INVENTUM ENGINEERING

Process Equipment
Construction Completion Report



Riverview Innovation & Technology Campus

Brownfield Cleanup Program Site No. C915353

3875 River Road

Tonawanda, New York 14150

November 3, 2025

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1 Introduction

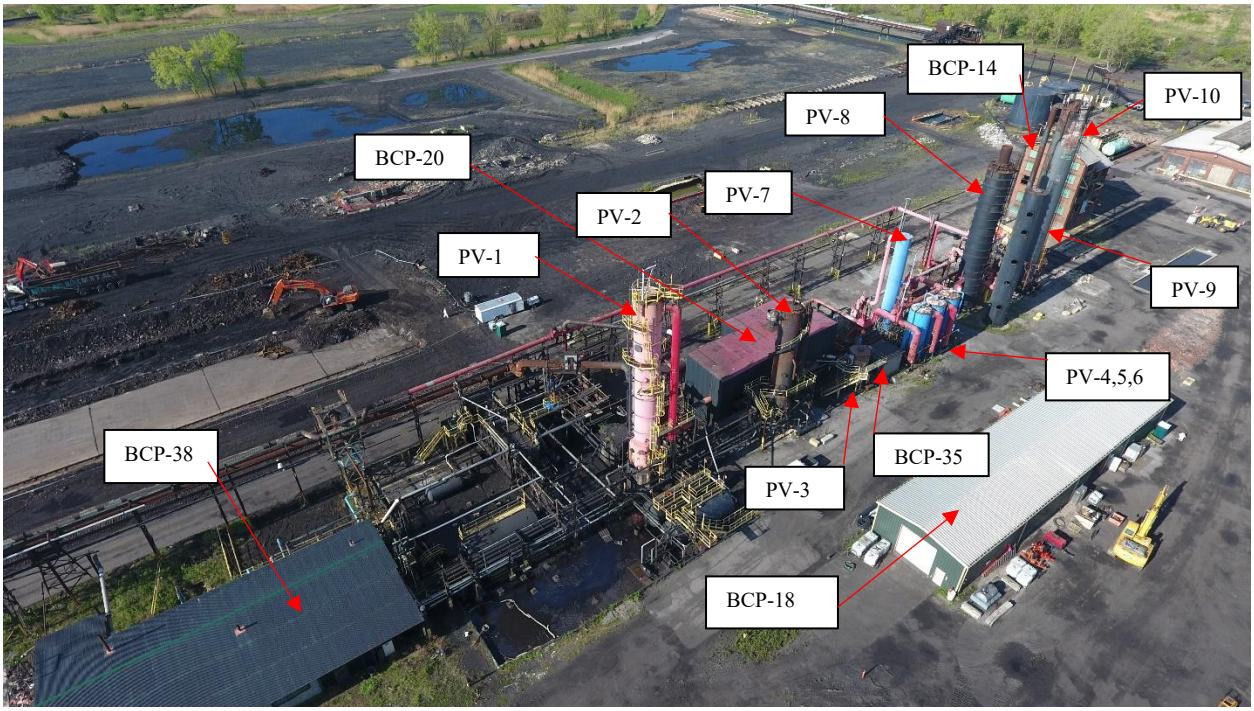
Inventum Engineering, P.C. (Inventum), on behalf of Riverview Innovation & Technology Campus, Inc. (Riverview), has prepared this construction completion report (CCR) for the removal and management of process equipment and associated piping and components on the Riverview Brownfield Cleanup Program (BCP) Site No. C915353 located at 3875 River Road, Tonawanda, New York in accordance with the approved Process Equipment Removal Interim Remedial Measures Work Plan (Inventum, July 2022).

2 Purpose

This CCR documents the decommissioning, demolition, and management of process equipment and process equipment residuals which consisted of;

- Piping not addressed by the Demolition IRM Work Plan (Inventum, 2021);
- Piping not addressed by the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021);
- Cooling/heat transfer equipment;
- Cooling towers, ammonia concentrators (AC), precipitators, scrubbers, actifiers,
- Exhausters and pumps, and
- Electrical components and controls associated with the process equipment.

The process equipment addressed by this CCR was located from, and included, the light oil area (LOA) to the former Pump House (BCP-38). The former locations of the process equipment in the former production area are shown in Figure 1 and in Photograph No. 1 below. All work was performed in accordance with the approved Process Equipment Removal Interim Remedial Measures Work Plan (July 2022).



Photograph No. 2.1: Process Equipment - Primary Cooler (pink on left-center/east) to Light Oil Scrubber (right/west).

Table 2.1: Structure Designation in By-products Area. Note all structures and equipment have been removed.

Structure No.	Name	Description
BCP-18	Green Warehouse	TCC and OSC equipment storage, including the RITC hazardous waste accumulation area and the EPA, then OSC, weir tank for wastewater accumulation and treatment.
BCP-14	Former Light Oil Building	Light Oil Process Building (controlled demolition)
BCP-20	Exhauster Building	By-products processing
BCP-35	Precipitator Control Room	Electrical equipment (Non-PCB Transformer)
BCP-38	Pump House	By-products equipment control
PV-1	Primary Cooler	Reduce temperature of the raw gas from the battery.
PV-2	Secondary Cooler	Second stage cooling of raw gas from the primary cooler.
PV-3	Tar Precipitator	Removed tar from coke oven gas
PV-4	LGA No. 4	Ammonia Concentrator – Installed and reportedly did not operate properly. Only used by TCC for a short period.
PV-5	LGA No. 5	Ammonia Concentrator – Installed and reportedly did not operate properly. Only used by TCC for a short period.
PV-6	LGA No. 6	Ammonia Concentrator – Installed and reportedly did not operate properly. Only used by TCC for a short period.
PV-7	"New" LGA	Ammonia Concentrator – Installed to replace function of LGAs 4 to 6
PV-8	Actifier (Abandoned)	Liquid purification of coke oven gas
PV-9	Abandoned Vessel	Unknown
PV-10	LBA Light Oil Scrubber	Removed light oil from coke oven gas

Coke Oven Gas (COG) pipes inside the work area or connecting to process equipment and process equipment piping were identified prior to the start of work, and COG pipe(s) (pink in Photograph No. 1) were managed in accordance with the approved August 25, 2021, Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan for the Riverview BCP Site. COG Pipe and process equipment after the exhauster building (pressure side) were considered most likely to contain materials that could combust after exposure to the atmosphere (PV-3 to PV-10), and until sampling and testing were completed, all process equipment residuals were treated as potentially combustible.

The process equipment and piping addressed under the IRM Work Plan are summarized below:

- Primary and secondary coolers (PV-1 and PV-2) – These were the first COG cooling equipment. This equipment was on the vacuum side of the exhauster building and used wash oil to cool COG from approximately 2,000°F to 300°F. The primary and secondary coolers contained less tar residuals than expected. This equipment operated at higher temperatures than the other process equipment, meaning much of the residual would have remained in a vapor phase and condensed in the subsequent process equipment. PV-1 was inspected to determine if it potentially contained a listed hazardous waste (K141). The inspection determined the residual material did not meet the definition of K141. The presence of combustible materials had not been detected on the vacuum side of the exhausters, and therefore the likelihood was considered lower in these vessels, but precautions for temperature measurement and quenching were followed.
- The tar precipitator (PV-3) – was located northwest of the exhauster building. This vessel was expected to be coated with tar residuals characteristically hazardous for benzene (potentially among other characteristics). The interior components had a very thin, hardened, black coating that met the definition of RCRA empty.

- Ammonia Concentrators (PV-4 through PV-7) – The four blue process vessels were expected to contain ammonia residuals and possibly wood blocking. The wood blocking would have been used to absorb, among other compounds, hydrogen sulfide from the COG. These vessels were purged with nitrogen and opened with non-sparking tools. No wood blocking was present, and a comparatively small volume of possible tar and/or naphthalene residuals were removed from the vessels;
- Abandoned Actifier (PV-8) – The actifier would have been used to "scrub" the gasses and liquids of hydrogen sulfide. This equipment would have used an alkaline liquid so the residuals in the vessel could have contained high pH materials and light oil residuals (potentially characteristic for benzene). Although the top was open, this vessel was on the pressure side of the exhausters and was purged with nitrogen prior to opening. The residuals were tested and were found to have a pH of 5.9 and did not exhibit the characteristic of toxicity;
- Abandoned Scrubber (PV-9) – The abandoned scrubber was open and empty;
- Light Oil Scrubber (PV-10) – This unit contained residual light oil and tars, listed as K143 Hazardous Waste. This vessel was on the pressure/compression side of the exhausters, and one sample of this residual was also characteristically hazardous for benzene. Although a flanged opening near the base of the unit had been open for years, it could not be verified that air had circulated through the entire height of the unit and therefore the vessel was purged with nitrogen and carefully opened with non-sparking tools. The vessel was filled with wood packing material saturated with residuals;
- Chiller/heat exchangers – These were non-contact vessels used to cool wash and light oils with river water. The vessels were all ruptured and contained only residual oil. The oil was collected and managed as a characteristic hazardous waste;
- Exhausters (In Building BCP-20) – The large blowers in the exhauster building were termed "exhausters" in a coke plant. These COG handling units would have drawn the COG under vacuum from the collector main, across the crossover pipes, and through the primary and secondary coolers before exhausting it under pressure to the rest of the COG process, battery, and boiler house. The exhausters would have operated at high temperature and pressure and were expected to contain some residual tar as the majority of the other constituents of COG would have remained in the vapor phase. However, the exhausters were found to be empty, and;
- Pumps – Throughout the process area (including the pump house) there were tar, wash oil, and clear water pumps. The pumps were used to move the by-products and cooling fluids through the system. The pumps were either empty (clear water pumps), contained trace residuals but were able to be recycled, or were able to be drained (pumps in the pump house) and recycled;

Table 2.2: Waste Summary

Structure No.	Name	Hazardous Waste
PV-1	Primary Cooler	Tar impacted steel components, managed as characteristic for benzene, D018.
PV-2	Secondary Cooler	RCRA Empty.
PV-3	Tar Precipitator	RCRA Empty.
PV-4	LGA No. 4	No wood blocking, tar residuals managed as Listed Waste K147 (applied by disposal facility) and D018.
PV-5	LGA No. 5	No wood blocking, tar residuals managed as Listed Waste K147 (applied by disposal facility) and D018.
PV-6	LGA No. 6	No wood blocking, tar residuals managed as listed hazardous waste K147 (applied by disposal facility) and D018.



PV-7	"New" LGA	No wood blocking, tar residuals managed as listed hazardous waste K147 (applied by disposal facility) and D018.
PV-8	Actifier (Abandoned)	Dry solid residuals managed as non-hazardous solid waste.
PV-9	Abandoned Vessel	Empty.
PV-10	LBA Light Oil Scrubber	Residuals and wood packing managed as listed hazardous waste K143.
Chillers	Chillers/Heat Exchangers	Residual oil managed as characteristic for benzene (D018)
Pump House	Piping	Drained oil managed as characteristic for benzene (D018)

3 Decontamination and Demolition Sequence

The demolition sequence was completed to open access to the equipment prior to purging and lowering/tripping of the vertical process equipment. Prior to initiating any activities under the IRM Work Plan, including sampling, Job Safety Analyses (JSAs) were prepared. All demolition activities were completed in accordance with the Building Permit (**Appendix C**) and after a Pre-demolition Checklist (Pump House and Exhauster Building Appendices) was completed. Decontamination and quench water produced during sampling, decontamination, and demolition of the process equipment was treated and discharged in accordance with the Industrial Waste Discharge Permit No. 331 (**Appendix D**) issued by the Town of Tonawanda. All work under the IRM Work Plan was conducted in accordance with the Site Community Air Monitoring Plan (CAMP) and CAMP data is provided in **Appendix J.**

The demolition sequence occurred in the following order throughout 2022:

1. Removed COG Pipe Along Broadway. Note: this progressed with the process equipment removal and as COG pipe was made accessible, rather than was completed as a continuous task, from November 2021 through October 2022. All COG pipe removal and residual management is documented under separate cover in the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals CCR (Inventum, 2025).
    a. JSA for demolition.
    b. Established a CAMP station no more than 50 feet downwind of the pipe section during removal and decontamination; and
    c. The COG pipe along Broadway would interfere with the demolition of the pump house, exhauster building, and some process equipment. The COG pipe was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021) as necessary to access the work items listed below.
2. Sampling (see Sampling) May, August, September, and October as safe access was created.
    a. JSA for sampling.
    b. Established a CAMP station no more than 50 feet downwind of the equipment during sampling;
    c. Mobilized fire suppression equipment and a water bath should a sample have required quenching;
    d. To the extent possible, before demolition and removal, opened and sampled residuals in PV-1 through PV-10, liquids in the pump house and chillers/heat exchangers.
    e. All sampling was conducted in strict accordance with the sampling plan herein;
    f. Compiled data;
    g. Shared data with Project Health and Safety Officer, Project Manager and Project Superintendent for preparation of JSA's; and



h. Submitted to waste brokers to initiate pre-approval for waste streams.

3. Exhauster Building (Building BCP-20) Late June – Early July 2022
    a. Completed the Building Pre-demolition Checklist (**Appendix G1**, Exhauster Building**)**;
    b. JSA for demolition.
    c. Deenergized all electrical equipment and connections to the exhauster building;
    d. Established a CAMP station no more than 50 feet downwind of the building during equipment decontamination and demolition;
    e. The exhauster building was interconnected to the rest of by-products with COG pipe; this was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
    f. The exhausters were quenched in the quench pit;
    g. The building corrugated siding and roof were removed, cleaned, and recycled;
    h. The structural steel was removed, cleaned, and recycled;
    i. The exhausters were submerged in the quench pit for no less than 72-hours;
    j. Decontamination and quench water was contained in the quench pit and/or the yellow steel quench box and conveyed to the groundwater treatment system for treatment prior to discharge under permit;
    k. The exhausters were recycled;
    l. All material scraped from the floors and pedestals were added to the K143 listed waste residual pile staged on the Tar Management Area secondary containment[1].
    m. The slab was decontaminated with water which was conveyed to the groundwater treatment system for treatment prior to discharge under permit.
4. Pump House (Building BCP-38) Late July – Early August 2022
    a. Completed the Building Pre-demolition Checklist (**Appendix G2,** Pump House**)**;
    b. JSA for demolition.
    c. Deenergized all electrical equipment and connections to the pump house;
    d. Established a CAMP station no more than 50 feet downwind of the equipment during equipment decontamination and demolition;
    e. Drained all free liquids from piping and equipment in the pump house;
    f. Removed the internal piping and equipment;
    g. Recycled the equipment;
    h. Demolished the building;
    i. Scraped and consolidated residuals on the floors and equipment pedestals as accessible. All materials scraped from the floors and pedestals were comingled with the stained brick during demolition.
    j. Decontaminated the slab; and
    k. The floor, pedestal, and brick residuals were sampled for disposal characteristics and disposed as solid waste at Modern Landfill in Model City, New York (**Appendix G2,** Pump House**).**
5. Ammonia Concentrators (PV-4 to PV-7) September 2022
    a. JSA for concentrator removal.
    b. Mobilized the water truck to the ammonia concentrator vicinity;

[1] Small quantities of non-listed materials, each insufficient to constitute a separate shipment, were consolidated into the K143 listed waste residual pile primarily generated from, and staged on, the Tar Management Area secondary containment. Although not subject to K143 classification, these materials were managed with the pile to facilitate disposal. The consolidated non-listed materials comprised a comparatively small portion of the total pile volume and were managed under the more stringent listed waste transportation and disposal requirements.

c. Established a CAMP station no more than 50 feet downwind of each unit of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
d. The ammonia concentrators were interconnected to the rest of by-products with COG pipe; this was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
e. Purged the ammonia concentrators with nitrogen;
f. Lower the ammonia concentrators onto polyethylene sheeting south of the equipment location;
g. Quenched all exposed residuals with water;
h. Decontamination and quench water was contained in the yellow quench box and conveyed to the warehouse (Building BCP-18) weir tank prior to conveyance to the groundwater treatment system for treatment prior to discharge under permit;
i. A concentrator was not opened unless the entire side (full height top to bottom) was able to be opened that day;
j. Sheared open the ammonia concentrator to allow inspection of the interior and access to and removal of the residuals;
k. Placed residuals in the yellow quench box for no less than 72-hours.
l. Decontaminated the steel shell and recycled.
m. Removed residuals from quench tank and staged on polyethylene sheeting on the former bag house slab;
n. Monitored temperature change as the residual dried; and
o. Disposed of residuals at Chemtron Corporation in Avon, Ohio, in accordance with the sample profile (**Appendix E4,** Ammonia Concentrators**).**

6. Secondary Cooler (PV-2) September 20, 2022
    a. JSA for cooler removal;
    b. Mobilized the water truck to the PV-2 vicinity;
    c. Established a CAMP station no more than 50 feet downwind of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
    d. The secondary cooler was interconnected to the rest of by-products with COG pipe; this was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
    e. Lowered the secondary cooler onto the exhauster building slab;
    f. Sheared open the secondary cooler to allow inspection of the residuals;
    g. Removed approximately 4 cubic yards of rust scale and residuals;
    h. Sheared the steel shell and recycled;
    i. Monitored temperature changes as the residual dried; and
    j. Disposed of residuals with the "K143 Pile," the pile of residuals staged in the Tar Management Area Secondary Containment (**Appendix I)**.
7. Tar Precipitator (PV-3) September 21, 2022
    a. JSA for precipitator removal;
    b. Removed the transformer from the precipitator control room (Building BCP-35);
    c. Mobilized the water truck to the PV-3 vicinity;
    d. Established a CAMP station no more than 50 feet downwind of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;



e. The tar precipitator was interconnected to the rest of by-products with COG pipe; this will be disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
f. Purged the tar precipitator with nitrogen;
g. Lowered the tar precipitator onto the tar management secondary containment area;
h. Sheared open the tar precipitator to allow inspection of the interior (RCRA empty);
i. Segregated the grossly contaminated steel shell and interior components for disposal by microencapsulation (**Appendix E3,** Tar Precipitator);
j. Recycled the steel shell and interior components.

8. Abandoned Scrubber (PV-9) September 23, 2022
   a. JSA for scrubber removal. Note: JSA's prepared under the work plan were prepared prior to starting the process vessel removal;
   b. The abandoned scrubber was open, empty, and not connected to the rest of the process equipment;
   c. Established a CAMP station no more than 50 feet downwind of the equipment during decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
   d. Lowered the abandoned scrubber onto polyethylene sheeting on the road northeast of the equipment location;
   e. Sheared open the abandoned scrubber concentrator to allow inspection of the interior; and
   f. Recycled the steel shell.
9. Primary Cooler (PV-1) October 5, 2022
   a. JSA for cooler removal;
   b. Mobilized the water truck to the PV-1 vicinity;
   c. Established a CAMP station no more than 50 feet downwind of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
   d. The primary cooler was interconnected to the rest of by-products with COG pipe, this was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
   e. Purged the primary cooler with nitrogen;
   f. Lowered the primary cooler onto the Tar Management Area Secondary Containment;
   g. Sheared open the primary cooler to allow inspection and access to and removal of the residuals;
   h. Segregated the grossly contaminated steel shell and interior components for disposal by microencapsulation (**Appendix E1,** Primary Cooler); and
   i. Recycled the steel shell;
10. Abandoned Actifier (PV-8), October 10, 2022.
    a. JSA for actifier removal;
    b. Mobilized the water truck to the actifier vicinity;
    c. Established a CAMP station no more than 50 feet downwind of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
    d. The abandoned actifier was surrounded by COG pipe; this was removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
    e. Even though this equipment had been open for years, it was purged with nitrogen;



f. Lowered the abandoned actifier onto polyethylene sheeting on the road north of the equipment location;
g. Sheared open the abandoned actifier to allow inspection of the interior and access to and removal of the residuals;
h. Removed residuals and staged on polyethylene sheeting on the north property boundary for disposal with Modern Landfill (**Appendix E5,** Abandoned Actifier); and
i. Recycled the steel shell.

11. Light Oil Scrubber (PV-10) October 20, 2022.
    a. JSA for scrubber removal;
    b. Mobilized the water truck to the scrubber vicinity;
    c. Established a CAMP station no more than 50 feet downwind of the equipment during equipment purging, inerting, and decontamination and no more than 50 feet downwind of the fall zone envelope when the equipment was lowered/tripped;
    d. The scrubber was surrounded by COG pipe; this was removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021);
    e. Even though this equipment had been open for years, it was purged with nitrogen;
    f. Lowered the scrubber onto polyethylene sheeting south of the equipment location;
    g. Sheared open the abandoned scrubber to allow inspection of the interior and access to and removal of the residuals;
    h. Removed residuals and wood packing and staged on polyethylene sheeting on the Tar Management Area Secondary Containment;
    i. Decontaminated the steel shell and recycled; and
    j. Disposed of residuals in accordance with the sample profiles at Chemical Waste Management in Emelle, Alabama and Heritage Thermal Services in East Liverpool, Ohio (**Appendix E7,** Light Oil Scrubber).

Additional details for the activities listed above are provided in:

- Section 8 Process Equipment;
- Process Equipment Appendices **E1** through **E7;**
- Chillers Heat Exchanger Appendix **F;**
- Building Demolition Appendices **G1** and **G2;** and
- Quench Water Appendix **H.**



4 Mobilization and Site Controls

Mobilization for the demolition of process equipment and piping included the following steps:

1. Permits and Approvals:

    a. A Town of Tonawanda Building Permit for demolition was in place (**Appendix C**). The requirements of that permit were in addition to and not superseded by the work plan. The more stringent requirements of the Work Plan or the Building Permit applied.
    b. Approval for discharge of decontamination and dust control water from the Town of Tonawanda (**Appendix D**). The permit was limited to 2,000 gallons per day of "equipment decontamination water from investigation." This permit did not require amendment for discharge under this IRM work plan.
    c. All disposal facilities were approved by Riverview prior to preparation of any waste profile.
    d. When possible, waste profiles were submitted prior to initiation of the demolition and decontamination of each piece of process equipment if profile data was available. To the extent practicable, the approval of the profiles was sought before any waste was generated.

2. Health and Safety Plan (HASP):

    a. The site HASP included requirements for working onsite including the activities associated with the process equipment IRM.
    b. OSC prepared a JSA for each piece of process equipment and held daily safety briefings to ensure that every employee worked in the safest and cleanest environment practicable.
    c. Hazards associated with the decommissioning and demolition of each piece of process equipment were assessed in JSAs prior to starting decontamination and demolition activities. The JSAs included, but were not limited to:
        i. Combustible materials;
        ii. Residual light oil, waste oil, and tar materials;
        iii. Materials containing ammonia and naphthalene;
        iv. Working on elevated surfaces;
        v. Stored energy; electrical, hydraulic, and pneumatic;
        vi. Working on uneven surfaces;
        vii. Pits, sumps, and other below grade structures;
        viii. Hot work; and
        ix. Working near heavy equipment.

3. Work Planning

The work planning for each piece of process equipment included:

    a. Daily Work Briefing - The JSA was incorporated into the specific daily work activities for each unit of process equipment.
    b. Process equipment inspection and temperature measurements - The temperature of the process equipment (sun and shade sides) and any exposed content were measured before the daily activity was started (**Appendix A,** Temperature Monitoring Summary**)**. Piping and associated equipment (pumps, instrumentation, valves) were documented, and all points of entry were checked.

c. Equipment List – all personal protective equipment (PPE), and equipment required to open, purge, decontaminate, quench, and suppress any ignition or ignition source was available at the process equipment location.
d. Schedule – Work was planned such that process equipment was first opened before noon Monday to Thursday. No unit of process equipment was opened for the first time after noon Monday to Thursday or at any time on a Friday.

4. Electrical Equipment:

a. Electrical equipment (pre-existing, not that for the IRM activities) within the work area and any electrical supply to process equipment components such as pump motors and controls were de-energized prior to starting decommissioning work.
b. Electrical equipment containing or potentially containing liquid dielectric fluids was sampled and tested for Polychlorinated Biphenyls (PCBs) unless previous testing data was available. No PCB containing equipment was found to have existed in the IRM work areas.
c. One non-PCB transformer was located in the precipitator control room (Building BCP-35). The transformer fluids were classified as non-PCB containing oil based on the manufacturing name plate. The oil was drained and recycled with NOCO prior to work on the process vessel removal.

5. Asbestos Containing Material (ACM):

ACM was not encountered during the process equipment and piping work because the identified ACM had been previously abated. Unexpected sources such as gaskets, hidden pipe insulation, or electrical equipment insulation did not exist.

6. Work Zone Delineation:

Work Zone delineation prior to the start of work consisted of identifying:
a. Utilities and planning for utility protection or deenergizing;
b. Fall radius evaluation;
c. Access to quench water;
d. Quench water containment;
e. Laydown Areas (Waste, recyclable materials, equipment).

7. Temperature monitoring:

a. The temperature of the process equipment and residuals were monitored prior to, during and following the decontamination process (**Appendix A,** Temperature Monitoring Summary**)**.
b. The temperature of the vessel and all exposed contents were measured and recorded before the work (**Appendix A,** Temperature Monitoring Summary**).**
c. The temperatures (sun side, shade side and exposed residuals) were monitored and recorded during active work. Temperature measurements were taken 1 hour before and at the end of each day's work shift. If there was a rise in temperature greater than 10°F above any ambient temperature increase between these readings, a third measurement was taken one hour later to verify the temperature was not continuing to rise independently of the ambient conditions (**Appendix A,** Temperature Monitoring Summary**)**.



d. Any rise in temperature, not attributed to the sun or ambient temperature rise, was monitored. A rise of more than 10°F that was not associated with the rise of the ambient temperature indicated the need for quenching or sealing the vessel and purging with nitrogen.

8. Community Air Monitoring Plan (CAMP) and Dust Control:

a. A CAMP station was monitored downwind of the IRM activities during the process equipment and piping sampling and decommissioning work.
b. A CAMP station was positioned midway between the work area and the closest property line, but in no case more than 50-feet downwind of the operations.
c. Water was used to limit fugitive dust beyond the work area. All OSC's employees who noticed or anticipated dust were required to communicate with their supervisor to implement mitigation measures. OSC's Site Superintendent took steps to control excessive amounts of dust and/or exposure using water, positioning ground personnel based on wind direction, and directing Operators to close their equipment cab.
d. Process Equipment IRM CAMP data was included in the daily CAMP reports submitted to the NYSDOH (**Appendix J,** CAMP Data).

9. Stormwater Pollution Prevention Plan (SWPPP):

a. The BCP site SWPPP was reviewed in advance of the process equipment and piping work.
b. Ponded stormwater within the process equipment area was treated and discharged through the Groundwater IRM equipment in accordance with the Industrial Waste Discharge (POTW) permit No. 331 (**Appendix D**). Quench water was discharged under the approved quench water discharge authorization request from the Town of Tonawanda POTW pre-treatment coordinator.
c. Accumulated decontamination and quench water was contained and tested for treatment through the groundwater IRM equipment. Analytical results are presented in **Appendix H,** Quench Water Appendix**.**
d. Excess sediment from quenching was allowed to settle in the yellow quench box and was combined with the COG quenching residuals staged on the baghouse pad.

10. Process Residual Sampling

a. Riverview could not pre-determine the presence or characteristics of the contents of liquids or solids present in the piping, exterior holding tanks, process equipment, or pumps based on knowledge of the former plant's operations. Samples of the solids and liquids (if present) were collected for analysis to characterize the waste (see Sampling below).
b. An outline of sampling procedures is provided in the Sampling section of this CCR.



5 Sampling

The protocol followed for sampling the process equipment, including any sampling of residuals on, or from floors, equipment pedestals, piping, or exterior components of the process equipment was as follows:

1. Inspected the exterior of the process equipment to be sampled. There were existing covered or open access points to all process equipment to be decommissioned under the IRM Work Plan. If possible, the equipment was not cut to gain access for sampling. Access was through existing threaded or bolted connections (e.g. flange) or from drains. The connections were removed with non-sparking tools to allow sampling;
2. Inspected the ground surface around the process equipment to determine if there had been any previous or suspected historical leakage.
3. Covers removed to allow sampling were replaced immediately after the sample had been collected;
4. Inspected the exterior of the process equipment and piping for signs of rupture, wear/holes, and bulging;
5. Used a photoionization detector (PiD) to check the atmosphere around the outside of the component to be sampled for volatile organic compounds (VOCs);
6. Established a work zone to allow access to the tank;
7. Set up the CAMP air monitoring station no more than 50 feet downwind of the work zone.
8. During sampling:
    a. No one or no part of anyone's body crossed into the process equipment for sampling. Non-sparking tools were used to extract samples;
    b. Refer to HASP (Appendix F of the Process Equipment IRM Work Plan) for the minimum respiratory protection required while sampling;
    c. Scanned the vapors at the opening and just inside the interior of the component for VOCs. Refer to the HASP (Appendix F of the Process Equipment IRM Work Plan) for Action Levels;
    d. Scanned the vapors at the opening for Lower Explosive (LEL) and oxygen (O_2). Refer to the HASP (Appendix F of the Process Equipment IRM Work Plan) for Action Levels; and
    e. Measured the temperature of the residuals. Placed no less than 500 grams of material in an aluminum tray adjacent to the sample access point to record temperature changes associated with exposure to the atmosphere.
9. The LEL/O_2 meter did not indicate a potentially explosive atmosphere, oxygen deficiency, or oxygen rich atmosphere in the process equipment during sampling and the material did not react to the atmosphere. Ventilation of the process equipment before sampling was not required.
10. For PV5, PV-6, PV-7, PV-8, and PV-10 where access allowed, the thickness of contents in the vessel was gauged with a non-sparking tape. Physical descriptions of the material were recorded in a field book. Multiple phases were not observed.
11. Recorded (see Process Equipment Section):
    a. Thickness of material;
    b. Apparent viscosity/density;
    c. Color;
    d. Other observations.
12. Process equipment field samples
    a. Solids Field Testing – Each solid was sampled, and representative amounts (no less than 100 grams) were placed into a sealable (e.g., Ziploc™) bag and 500 grams were placed in an open aluminum tray. Each bag and tray were marked with source and sample time. The



temperature of the sample in the tray was recorded. When ambient temperature was below 50 degrees Fahrenheit (°F), the bagged sample was placed in a warm, heated, indoor space (not a vehicle). The indoor sample was not left unattended. After 15 minutes the PiD probe was inserted in the bag above the sample, the PiD measurement was recorded, and the sample temperature was recorded. The temperature of the sample in the tray was recorded. No temperature change of greater than 10°F above ambient temperature was recorded, and no smoldering was observed.

b. Liquids field sampling – no liquid phase was observed in a process vessel.

13. Laboratory Samples (Note: Laboratory samples were not collected from the field samples; they were collected BEFORE field samples were placed in the sealable bags and open containers).
    a. Solids - Collected samples from each unique solid material for waste characterization for the full suite of DER-10 parameters except the per- and polyfluoroalkyl substances (PFAS) but including aliquots for Hazardous Characteristics and Toxicity Characteristic Leaching Procedure (TCLP). PFAS sampling was not required for disposal characterization.
    b. Quench Water – Quench water was not used to quench sample material since no temperature change greater than 10°F or a reaction with the atmosphere occurred.
    c. Sample analysis to determine the appropriate disposal alternative included the following parameters:
        i. VOCs and SVOCs
        ii. Metals,
        iii. Cyanide,
        iv. Ammonia,
        v. Toxicity Characteristic Leaching Procedure (TCLP) VOCs, SVOCs, and Metals, Pesticides, and Herbicides,
        vi. PCBs,
        vii. Ignitability of Solids,
        viii. Corrosivity as pH,
        ix. Reactivity, Cyanide, and
        x. Reactivity, Sulfide.

6 Hot Work

Torch cutting was limited to structural steel components in areas that were open to the atmosphere. When practicable, mechanical shearing was used in lieu of cutting. Torch cutting of any COG (red painted) pipelines or process equipment was prohibited. Torch cutting of natural gas (yellow painted) lines was prohibited unless the line had been purged, frequently monitored with a LEL/O_2 meter, and was visibly open at both ends to confirm the conditions were safe for torch cutting. Torch cutting of piping and process equipment covered with coal or coke dust or inside closed buildings was prohibited without approval of the site Superintendent and in strict accordance with a Hot Work Permit.



7 Piping and Pumps

Prior to the removal of process piping and pumps connected to process equipment, the following steps were completed:

- The JSA was completed.
- Components were drained of any contents. All fluid contents or product in the piping or pumps were collected, containerized, and managed as classified based on waste profile sampling.
- Waste contents from different process equipment or pipes were not mixed unless known to be from the same process and verified to be compatible by testing.
- During dismantlement, COG piping was managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan. All COG pipes and residuals were quenched in accordance with the Work Plan.
- Non-COG process piping was cut into manageable sections via a hydraulic shear or disconnected at threaded connections or flanges.
- All non-COG piping and pumps removed during the IRM were stored for recycling or disposal in a manner that eliminated the risk of a release to the environment. No piping or pumps staged for recycling contained liquid or semi-solid material that could not be drained.
- Piping or pumps that were decontaminated were inspected to verify the equipment was free of any liquid or solids and was staged for recycling.
- All water generated from decontamination of piping or process equipment was containerized prior to conveying to the groundwater IRM treatment system.
- Grossly contaminated piping was segregated and accumulated as encountered throughout the production area. One load of impacted piping was disposed as characteristically hazardous waste (benzene, D018) by microencapsulation at Michigan Waste Treatment, Bellville MI in August 2023. This shipment may be referenced in the Shipment Summary Table in Appendix B. The waste manifest has been included in Appendix E1 (Process Vessel PV-1) as the majority of grossly contaminated material shipments were generated from the decommissioning of PV-1.



8 Process Equipment

Each piece of process equipment was emptied and decontaminated by removing all process related vapors, liquids, and accumulated solids to the extent reasonably possible.

- Each piece of process equipment except PV-9 (this vessel was never used) and PV-2 (vessel was deteriorated and unsafe and had been open to the atmosphere for years) was inerted by filling the entire interior cavity with nitrogen. PV-8 and PV-10 both also had openings to the atmosphere but were nearly full of residual packing and were purged with nitrogen.
- Prior to lowering any piece of process equipment to the ground surface, the vessels were inspected for free liquids. No free liquids were identified.
- The samples did not react to exposure to the atmosphere, and a temperature rise of more than 10°F was not recorded during sampling. Therefore, the vessels were not quenched with water before they were tripped.
- The fall zone for the process equipment was covered with polyethylene sheeting.
- The process equipment anchorage was removed immediately before the area was prepared to receive the lowered/tripped unit. The anchorage was removed by removing the restraining nuts and by shearing or cutting the anchor bolts.
- The processes equipment was lowered/tripped to the ground surface. Dust control water was sprayed as the process equipment was lowered/tripped to the ground.
- Removal of the contents did not begin until the contents of the process equipment response to exposure to the atmosphere had been verified by monitoring the temperature of the shell and any exposed content.
- The process equipment was sheared open from the base to the former top when possible. The temperature of the residual was monitored as the residuals were exposed during the shearing.
- Entry into process equipment was not allowed until it had been sheared and was open to the atmosphere. No confined space entry was allowed under this work plan.
- Decontamination required a combination of mechanical and manual cleaning. All decontamination personnel reviewed the JSA and followed the HASP (Appendix F of Process Equipment IRM Work Plan) and all appropriate safety precautions (General Duty Clause of the United States Occupational Safety and Health Act (Federal OSHA) states: 29 U.S.C. § 654, 5(a)1,) during cleaning.

Decontaminated process equipment was cut onsite into acceptable sizes for recycling and transported to Niagara Metals for recycling or disposed of at a 6 NYCRR Part 360 or Part 376 permitted facility. The decontamination included:

- Removal of all sediment, sludge and loose scale using scrapers and other mechanical or handheld equipment.
- Verification that the process equipment was empty. It did not have:
  - More than 1 inch of residue;
  - 3% residue by weight (If less than 119-gallon capacity), or
  - 0.3% residue by weight (If greater than 119-gallon capacity, approximately 3 gallons per 1,000-gallon capacity).

The surfaces of any process equipment that contained residual characteristic or listed hazardous wastes were decontaminated by implementing the following:

- The surface of the container, interior and exterior were scraped until all loose materials were removed; and

- All quench water was held in the quench box and conveyed to the groundwater IRM treatment system.

If the residual listed or characteristically hazardous material could not be removed, as with PV-1 and PV-3, the process equipment debris was classified, and hazardous debris was managed in accordance with 6 NYCRR Part 376.4(g). Parts of PV-1 and PV-3 that could not be decontaminated were processed to size and disposed by microencapuslation at a Michigan Disposal Waste Treatment in Belleville, Michigan.

8.1 PV-1 Primary Cooler

PV-1 was the first process vessel after the tar was removed from the raw coke oven gas (COG) in the Tar Management Area. The vessel was anchored to a concrete pedestal in the northwestern section of the Tar Management Area Secondary containment. PV-1 was surrounded by process piping, COG piping, catwalks, pipe racks, and tanks. All accessible surrounding piping, steel, and tanks were removed in the summer of 2022 in preparation for lowering PV-1. Before PV-1 was lowered, it was determined that the potential residuals in PV-1 did not meet the definition of listed hazardous waste, as documented in the July 2022 memorandum included in the PV-1 Appendix. A sample of the potential PV-1 contents was not collected before lowering the vessel, as no safe access was available.

PV-1 was purged with nitrogen on September 26, 2022, and lowered on October 5, 2022. PV-1 was lowered with one section of catwalk, one section of COG pipe, and two sections of process piping attached, as shown in Photograph No. 3 of the PV-1 Photographic Log. After PV-1 was lowered, the COG pipe was removed and managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021). The process pipe and catwalk were removed and managed in accordance with the Demolition Work Plan (Inventum, March 2021). All ancillary piping was empty.

PV-1 was opened on the Tar Management Area Secondary Containment. The PV-1 interior was filled with steel journals coated in residual material that was unable to be physically separated by mechanical or other reasonable means. PV-1 was constructed of steel that was segregated into recyclable and impacted piles. The impacted steel was prepared onsite and transported offsite under the existing approved waste profile for impacted steel as characteristically hazardous for benzene (D018) and disposed following microencapsulation by Michigan Disposal Waste Treatment in Belleville, Michigan. Unimpacted steel was recycled with Niagara Metals.

The temperature of the sun-side of PV-1 was recorded at 74° F while the shade-side was 60° F. After shearing open the vessel, the temperature of the interior residual-coated journals was recorded between 73.1° F and 76.3° F. No temperature rise attributed to exposure to the atmosphere was detected. **Appendix A** provides temperature data recorded in the field during sampling and vessel decommissioning.

The Photographic Log, Waste Classification Memorandum, and waste manifests are provided in **Appendix E1,** Primary Cooler.

8.2 PV-2 Secondary Cooler

PV-2 was operated to continue to reduce the temperature of the COG and began the process of removing oil from the COG. The vessel was anchored to a concrete pad north of the exhauster building. PV-2 was surrounded by pipe racks, process piping, COG piping, and catwalks. All accessible surrounding piping and steel were removed in the summer of 2022 in preparation for lowering PV-2.



PV-2 was inspected through the open flange at the base of the vessel and only rust scale was observed. PV-2 had open flanges and was in a deteriorated condition, with the interior exposed to the atmosphere for years. It was deemed unsafe to attempt to purge. PV-2 was not purged and was lowered as soon as access was created to eliminate a site safety risk.

The vessel was lowered on September 20, 2022, with the catwalk, one section of COG pipe, and one section of process piping attached, as shown in Photograph No. 5 of the PV-2 Photographic Log. After PV-2 was lowered, the COG pipe was removed and managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021). The process pipe and catwalk were removed and managed in accordance with the Demolition Work Plan (Inventum, March 2021). All ancillary piping was empty.

PV-2 was sheared open on a by-products area concrete pad and contained approximately 4 cubic yards of rust scale and dry black residuals (Photograph No.'s 11 and 12). The PV-2 contents were removed and mixed with the residual pile that was staged on the Tar Management Area Secondary Containment. The residual pile consisted of residuals potentially from PT05, PT06, PT07, PT08, PT11, the tank heel of PT04, Light Oil Area Secondary Containment solids, and Tar Management Area Secondary Containment solids, The pile was stabilized with lime kiln dust (LKD) and sawdust and disposed as K143 listed waste at RSI Environnemental in Quebec, Canada in December 2022. The 4 cubic yards of PV-2 residuals comprised a small volume of the 380-ton pile. All waste manifests for the residual pile are documented under separate cover in the Aboveground Storage Tank Management and Closure CCR (Inventum, 2025). The PV-2 steel was recycled with Niagara Metals.

The temperature of the sun-side of PV-2 was recorded at 111.6° F while the shade-side was 70.3° F. After shearing open the vessel, the temperature of the interior was 87.0° F, and the temperature of the residuals was 68.2° F (nearly the same as ambient temperature). No temperature rise attributed to exposure to the atmosphere was detected. **Appendix A** provides temperature data recorded in the field during sampling and vessel decommissioning.

The Photographic Log is provided in the **Appendix E2,** Secondary Cooler.

8.3 PV-3 Tar Precipitator

The tar precipitator PV-3 was reportedly a TCC design and fabrication that never operated successfully. The vessel was anchored to a concrete pad east-adjacent to the precipitator control room (BCP-35). PV-3 was surrounded by pipe racks, process piping, COG piping, and a catwalk. All piping and steel were removed in the summer of 2022 in preparation for lowering PV-3. A sample of the potential PV-3 contents was not collected before lowering the vessel, as no safe access was available.

PV-3 was purged with nitrogen on September 20, 2022, and lowered onto the Tar Management Area Secondary Containment on September 21, 2022. The vessel was sheared open on September 22, 2022, and found to contain an array of vertical steel tubes (Photograph No. 6 of the PV-3 Photographic Log). PV-3 was RCRA empty, therefore a sample was not collected.

The temperature of the sun-side of PV-3 was recorded at 109.5° F while the shade-side was 69.8° F the day it was lowered. The following day temperatures were recorded again before shearing and were 74.1° F (sun-side) and 70.2° F (shade-side). The interior temperature of the vessel ranged from 70.8° F to 73.4° F. No temperature rise attributed to exposure to the atmosphere was detected. **Appendix A** provides temperature data recorded in the field during sampling and vessel decommissioning.



PV-3 had been fabricated with steel and was deconstructed. The bottom of the vessel was impacted with black solid accumulation. The bottom of the vessel was segregated with impacted steel and disposed following microencapsulation by Michigan Disposal Waste Treatment in Belleville, Michigan. The remaining steel and interior tubing were recycled with Niagara Metals. The Photographic Log is provided in **Appendix E3,** Tar Precipitator.

8.4 PV-4, PV-5, PV-6, and PV-7 Ammonia Concentrators

The Ammonia Concentrators PV-4 through PV-7 were anchored to concrete pads in the northwestern section of the by-products area. PV-4, PV-5, and PV-6 were connected in series by COG and process piping. PV-7 was constructed later than the other three concentrators and was connected by COG piping. All COG piping was removed from PV-4, PV-5, and PV-6, and nearly all COG piping was removed from PV-7 in September 2022. All COG piping was removed managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021). The process pipe was removed and managed in accordance with the Demolition Work Plan (Inventum, March 2021).

The ammonia concentrators were inspected and sampled in August 2022. The interiors of PV-5, PV-6, and PV-7 were able to be observed through the openings created by the removal of COG pipe. The interior of PV-4 was not observable as the COG pipe connection was pinched closed with the shear. Collapsed steel shelving was observed in the base of PV-5, indicating wood block shelving was not used. PV-5 and PV-6 each contained approximately 1 foot of residual material consisting of intermixed solid and semi-solid masses. The solid portions were black to dark brown, dry, and contained white naphthalene-like crystals, while the semi-solid portions were black and highly viscous. These materials were not present as distinct, separable phases; rather, they occurred together in a heterogeneous mixture, with mounded solid material interspersed with pools of semi-solid material. The residuals had an ammonia-like odor. The solid material shared physical properties with residuals encountered in the COG piping. It was assumed that PV-4 contained similar residuals. PV-7 contained less than 1-inch of black semi-solid tar-like residuals in its base, an insufficient volume to sample. One waste characterization sample of PV-5 residuals was collected to represent the ammonia concentrators based on safe access and similar physical characteristics of the materials.

PiD readings and temperatures were recorded during inspection and sampling of PV-5. The PiD reading at the open flange of PV-5 was 0.3 ppm and the O_2 was 20.6 percent. The bagged residual sample produced a PiD reading of 47.1 ppm. The ambient temperature was 69° F, the aluminum tray was 71.0° F, and the initial temperature of the residuals was 75° F. No temperature increase was noted. Field temperature data are provided in **Appendix A.**

PV-7 was purged with nitrogen on September 13, 2022, and lowered on September 14, 2022. PV-7 was lowered first, to create access to lower the remaining concentrators. The COG line was disconnected from the vessel in four sections which contained between 10 percent and 30 percent rust scale and COG residuals. The COG pipe and residuals were managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021). PV-7 was sheared open and found to contain a stainless-steel “Pall Ring” packing material. The Pall Rings had a thin, hardened, black coating that left no residual on nitrile gloves when inspected. Limited residuals were present in sections of the vessel and were generally not co-mingled with the Pall Rings (Photograph No. 8 through 12 of the Ammonia Concentrator Photographic Log).

The temperature of the sun-side of PV-7 was recorded at between 81.3° F and 99.5° F while the shade-side was between 60.5° F and 85.5° F. After shearing open the vessel, the immediate temperature of the residuals



was between 81.4° F and 86.6° F. The Pall Ring packing media was 84° F to 95° F. Residuals from the top of the vessel were recorded to produce temperature readings between 104° F and 106° F. This temperature increase was not observed during sampling, so the vessel had only been purged with nitrogen but not quenched with water. The residuals were promptly removed and placed in the quench tank for 72 hours. **Appendix A** provides temperature data recorded in the field during sampling and vessel decommissioning.

PV-6 was purged with nitrogen on September 13, 2022, and PV-4, PV-5 were purged with nitrogen on September 15, 2022. PV-6 was lowered on September 14, 2022, and PV-4 and PV-5 were lowered on September 15, 2022. Residuals did not exhibit the same temperature increase as PV-7, but out of an abundance of caution, all ammonia concentrator residuals were placed in the quench box for 72 hours.

The quenched residuals were placed on and under polyethylene sheeting on the baghouse pad. Approximately 14 tons of residuals from PV-4, PV-5, PV-6, and PV-7 were disposed as hazardous waste at Chemtron Corporation in Avon, Ohio. The sample collected from PV-5 was characteristically hazardous for benzene (D018). In addition to the D018 waste code, the waste facility applied the listed waste code K147 to the ammonia concentrator residuals. The PV-4 through PV-7 steel and PV-7 Pall Ring packing media were recycled with Niagara Metals.

The Photographic Log, analytical table, laboratory report, and waste manifests are provided in **Appendix E4,** Ammonia Concentrators.

8.5 PV-8 Abandoned Actifier

The top of PV-8 had the appearance of a vessel that had been damaged by a fire. The actifier would have been used to “scrub” the gasses and liquids of hydrogen sulfide. This would have used an alkaline liquid so the residuals in the vessel could have contained high pH materials. The abandoned process vessel was anchored to a concrete pad on the west end of the by-products area. Pipe rack and COG pipe were located south adjacent to the process vessel.

PV-8 was inspected and sampled in September 2022. An upper flange was opened by OSC and accessed by manlift to collect a sample. PV-8 contained a dry, black, solid residual and no separate phases were observed. One waste characterization sample was collected from PV-8. The results indicated the material sample was not characteristically hazardous and not corrosive with a pH of 5.9 SU.

PiD readings and temperatures were recorded during inspection and sampling of PV-8. The PiD reading at the open flange of PV-8 was 0.0 ppm and the O_2 was at 20.6%. The bagged residuals produced a PiD reading of 0.0 ppm. The ambient temperature was 67° F, the aluminum try was 84.6° F (in sun), and the initial temperature of the residuals was 76.9° F. No temperature increase was noted.

PV-8 was purged with nitrogen on October 5, 2022, and lowered on October 10, 2022. PV-8 was sheared open and found to contain plastic “cage ball” packing media and the same granular residuals observed during sampling. See Photograph No. 5 through 8 of the PV-8 Photographic Log. The temperature of the sun-side of PV-8 was recorded at 113.0° F while the shade-side was 67.0° F. After shearing open the vessel the temperature of the residuals was between 59° F and 60° F. No temperature increase was noted.

A memorandum was submitted in October 2022 classifying the residuals as non-hazardous solid waste. All unimpacted cage balls were segregated and disposed as solid waste. Cage balls that were mixed with residuals and that could not be separated by reasonable effort were staged with the residuals for disposal.

Approximately 33 tons of PV-8 residuals were disposed as non-hazardous solid waste at Modern Landfill in Model City, New York. The PV-8 steel was recycled with Niagara Metals.

The Photographic Log, analytical table, laboratory report, waste classification memorandum, and waste manifests are provided in **Appendix E5,** Abandoned Actifier.

8.6 PV-9 Abandoned Scrubber

PV-9 was an abandoned and unused scrubber. PV-9 was inspected through an open flange near the base of the vessel and was observed to contain only organic detritus from years of habitation by birds, not process residual. No sample from PV-9 was collected, as the vessel was RCRA empty.

PV-9 was not purged with nitrogen, and it was lowered on September 23, 2022. The steel shell was sheared to size and recycled with Niagara Metals.

The Photographic Log is provided in the **Appendix E6,** Abandoned Scrubber.

8.7 PV-10 Light Oil Scrubber

PV-10 was the light oil scrubber and final process vessel in the treatment of COG. PV-10 was anchored to a concrete pad at the west end of the by-products area. PV-10 was surrounded by pipe racks, process piping, and COG piping. All surrounding and ancillary equipment was removed to the extent practicable in 2022 to prepare for lowering the vessel. The COG pipe was managed in accordance with the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals IRM Work Plan (Inventum, 2021).

PV-10 was initially inspected and sampled through an open flange near the base of the vessel in May 2022. The residual was black and brown, solid, hard (a spade was required to penetrate the material), and had an odor similar to that of COG residuals. Approximately 100 grams of the material were bagged and screened with a PiD. The material produced a PiD reading of 204 ppm. The PiD reading around the open flange was 70 ppm to 80 ppm, and the O_2 was 20.9 percent. Analytical results indicated the sample exhibited the characteristic of toxicity for benzene (D018) and mercury (D009).

PV-10 was purged with nitrogen on October 13, 2022, and lowered on October 20, 2022. One length of COG pipe was removed after the vessel was lowered. PV-10 was sheared open and was full of wood packing material saturated with black, solid, dry residuals (Photograph No. 11 to 13 of the PV-10 Photographic Log). The temperature of the sun-side of PV-10 was recorded between 52° F and 62° F while the shade-side was between 42° F and 44° F. After shearing open the vessel, the temperature of the residuals was between 46° F and 48° F. No temperature increase was noted.

A second waste characterization sample was collected from the wood packing material. The sample results indicated the material was not characteristically hazardous. However, because this was a light oil process, all material from PV-10 was characterized as listed hazardous waste K143. At the request of the waste broker, one additional waste characterization sample was collected from the wood packing and analyzed for total mercury. The initial sample contained 98.7 mg/kg of mercury. The second sample contained 290 mg/kg of mercury.

The PV-10 contents were staged on and under polyethylene sheeting on the Tar Management Area Secondary Containment. Approximately 164 tons of PV-10 wood packing and residuals were disposed as listed hazardous waste K143 by macro-encapsulation at Chemical Waste Management, Inc. in Emelle, Alabama. Approximately 22 tons of PV-10 “fines” or material less than 3-inches in the greatest dimension were disposed as listed hazardous waste K143 at Heritage Thermal Services, Inc. in East Liverpool, Ohio. PV-10 steel was decontaminated and recycled with Niagara Metals.



The Photographic Log, analytical tables, laboratory report, and waste manifests are provided in **Appendix E7,** Light Oil Scrubber.

8.8 Chillers/Heat Exchangers

The Chillers/Heat Exchangers were located in the Light Oil Area Secondary Containment. The chillers were ruptured and in poor condition. The chillers were carefully removed by mechanical shearing and residual oil was recovered from the chillers and associated pipe rack before they were removed from the Light Oil Area.

One waste characterization sample was collected. Analytical results indicated the sample was characteristically hazardous for benzene (D018) and selenium (D010). Seven drums of oil were disposed as hazardous waste with Veolia Technical Solutions in Middlesex, New Jersey. The oil was managed by method H061, "fuel blending prior to energy recovery at another site (waste generated on-site or received from off-site)." Note that a single drum of oil [Ignitable (D001), benzene (D018), and pyridine (D038)] is also listed on the Veolia waste manifest and managed by the same method H061. This drum contained oil drained from the process piping from the nearby Light Oil Area Buildings 10 North and 10 South. The deconstructed steel chillers were recycled with Niagara Metals.

The Photographic Log, analytical tables, laboratory reports, and waste manifests are provided in **Appendix F,** Chillers/Heat Exchangers.

8.9 Exhauster Building

The exhauster building (BCP-20) was centrally located in the former by-products area. It was constructed of steel beams covered with corrugated roofing and siding. It housed three large blowers, called exhausters in a coking plant, that drew the COG under vacuum from the collector main, across the crossover pipes, and through the primary and secondary coolers before exhausting it under pressure to the rest of the COG process and the battery and boiler house. The exhausters would have operated at high temperature and pressure and were expected to contain some residual tar as the majority of the other constituents of COG would have remained in the vapor phase. However, the exhausters were found to be empty.

The exhausters were interconnected to the rest of by-products with COG pipe. The piping was disconnected and removed following the Coke Oven Gas Pipe and Coke Oven Gas Pipe Residuals Interim Remedial Measures Work Plan (October 2021) in June and July 2022. Out of an abundance of caution and following the procedures outlined in the COG IRM Work Plan, the exhausters were submerged in the quench pit for 24 hours before being sheared to size. The exhuaster steel was recycled with Niagara Metals.

The Pre-Demolition Inspection and Photographic Log are provided in **Appendix G1**, Exhauster Building.

8.10 Pump House

The pump house building (BCP-38) was located at the eastern end of the by-products area. It was a brick structure that housed an array of pumps and piping for cooling water and quench oil. The pump house was prepared for demolition in July and August 2022. All free liquids were drained from the pump house piping and equipment. The pump house was demolished in August 2022. The brick was stained with black residuals and the brick and material scraped from the floor and pedestals were stockpiled for disposal characterization.

The south side of the Pump House had a concrete slab that previously supported the heat exchangers. The slab had collection sumps along the north and south sides of the heat exchanger area. The concrete slab

appeared to extend between the two sumps but was partially covered with site fill. A 10-inch pipe leaking a black NAPL was observed in the north sump. The fill and NAPL were removed from the sumps in July 2022. A memorandum titled Heat Exchanger/Chiller Area South of the Pump House (Inventum, July 2022) was submitted documenting the sump conditions and observations which may be referenced in **Appendix G2,** Pump House.

One waste characterization sample was collected from the brick pile, the sump material pile, and the drained oils generated from the pump house. The brick sample and sump material sample were not characteristically hazardous. The sample of oil was characteristically hazardous for benzene (D018).

The brick and the sump material were approved for disposal as solid waste at Modern Landfill in Model City, New York. Approximately 170 tons of pump house brick were disposed in January 2023 and approximately 20 tons of sump material were disposed in April 2023. The drums of oil drained from piping and equipment in the pump house were disposed as characteristically hazardous waste at Veolia Technical Solutions in Flanders, New Jersey in October 2022. Steel generated from the pump house demolition was recycled with Niagara Metals.

The Pre-Demolition Inspection, Photographic Log, analytical tables, laboratory reports, and waste manifests are provided in **Appendix G2,** Pump House.



9 Post Removal Inspections

After the process equipment was removed the exposed ground surface or foundation was assessed to document any evidence of contamination.

Primary Cooler PV-1 was anchored to a concrete pedestal that was almost completely coated with black, hardened, tar-like material. The pedestal, and entire Tar Management Secondary Containment, were decontaminated by sand/media blasting by Lake Effect in March 2023 (Photograph No. 15 and 16 in the PV-1 Photographic log).

The Tar Precipitator PV-3 was anchored to a concrete pad with black residuals accumulated on the surface (Photograph No. 1 of the PV-3 Photographic Log). The concrete pad was scraped with a flat bladed excavator bucket to remove the residual accumulation. The residuals were added to the K143 residual pile staged on the Tar Management Area secondary containment.

Photograph No. 2 of the PV-10 Photographic Log shows a hardened material that appears to have had the potential of dripping from the open flange, but there was no evidence of it having been released. During deconstruction of PV-10 this material was disposed of without being released to the ground.

During foundation removal, grossly contaminated material (GCM) had been observed in the by-products area. The by-products area, referred to as the MW-BCP-05 Area, has since been solidified in accordance with the Source Area Solidification IRM Work Plan (Inventum, October 2023).

The Secondary Cooler PV-2, Ammonia Concentrators PV-4, 5, 6, and 7, Abandoned Actifier PV-8, and Abandoned Vessel PV-9 did not exhibit evidence of a historical release and did not have staining on the concrete pads.



10 Process Vessel Residual Quench Water

Quench water was available in the yellow quench box throughout the process equipment removal. For all vessels, except the ammonia concentrators, the field-testing during sample collection and/or during the contents inspections after lowering did not produce a change in temperature of greater than 10° F nor did a reaction occur upon exposure to the atmosphere. Therefore, only the PV-4 through PV-7 residuals were quenched.

One characterization sample of the water used to quench the residuals was collected in September 2022. Analytical results indicated the water was characteristically hazardous for benzene, with a concentration of 1,000 ug/L (compared to the criterion of 500 ug/L). All quench water was treated through the onsite permitted groundwater treatment system and discharged directly to the sanitary sewer and to the POTW in accordance with Permit No. 331.

The analytical table and laboratory report are provided in **Appendix H,** Process Vessel Residual Quench Water.

11 Materials Management

To the extent practicable and safe, materials were segregated, stored, and managed in accordance with their material composition, including but not limited to:

1. ACM gaskets/flanges
2. Construction and Demolition (C&D) Debris
3. Grossly Contaminated Materials
4. Structural Steel
5. Non-ferrous Metal
6. Non-durable Materials
7. Piping, Pumps, and Equipment
8. Holding Tanks and Process Equipment
9. Electrical Equipment and Motors

A shipment summary organized by material type is provided in **Appendix B,** Shipment Summary. The management of each class of material is described below.

11.1 ACM Gaskets/Flanges

ACM was not encountered during equipment removal under the IRM Work Plan.

11.2 C&D Debris/Nondurable Materials

C&D debris were those materials that were not suitable for use as fill, and which were not known to be impacted by the former operations at the Riverview BCP site and that are also free of asbestos. These materials were typically plastic or fibrous (e.g., wood supports) and other non-durable materials. These materials were separated, inspected, staged in a roll-off container or on polyethylene sheeting and shipped offsite for disposal at a permitted landfill. Note: Wood blocking from inside PV-10 was not considered C&D and was handled as K143 listed hazardous waste.

As a new waste stream, the NYSDEC was notified 5 days before the process equipment C&D was transported offsite. All shipments of C&D were tracked by transporter, disposal facility, and weight in accordance with the Riverview BCP March 23, 2021, Demolition Work Plan (Demolition Work Plan).

Any materials found to be impacted were segregated and managed by the appropriate waste characterization of hazardous or non-hazardous. C&D debris was generated from the demolition (pump house area, byproducts area).

11.3 Grossly Contaminated Materials

The characterization of grossly contaminated materials included:

- Building materials that were stained and could not be decontaminated;
- Building materials that were covered with or potentially saturated with petroleum, light oils, or other liquid by-products; and
- Building materials that produced a sheen or sufficient odor that could be detectable during transportation.

Grossly contaminated building materials that could not be decontaminated were managed as either a hazardous or non-hazardous waste. The determination was made after consultation with the NYSDEC

based on laboratory analysis of representative samples. The pump house, any portion of the exhauster building floor slab, or any stained concrete was considered “grossly contaminated”. The pedestals of the process equipment were classified after the associated equipment had been removed (See Section 9. Post Removal Inspections). Building materials were staged on the associated building slab.

11.4 Structural Steel

Uncontaminated structural steel was segregated into manageable stockpiles in preparation for off-site recycling. Clean structural steel was defined as structural elements that were free of accumulations of hazardous waste and that approved recycling facilities would accept. Clean structural steel was stockpiled and inspected before it was prepared for recycling. All shipments of steel scrap were tracked and recorded in accordance with the Demolition Work Plan and listed on the monthly waste tracker. All structural steel was recycled with Niagara Metals.

11.5 Non-Ferrous Metals

Non-ferrous metals were not recovered from the process equipment work area.

11.6 Piping, Pumps, and Equipment

Non-COG piping, pumps, and equipment that were purged/drained, cleaned, and free of visual contamination were recycled.

Equipment that contained residual process materials that could not be removed were managed and disposed of as hazardous debris in accordance with 6 NYCRR Part 376.4(g). Hazardous debris was stored as a hazardous waste in a satellite accumulation area and inspected weekly until transportation and disposal were arranged.

11.7 Process Equipment Disposal

The process equipment was decontaminated as previously described in this CCR. If the process equipment could not be decontaminated to remove hazardous material, then the impacted sections of the process equipment were classified as hazardous debris in accordance with 6 NYCRR Part 376.4(g). The impacted PV-1 and PV-3 materials were stored as a hazardous waste and inspected weekly until transportation and disposal were arranged. As a new waste stream, the NYSDEC was notified no less than 5 days before any of these materials were transported for disposal.

11.8 Electrical Equipment and Motors

Electrical supply equipment was removed prior to demolition. There was one relatively new (faceplate was from 2006) transformer in the precipitator control room (Building BCP-35) known to contain approximately 60 gallons of dielectric fluid with concentrations less than 50 ppm PCBs. The transformer was removed from the precipitator control building before work on the tar precipitator (PV-3) or the ammonia concentrators (PV-4 through PV-7) was initiated. The transformer was stored in the warehouse (Building BCP-18) before it was drained and transported offsite for recycling

Electric motors were prepared for offsite recycling by removing any accumulations of process residuals (if present) from the exterior surfaces. The motors were staged in the warehouse (Building BCP-18) prior to being transported offsite for reuse or recycling.



12 Process Equipment Waste Management

The residuals from the process equipment were assumed to exhibit the characteristics of the COG residuals, unless:

- previously exposed to the atmosphere (PV-8 and PV-10);
- the pre-mobilization testing (Section 5) confirmed the residuals did not react with the atmosphere;

Absent evidence that the residuals were not spontaneously combustible, the residuals from the process equipment were quenched for 72-hours after removal from the sheared unit. The management sequence was as follows:

a. Mobilized a quench tank with no less than twice the capacity to hold the estimated volume of material in the process equipment to be tripped that day;
b. Filled the quench tank to 50% capacity with potable water;
c. Mobilized a hose hooked to a pump that had quench water available for no less than 4 hours (e.g., a 20-gpm quench pump with access to 5,000 gallons of water);
d. Tripped the process equipment onto polyethylene sheeting with berms or a concrete slab with surrounding containment;
e. Sheared open the process equipment with a water spray. All sprayed quench water shall be contained and conveyed to the groundwater treatment system;
f. Moved the bulk residuals into the quench tank with an excavator equipped with a smooth blade ditching bucket;
g. After 72-hours, pumped the quench water to the groundwater treatment system; and
h. Removed the residuals and placed on polyethylene sheeting to drain. Temperature was monitored as the residuals dried.

The residuals were managed in accordance with the characteristics determined by laboratory analysis (see Sampling). The residuals in PV-10 were listed hazardous waste K143 and characteristically hazardous. The residuals were stored in a hazardous waste satellite storage area on the Tar Management Secondary Containment. The ammonia concentrator residuals were characteristically hazardous and stored on polyethylene sheeting in a hazardous waste satellite storage area on the baghouse pad. The satellite storage areas were inspected weekly until the wastes were transported from the site. Generated wastes were not combined unless the residual materials were compatible (e.g. PV-4, PV-5, PV-6, and PV-7 were used in the same phase of the COG process and contained physically similar residuals).

12.1K143 Waste Residual Pile

The waste residual pile referred to as the “K143 Pile” was generated during the process equipment removal. The material consisted predominately of residuals potentially from tanks PT05, PT06, PT07, PT08, PT11, the tank heel of PT04, Light Oil Area secondary containment solids, and Tar Management Area secondary containment solids. The residuals were consolidated within the Tar Management Area secondary containment and stabilized with sawdust and Lime Kiln Dust (LKD) to eliminate free liquids for transportation and disposal.

The lack of generator/operator knowledge and the poorly managed state of the overall Tar Management Area made it impossible to determine when releases occurred, whether the materials were by-products or production wastes, or which materials came from which source. RSI Environmental of Quebec, Canada

approved a waste disposal profile for the K143 pile based on a submission of the analytical data and estimated volume from the respective tanks and Light Oil Area secondary containment solids that contributed to the pile. While multiple K-listed waste codes could have potentially been applied to certain materials comprising the pile, the waste facility RSI advised consolidating the wastes and assigning the waste disposal codes K143 and D018 based on the material analyses and the fact that the waste treatment process was the same for all materials from a coke plant and they would be blended at the treatment facility on arrival.

Small quantities of non-listed materials, if insufficient to constitute a separate shipment, were consolidated into the K143 listed waste residual pile. Although not subject to K143 classification, these materials were managed with the pile to facilitate disposal. The consolidated non-listed materials comprised a comparatively small portion of the total pile volume and were managed under the more stringent listed waste requirements. The small quantities of materials included the residuals scraped from the exhauster building slab, byproducts area slabs, and PV-2 rust scale residuals.

Nine samples were collected from the pile between August 2022 and November 2022 and analyzed for waste facility acceptance requirements including total mercury, TCLP mercury, percent moisture, and BTU. The sample contained total mercury at 0.798 mg/kg and TCLP mercury was not detected. The samples had a moisture level between 6.59 percent and 34.73 percent. The samples had a BTU between 10,476 BTU/lb and 12,969 BTU/lb. The analytical table is provided in **Appendix J.**

Approximately 380 tons were incinerated at RSI. Waste manifests are included in **Appendix J,** K143 Pile Waste Manifests.



13 Spills

The SWPPP was followed at all times. No spills occurred during implementation of the IRM Work Plan.

Engineering Certification

I, John P. Black, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Process Equipment Construction Completion Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Respectfully Submitted,

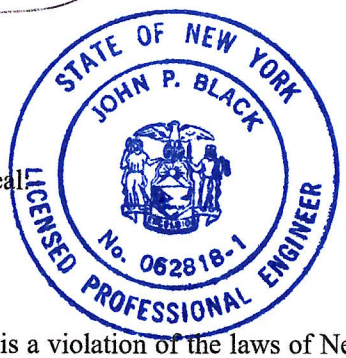
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John P. Black, P.E.

Date: 11.5.2025

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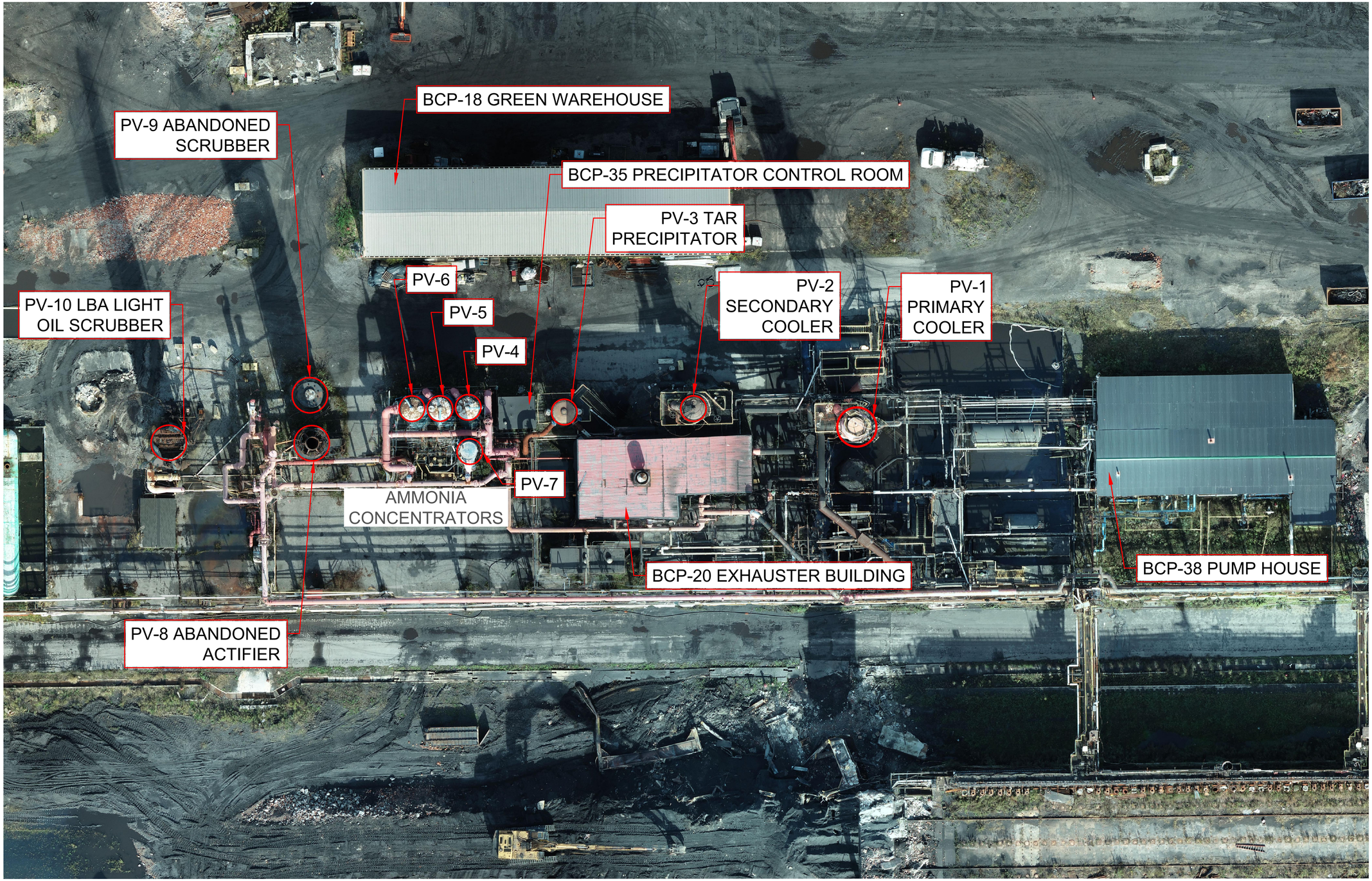
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Figure 1





N

40 0 10 20 40 80

1 INCH = 20 FEET (22X34)

D

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FIGURE 1

DRAWING NUMBER
A0I 2 WEST

Appendix A – Temperature Monitoring Summary

Temperature Monitoring Summary
Process Equipment CCR
Riverview Innovation Technology Campus, Inc.,
Tonawanda, New York

	Primary Cooler PV-1	Secondary Cooler PV-2	Tar Precipitator PV-3	Ammonia Concentrator PV-4	Ammonia Concentrator PV-5	Ammonia Concentrator PV-6	Ammonia Concentrator PV-7	Abandoned Actifier PV-8	Abandonded Vessel PV-9	Light Oil Scrubber PV-10
Sample Field Testing	-	-	-	-	**8/25/2022**	-	-	**9/9/2022**	-	**5/4/2022**
Ambient Temp (F)	-	-	-	-	69	-	-	67	-	-
Initial Temp (F)	-	-	-	-	75	-	-	76.9	-	-
Final Temp (F)	-	-	-	-	-	-	-	76.0	-	-
PiD-material (ppm)	-	-	-	-	47.1	-	-	0	-	204
PiD-vessel opening (ppm)	-	-	-	-	0.3	-	-	0	-	70-80
O2 (%)	-	-	-	-	20.6	-	-	20.6	-	20.9
LEL	-	-	-	-	0	-	-	0	-	0
Material Phases	-	-	-	-	Solid	-	-	Solid	-	Solid
Material Thickness	-	-	-	-	4"-6" to 1'	-	<1"	4'	-	46"
Date Demolished	**10/5/2022**	**9/20/2022**	**9/21/2023**	**9/15/2022**	**9/15/2022**	**9/14/2022**	**9/14/2022**	**10/10/2022**	**9/23/2022**	**10/20/2022**
Before Work										
Sun Side	74.0	111.6	74.1, 109.5	66.1	84, 88, 95, 73.2	101.6, 91.8	81.3, 82.3, 99.5	113.0	-	52-62
Shade Side	60.0	70.3	70.2, 69.8	57.4	71, 53.7	74.9, 59.2	69.9, 60.5, 85.5	67.0	-	42-44
Residuals										
In opened vessel	73.1-76.3	87.0	70.8, 73.4	60-71	85-93	60-72	81.4, 86.6	59-60	-	48.0
Packing Material	-	-	-	-	-	-	84-95	-	-	46.0
Removed Residuals	-	68.2	-	Quenched	Quenched	Quenched	**104-106** Quenched	-	-	45-47
End of Day, in Work Area										
First Measurement	-	76.0	69.1	70.1	70.1	70.1	-	-	-	39.0
Second Measurement	-	73.0	-	61.7	61.7	61.7	-	-	-	45-47
Notes:										
1. All temperatures were recorded in Farenheit, °F.										
2. "Residuals" in PV-1 were those coating the steel journals on the interior of the vessel. This measurement was the general interiror of PV-1.										

Appendix B – Material Shipment Summary

Waste Shipment Summary
Process Equipment Construction Completion Report
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Date Shipped	Profile #	Manifest #	eight Ticke	Waste Type	Disposal Facility	Carrier	Type	Vehicle #	Material Quantity	Material Unit	Description
Grossly Contaminated Materials											
11/17/2022		017760942FLE		Tar impacted steel	USE - Belleville	US BULK	Trailer		23.10	Tons	Tar impacted material from PV-1 & PV-3 going for microencapsulation
12/8/2022		017760943FLE		Tar impacted steel	USE - Belleville	US BULK	Trailer		23.15	Tons	Tar impacted material from PV-1 & PV-3 going for microencapsulation
12/8/2022		017760944FLE		Tar impacted steel	USE - Belleville	US BULK	Trailer		22.82	Tons	Tar impacted material from PV-1 & PV-3 going for microencapsulation
8/7/2023		17760959FLE		Tar Impacted Pipe - Microencapsulation	RES Belleville	US Ecology	Trailer		18.68	Tons	Tar Impacted pipe sitewide for microencapsulation
K143 Pile Residuals											
11/22/2022		023894471JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		33.95	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
11/28/2022		023894472JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		34.29	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
11/28/2022		023894473JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		34.40	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
11/28/2022		023894474JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		33.44	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
11/29/2022		023894475JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		35.63	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
11/29/2022		023894476JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		37.46	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
12/5/2022		023894477JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		33.67	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
12/5/2022		023894478JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		36.33	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
12/6/2022		023894479JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		35.41	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
12/12/2022		023894480JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		38.00	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
12/14/2022		023894488JJK		K-listed waste	RSI Environmental	Laidlaw Carriers	Trailer		28.78	Tons	Stabilized K-listed waste from PV tanks and LOA secondary containment
Process Equipment Residuals											
6/23/2023		006362959GFB		Ammonia Concentrators	Chemtron Corporation	Franks Vacuum Truck Service	Trailer		11.43	Tons	Stabilized K-listed waste from PV-4 through PV-7
3/23/2023	M23-3539	0018631		PV-8 Media	Modern	Modern	30 CY Roll-off		19.55	Tons	Media from within process vessel PV-8
4/11/2023	M23-3539	0018629		PV-8 Media	Modern	Modern	30 CY Roll-off		13.56	Tons	Media from within process vessel PV-8
4/10/2023		007272470GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	30 CY Roll-off		8.9	Tons	Wood media from PV-10 macroencapsulation
4/10/2023		007272471GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	30 CY Roll-off		8.26	Tons	Wood media from PV-10 macroencapsulation
4/24/2023		007272473GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	30 CY Roll-off		8.55	Tons	Wood media from PV-10 macroencapsulation
4/24/2023		007272474GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		13.5	Tons	Wood media from PV-10 macroencapsulation
5/1/2023		007272477GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		12.79	Tons	Wood media from PV-10 macroencapsulation
5/1/2023		007272478GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		15.32	Tons	Wood media from PV-10 macroencapsulation
5/1/2023		007272479GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		14.17	Tons	Wood media from PV-10 macroencapsulation
5/9/2023		007272475GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		11.88	Tons	Wood media from PV-10 macroencapsulation
5/9/2023		007272476GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	40 CY Roll-off		13.29	Tons	Wood media from PV-10 macroencapsulation
5/15/2023		007272480GFB		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	41 CY Roll-off		15.22	Tons	Wood media from PV-10 macroencapsulation
5/15/2023		007272481GFB		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	Trailer		11.73	Tons	Wood media from PV-10 macroencapsulation
5/22/2023		007272482GFB		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC	Trailer		12.63	Tons	Wood media from PV-10 macroencapsulation
5/30/2023		007272483GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC Inc	40 CY Roll-off		9.83	Tons	Wood media from PV-10 macroencapsulation
6/5/2023		007272484GBF		PV-10 Macroencapsulation	Waste Management-Emelle	Page ETC Inc	40 CY Roll-off		7.84	Tons	Wood media from PV-10 macroencapsulation
6/14/2023		001315509WAS		PV-10 Fines & Lake Effect Waste	Heritage Thermal Services	Heritage Transport LLC	30 CY Roll-off		13.64	Tons	PV-10 & Lake Effect Secondary Containment Cleanup
Drained/Recovered Oil											
6/20/2022		001563886 VES		Hazardous waste oil	Veolia Environmental	Frank's Vac	Box Van		1.2	Tons	Oil from Chillers, Building 10S, Building 10N, and pipe rack oil
10/28/2022		001565135VES		Pump house oil	Veolia Environmental	Frank's Vac	Box Van		8	drums	Oil drained from lines within pump house
C&D											
8/16/2022	M21-3292	0011176		C&D - general debris	Modern	Modern Disposal	30 CY Roll-off		4.61	Tons	C&D site wide and from pump house
8/19/2022	M21-3292	0011177		C&D	Modern	Modern Disposal	30 CY Roll-off		10.7	Tons	C&D pump house
7/26/2022	M21-3292	0011172		C&D	Modern	Modern	30 CY Roll-off		9.77	Tons	C&D from byproducts area
1/17/2023	M21-3292	0011181		C&D	Modern	Pariso Logistics	Trailer		20.96	Tons	Pump house brick
1/17/2023	M21-3292	0011182		C&D	Modern	Pariso Logistics	Trailer		21.86	Tons	Pump house brick
1/17/2023	M21-3292	0011183		C&D	Modern	Pariso Logistics	Trailer		20.75	Tons	Pump house brick
1/17/2023	M21-3292	0011184		C&D	Modern	Pariso Logistics	Trailer		20.07	Tons	Pump house brick
1/17/2023	M21-3292	0011185		C&D	Modern	Pariso Logistics	Trailer		21.61	Tons	Pump house brick
1/17/2023	M21-3292	0011186		C&D	Modern	Pariso Logistics	Trailer		19.73	Tons	Pump house brick
1/17/2023	M21-3292	0011187		C&D	Modern	Pariso Logistics	Trailer		26.18	Tons	Pump house brick
1/17/2023	M21-3292	0011188		C&D	Modern	Pariso Logistics	Trailer		21.21	Tons	Pump house brick
4/13/2023	M22-3492	0019175		Soil Debris	Modern	Modern	30 CY Roll-off		17.81	Tons	Soil and debris from pump house sump
Notes:											
1. No ACM was dipsosed under the Process Equipment IRM Work Plan.											

Date	Container Type	Matrix	Materials	Weight (Tons)	Shipped By/To	Notes
Structural Steel						
7/27/2022	Dump Trailer	Metal	Prepared P&S	26.71	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	byproducts
9/8/2022	Dump Trailer	Metal	Prepared P&S	24.58	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
9/8/2022	Dump Trailer	Metal	Prepared P&S	27.85	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts / ACM tunnel
8/3/2022	Box Truck	Metal	Heavy Melt	5.49	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
8/5/2022	30 CY Roll-off	Metal	Oversized Shearing	5.87	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
8/11/2022	Box Truck	Metal	Shredding	6.45	Niagara Metals - 4861Packard RD, Niagara Falls, NY	By Products
8/11/2022	Dump Trailer	Metal	Heavy Melt	28.41	Niagara Metals - 4861Packard RD, Niagara Falls, NY	By Products
8/12/2022	Dump Trailer	Metal	Heavy Melt	28.84	Niagara Metals - 4861Packard RD, Niagara Falls, NY	By Products
8/12/2022	Dump Trailer	Metal	Heavy Melt	25.96	Niagara Metals - 4861Packard RD, Niagara Falls, NY	By Products
9/1/2022	30 CY Roll-off	Metal	Oversized Shearing	6.86	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
9/8/2022	30 CY Roll-off	Metal	Heavy Melt	14.56	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
9/12/2022	30 CY Roll-off	Metal	Heavy Melt	13.21	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
			Subtotal:	214.79		
Pipes, Pumps, and Equipment						
7/20/2022	30 CY Roll-off	Metal	Oversized shearings	6.52	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Pipe rack along Broadway/byproducts
7/20/2022	Dump Trailer	Metal	Prepared P&S	25.84	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Broadway pipe rack / byproducts
7/22/2022	Dump Trailer	Metal	Prepared P&S	27.43	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Broadway pipe rack / byproducts
7/22/2022	30 CY Roll-off	Metal	Shearing	5.79	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Broadway pipe rack / byproducts
7/26/2022	Dump Trailer	Metal	Prepared P&S	28.53	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Broadway pipe rack / byproducts
7/28/2022	Dump Trailer	Metal	Shredding material	4.62	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Siding from exhauster building
7/28/2022	Dump Trailer	Metal	Shredding material	3.89	Niagara Metals - 4861 Packard RD, Niagara Falls, NY	Siding from exhauster building
8/12/2022	Dump Trailer	Metal	Sheet Iron	4.44	Niagara Metals - 4861Packard RD, Niagara Falls, NY	pump house
9/7/2022	30 CY Roll-off	Metal	Heavy Melt	17.66	Niagara Metals - 4861Packard RD, Niagara Falls, NY	COG line / byproducts (valves)
9/7/2022	30 CY Roll-off	Metal	Cast / Shearings	8.85	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts
9/8/2022	30 CY Roll-off	Metal	Stainless	5.71	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Byproducts / site wide
10/26/2022	30 CY roll-off	Metal	Shearings	12.75	Niagara Metals - 4861Packard RD, Niagara Falls, NY	byproducts area
			Subtotal:	152.03		
Electrical Equipment/Motors						
9/12/2022	30 CY Roll-off	Metal	Transformer housings	3.47	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Transformers
9/12/2022	30 CY Roll-off	Metal	Shredding material	1.34	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Transformers
10/6/2022	30 CY roll-off	Metal	Electric motors	11.37	Niagara Metals - 4861Packard RD, Niagara Falls, NY	byproducts area
			Subtotal:	16.18		
Process Vessels						
9/23/2022	Dump Trailer	Metal	Prepared P&S	27.45	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Part of PV4, 5, 6 and 7
10/6/2022	30 CY roll-off	Metal	Oversized shearing	6.32	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area
10/13/2022	30 CY roll-off	Metal	Oversized torching	15.20	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area
10/14/2022	Dump Trailer	Metal	Prepared P&S	27.15	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area
10/14/2022	Dump Trailer	Metal	Prepared P&S	24.89	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area
10/14/2022	Dump Trailer	Metal	Prepared P&S	22.35	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area
9/23/2022	30 CY Roll-off	Metal	Stainless (316)	4.44	Niagara Metals - 4861Packard RD, Niagara Falls, NY	PV7 media
10/6/2022	30 CY roll-off	Metal	Stainless Steel	6.67	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Internal media from PV2
10/13/2022	30 CY roll-off	Metal	Stainless Steel	4.41	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels from byproducts area (PV3)
11/15/2022	Dump Trailer	Metal	4 ft Plate	27.51	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/16/2022	Dump Trailer	Metal	Heavy Melt	25.72	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/16/2022	Dump Trailer	Metal	4 ft Plate	26.85	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/17/2022	Dump Trailer	Metal	4 ft Plate	24.21	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/22/2022	Dump Trailer	Metal	4 ft Plate	30.78	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/29/2022	30 CY roll-off	Metal	Heavy Melt	13.36	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
11/29/2022	30 CY roll-off	Metal	4 ft Plate	6.12	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
12/1/2022	30 CY roll-off	Metal	Heavy Melt	12.06	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
12/5/2022	30 CY roll-off	Metal	Heavy Melt	13.88	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
12/5/2022	30 CY roll-off	Metal	Heavy Melt	7.12	Niagara Metals - 4861Packard RD, Niagara Falls, NY	Process vessels
			Subtotal:	326.49		
			Total:	**709.49**		
Notes:						
1. Non-ferrous metal was not generated for recycling under the Process Equipment IRM Work Plan						

Appendix C – Building Permit

Town of Tonawanda
Building Department

525 Belmont Ave
Buffalo, NY 14223
Phone: 877-8801
Fax: 871-8845

BUILDING PERMIT

Com. Demolition
Permit Number: BP2021-0018

Applicant
Name: Ontario Specialty Contracting
Address: 140 LEE STREET SUITE 200
BUFFALO, NY 14210
Phone: 716-856-3333

Owner
Name: Riverview Innovation &
Address: 1001 East Delavan Ave Unit 17
Buffalo, NY 14215
Phone:

Parcel Number: 64.08-1-10
Address: 3875 River Rd
Tonawanda, NY 14150

Issue Date: 01/11/2021
Expiration Date: 01/11/2023
Construction Value: $1,110,000.00

Description
Demolition of buildings and structures at former Tonawanda Coke.

Contractor
Name: Ontario Specialty Contracting
Address: 140 LEE STREET SUITE 200
BUFFALO, NY 14210
Phone: 716-856-3333

Charge Description	Amount	Paid
Com. Demolition	9000.00	9000.00

$0 Balance Due.

Thomas Duncan
Building Official

March 29, 2002
Date

Appendix D – POTW Permit No. 331

Permit No. 331
Modified Date: 7/23/20

TOWN OF TONAWANDA

INDUSTRIAL SEWER CONNECTION PERMIT

Company Name: Riverview Innovation & Technology Campus

Division Name (if Applicable)

Mailing Address: 333 Ganson Street
Street or P.O. Box
Buffalo, NY 14203
City, State and Zip Code

Facility Address: 3875 River Road
Street or P.O. Box
Tonawanda, NY 14150

The above Industrial User is authorized to discharge industrial wastewater to the Town of Tonawanda sewer system in compliance with the Town's Sewer Use Ordinance Number 2-2000, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the application filed on October 15, 2019 in the office of the Pretreatment Administrator, and in conformity with plans, specifications, and other data submitted to the Town in support of the above application.

Effective Date: August 1, 2020

Expiration Date: September 30, 2022

Permit No. 331

Date: 7/23/2020 Signed: Paul Morrow

Paul Morrow
Town of Tonawanda
Pretreatment Coordinator

Permit No. 331

Modified Date: 7/23/2020

WASTEWATER STREAMS AUTHORIZED FOR DISCHARGE

WASTEWATER STREAM	APPROXIMATE FLOW(GPD)	YES	NO
A. Sanitary	2,000	x	
B. Boiler Blowdown			
C. Treated Stormwater	53,000	x	
from Diked/Bermed Areas*			
D. Equipment Decon water from Investigation	2,000	x	
E. Coal Yard*	90,000	x	

. Each waste stream must be approved by this office and permit may be modified. All Equipment Cleaning water and water from dikes/ bermed areas must be treated by the same equipment the EPA used on discharge water. * Each new diked bermed area/ coal yard pond will be considered a new waste stream and must be approved by this office.

PART 1 - WASTEWATER DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

A. LOCALLY DERIVED LIMITATIONS

The industrial user shall comply with the following locally derived effluent limitations effective as of: ***August 1st, 2020***

MONITORING LOCATION: Sampling Manhole near Guard Gate

SAMPLE TYPE: 24 Hour Composite for all parameters except pH, SGT-HEM, and Volatiles which will be grabs

PARAMETERS	SAMPLE FREQUENCY	LIMIT	PURPOSE
pH	Monthly	5.0-9.5 SU	Compliance
SGT-HEM	"	100 ppm	"
Total Cyanide	"	1.1 mg/l	"
Biochemical Oxygen Demand	"	250 mg/l	Surcharge
Total Suspended Solids	"	"	"
Total Phosphorus	"	6.0 mg/l	"
Total Mercury	"	0.001 mg/l	Compliance
Total Arsenic	"	0.5 mg/l	Compliance
Priority Pollutant Volatiles (624)	"	----------	Monitoring
Total Recoverable Phenolics	"	----------	Monitoring
Priority Pollutant PAH's (625)	"	----------	"
Total Ammonia	"	----------	"

SGT-HEM= Silica Gel Treated Hexane Extractable Materials

Flow must be reported by the 10th day of the month for the preceding month.

Note: The complete list of discharge limitations for dischargers to the Town Treatment Plant is contained in the Town's Local Law 2-2000. On the basis of the application and previous monitoring, parameters deemed applicable to this discharge have been excerpted and their limitations included above. The discharger should be aware that all other limitations apply and should consider all such limitations when considering process changes or plant modifications.

Special Remedial Waste Streams and Required Analysis

1. Wastewater From the Dewatering of the Mixing Pad and Wastewater from the Power Washing of the mixing pad

   MONITORING LOCATION: Effluent from Charcoal Filter
   SAMPLE TYPE: Grab

PARAMETERS	SAMPLE FREQUENCY	LIMIT	PURPOSE
Priority Pollutant Volatiles (624)	see below	----------	Monitoring
Priority Pollutant PAH's (625)	"	----------	"

One grab sample of dewatering wastewater will be collected from the effluent of the charcoal filter during the completion of dewatering. One grab sample of power washing wastewater will be collected from the effluent of the charcoal filter during the completion of treatment of the power washing wastewater.

PART 1 - WASTEWATER DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

B. USEPA CATEGORICAL PRETREATMENT STANDARDS

The industrial user covered by this permit has been identified as may be subject to the following USEPA categorical pretreatment standard: 40 CFR Part,420 entitled, Iron & Steel, By-product Coke making, Merchant. Under those regulations, the permitee is required to meet the following limitations and perform the following monitoring:

No discharge of Categorical wastewater is allowed by this permit.

PART II - SPECIAL CONDITIONS/COMPLIANCE SCHEDULE

1. *The Industrial User shall develop, within 6 months of the effective date of this permit, an accidental spill prevention/slug control/SPCC plan(s) to eliminate or minimize the accidental or slug discharge of pollutants into the sewer system, which could have an effect on the Town's treatment plant, sludge, or cause the Town to violate its SPDES permit.*

PART III - REPORTING REQUIREMENTS

1. *All Industries requiring submittal of self-monitoring reports (SMR's) must submit all laboratory results on all discharged samples. If a lab analysis was performed using an EPA approved test method, then those results must be included in the SMR.*
   Persons signing SMR's must be a responsible company official, ie; owner, corporate manager, or supervise more than two hundred fifty (250) employees. Any of the above may appoint a company representative to sign SMR's but written notice must be supplied to this office authorizing said employee to sign.

The following statement will be required on all SMR's and baseline monitoring reports (BMR):

" I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation."

2. *If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the Town, if possible at least ten days before the date of the bypass. An Industrial User shall submit oral notice of an unanticipated bypass or slug discharge that exceeds applicable Pretreatment Standards to the Town within 24 hours from the time the Industrial User becomes aware of the bypass or slug discharge. A written submission shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass or slug discharge. The written submission shall contain a description of the bypass or slug discharge and its cause; the duration of the bypass/ slug discharge , including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass/ slug discharge. The Town may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.*

3. *The Industrial User shall notify the Town 30 days prior to the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the POTW from the User's industrial processes. The Industrial User Is required to notify the Town immediately of any changes to its facility affecting it potential for slug discharge.*

4. *Any upset experienced by the Industrial User of its treatment that places it in a temporary state of non-compliance with wastewater discharge limitations contained in this permit or other limitations specified in the Town's Ordinance shall be reported to the Town within 24 hours of first awareness of the commencement of the upset. Immediate resampling for the non-compliance pollutant shall begin. A detailed report shall be filed within 5 days.*

5. *The Industrial User is required to submit to the Town reports on the results of its sampling of the pollutants specified in Part I of this Permit. This report shall also contain monthly flows.*

6. *Analytical procedures must be performed in accordance with 40 CFR Part 136. Additional pollutants not contained in Part 136 must be performed using validated analytical methods approved by EPA (40 CFR 403.12 [g] [4]).*

7. All self-monitoring reports shall be submitted to the following address by the 25th day of the month following the reporting period:

Paul Morrow, Pretreatment Coordinator
Wastewater Treatment Facility
Two Mile Creek Road
Tonawanda, New York 14150

PART IV - STANDARD CONDITIONS

1. *The Industrial User shall comply with all the general prohibitive discharge standards in Article IV of the Local Law 2-2000.*

   a. *BOD 250 mg/l, SS 250 mg/l, P 6 mg/l are not to be construed as discharge limits of the above pollutants but as a baseline for generating abnormal sewer charges. Permitees that sample more frequently than required for surchargeable parameters and have a greater then 30% variation in flow per reportable day will have a flow averaged used for surcharge calculation.*

2. RIGHT OF ENTRY

The Industrial User shall, after reasonable notification by the Town, allow the Town or its representatives, exhibiting proper credentials and identification, to enter upon the premises of the User, at all reasonable hours, for the purposes of inspection, sampling, or records inspection. Reasonable hours in the context of inspection and sampling includes any time the Industrial User is operating any process which results in a process wastewater discharge to the Town's sewerage system.

3. RECORDS RETENTION

The Industrial User shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and all summaries thereof, relating to monitoring, sampling and chemical analysis made by or in behalf of the User in connection with

its discharge.

a) *All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the Town shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.*

4. CONFIDENTIAL INFORMATION

Except for data determined to be confidential under Article VII, Section 4 of the Town's Ordinance, all reports required by this permit shall be available for public inspection at the office of the Pretreatment Coordinator, Wastewater Treatment Facility. Two Mile Creek Road, Tonawanda, New York 14150.

5. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the user shall record the following information:

a) *The exact place, date and time of sampling;*
b) *The dates the analyses were performed;*
c) *The person(s) who performed the analyses;*
d) *The analytical techniques or methods used, and*
e) *The results of all required analyses.*
f) Where sanitary sewer discharge is measured by a mechanical or electronic device, accuracy of device shall be certified correct every year by the manufacturer
g) Where sanitary sewer discharge is measured as consumed water, the water meter must be certified as per the following schedule: meter size 5/8 to 1 inch every ten years, meter size 1 inch to 4 inch every five years, and meter size 4 inches and larger every year.

6. DILUTION

No Industrial User shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit

7. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of sludges and spent chemicals generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

8. TOXIC SUBSTANCES

All waters shall be maintained free of toxic substances in concentrations that are toxic to or produce detrimental physiological responses in human, plant, animal, or aquatic life.

9. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the User, or his designee.

10. REVOCATION OF PERMIT

The permit issued to the Industrial User by the Town may be revoked when after inspection, monitoring or analysis it is determined that the discharge of wastewater to the sanitary sewer is in violation of Federal, State, or local laws, ordinances, or regulations. Additionally, falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form, shall be cause for permit revocation.

11. LIMITATIONS ON PERMIT TRANSFER

Transfer of permit. Industrial waste permits are issued to a specific user for a specific operation. In the event of any change in ownership of the industrial facility, the permittee shall notify the new owner of the existence of the permit by letter, a copy of which shall be forwarded to the Pretreatment Administrator 30 days prior to change of ownership. A new industrial waste permit must be issued to the new owner.

12. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or other document required by this permit or knowingly rendered any monitoring device or method inaccurate, may result in punishment under the criminal law of the Town, as well as being subjected to civil penalties and relief.

13. MODIFICATION OR REVISION OF THE PERMIT

a) *The terms and conditions of this permit may be subject to modification by the Town at any time as limitations or requirements as identified the Town's Ordinance, are modified or other just cause exists.*
b) *This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.*
c) *The terms and conditions may be modified as a result of EPA promulgating a new federal Pretreatment standard.*
d) *Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.*

14. DUTY TO REAPPLY

The Town shall notify a User sixty (60) days prior to the expiration of the User's Permit. Within thirty (30) days of the notification, the User shall reapply for re- issuance of the permit on a form provided by the Town.

15. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

16. LIMITATIONS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State or Local regulations.

17. ENFORCEMENT OF THE SEWER USE LAW AND PERMITS

The Town has developed and received USEPA approval of its Enforcement Response Plan which details the standard responses to be taken by the Town when it encounters various violations of the Sewer Use Law or the terms of this permit. Copies of this document are available at the office of the Pretreatment Administrator. Town of Tonawanda Sewer Use Ordinance 2-2000 Article VI 165-33 allows for punitive Administrative fines of up to $5,000 per day. The Town of Tonawanda may also maintain an action or proceeding in the name of the Town of Tonawanda in a court of competent jurisdiction for injunctive relief of any violation Article 6 of the Town Sewer Use Ordinance 2-2000

Appendix E1: PV-1, Primary Cooler

PV-1 Photographic Log

Client Name: RITC	Date Photo was Taken: 7/6/2022	Project: RITC
Photo No. 1 **Direction Photo Taken:** View is south. **Description:** Process vessel PV-1 was the Primary Cooler located in the Tar Management Area.		
Client Name: RITC	**Date Photo was Taken:** 7/6/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is southwest. **Description:** PV-1 and attached coke oven gas (COG) line (vertical pink pipe).		

Client Name: RITC	**Date Photo was Taken:** 9/26/2022	**Project:** RITC
Photo No. 3 **Direction Photo Taken:** View is northwest. **Description:** PV-1 is prepared to be tipped.		
Client Name: RITC	**Date Photo was Taken:** 10/5/2022	**Project:** RITC
Photo No. 4 **Direction Photo Taken:** View is north. **Description:** PV-1 is prepared to be tipped.		

Client Name: RITC	Date Photo was Taken: 10/5/2022	Project: RITC
Photo No. 5		
Direction Photo Taken: View is north.		
Description: PV-1 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/5/2022	Project: RITC
Photo No. 6		
Direction Photo Taken: View is north.		
Description: PV-1 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/5/2022	Project: RITC
Photo No. 7 **Direction Photo Taken:** View is north. **Description:** PV-1 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 10/5/2022	**Project:** RITC
Photo No. 8 **Direction Photo Taken:** View is aerial, north. **Description:** PV-1 has been tipped.		

Client Name: RITC	Date Photo was Taken: 10/5/2022	Project: RITC
Photo No. 9		
Direction Photo Taken: View is north.		
Description: PV-1 is opened.		

Client Name: RITC	Date Photo was Taken: 10/5/2022	Project: RITC
Photo No. 10		
Direction Photo Taken: View is north.		
Description: PV-1 is opened.		

Client Name: RITC	**Date Photo was Taken:** 10/5/2022	**Project:** RITC
Photo No. 11 **Direction Photo Taken:** View is PV-1 interior. **Description:** The interior of PV-1.		
Client Name: RITC	**Date Photo was Taken:** 10/6/2022	**Project:** RITC
Photo No. 12 **Direction Photo Taken:** View is north. **Description:** PV-1 is sheared and prepared for disposal by microencapsulation.		

Client Name: RITC	Date Photo was Taken: 10/6/2022	Project: RITC
Photo No. 13 **Direction Photo Taken:** View is north. **Description:** Impacted steel from PV-1 is sheared and prepared for disposal by microencapsulation.		
Client Name: RITC	**Date Photo was Taken:** 10/12/2022	**Project:** RITC
Photo No. 14 **Direction Photo Taken:** View is northwest. **Description:** PV-1 is sheared and prepared for disposal by microencapsulation.		

Client Name: RITC	**Date Photo was Taken:** 1/16/2023	**Project:** RITC
Photo No. 15		
Direction Photo Taken: View is north.		
Description: The stained PV-1 pedestal.		
Client Name: RITC	**Date Photo was Taken:** 3/22/2023	**Project:** RITC
Photo No. 16		
Direction Photo Taken: View is north.		
Description: The decontaminated PV-1 pedestal.		

PV-1 Primary Cooler Residual Characterization Memorandum



INVENTUM ENGINEERING

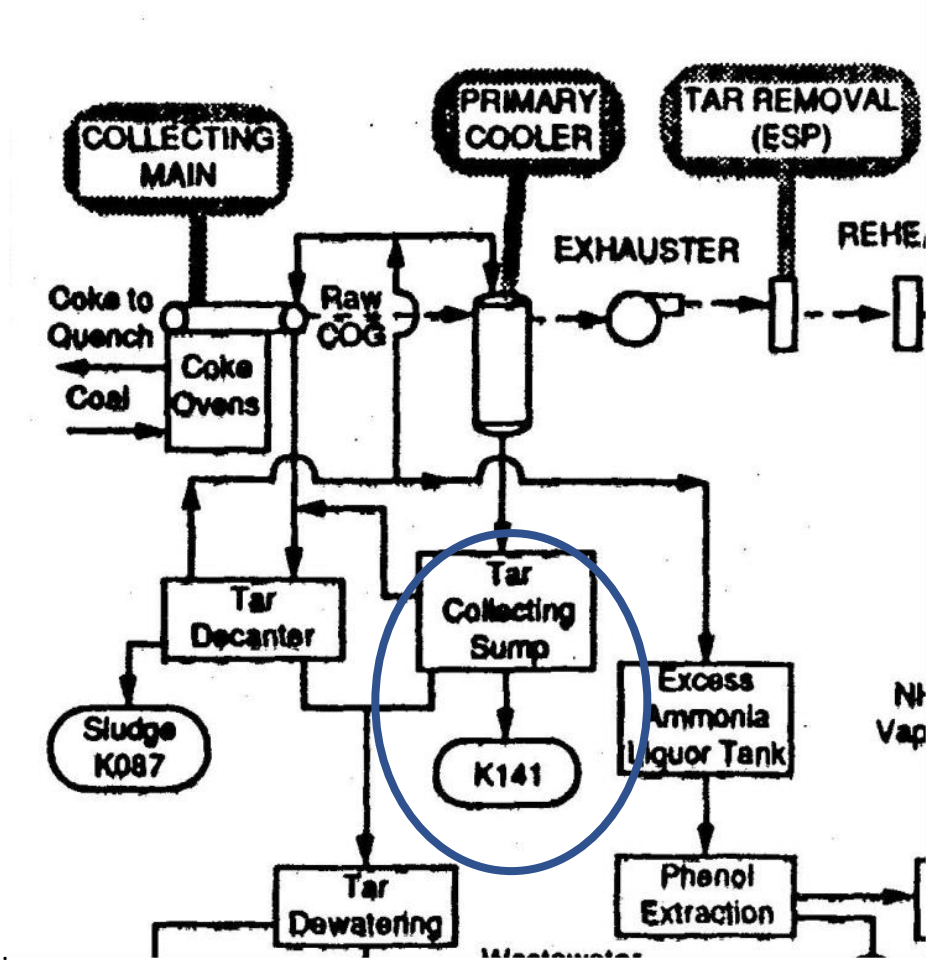
July 8, 2022

To: Ben McPherson

From: Roxanne Birx, John Black, Peter Zaffram

Re: Primary Cooling Tower Process Flow and Material Classification
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York
NYSDEC Site No. C915353

Inventum Engineering (Inventum) has investigated the characterization of the materials in the primary cooler as K141 – Process Residues from the Recovery of Coal Tar. K141 was identified as the residual from a Tar Collecting Sump after the primary cooler in the 1992 RCRA _ Final Rule Federal Register, Volume 5, No. 180, August 18, 1992 (Final Rule). An excerpt from Figure 1 of the Final Rule shown herein, indicates K141 being produced from the Tar Collecting Sump.



441C Carlisle Drive
Herndon, Virginia 20170

The Tar Collecting Sump at the Riverview Innovation & Technology Campus (RITC) Brownfield Cleanup Program (BCP) Site is believed to have been after the Secondary Cooler and had been filled in this sequence by the USEPA Emergency Response Team. There is a secondary cooler after the primary cooler before the Tar Precipitator at RITC, but there was not a secondary cooler until after the Ammonia Absorber in Figure 1 of the Final Rule. The following sequence of photographs follows the process flow at the BCP Site:



Photograph 1: Primary Cooling Tower, eastern most process vessel, first Coke Oven Gas (COG) process vessel.



Photograph 2: Concrete Base, No Visible Tar Collection Sump



Photograph 3: The 30-inch line at base of primary cooler which connects directly to the tar decanter.



Photograph 4: View of pipe connection to decanter.



Photograph 5: The blue line is the pipe shown in Photograph 3 to the tar decanter. The yellow line is a 24-inch to 30-inch line from the Primary Cooler to the Secondary Cooler, prior to the Exhausters.



Photograph 6: Line from primary to secondary cooler.



Photograph 7: 3-inch to 4-inch lines off southeast side of primary cooler, all lines tie into the north pipe rack running to the Pump House.



Photograph 8: Small pipe from Cooler base to valve.



Photograph 9: Secondary Cooler, view looking south, just north of Exhauster Building.

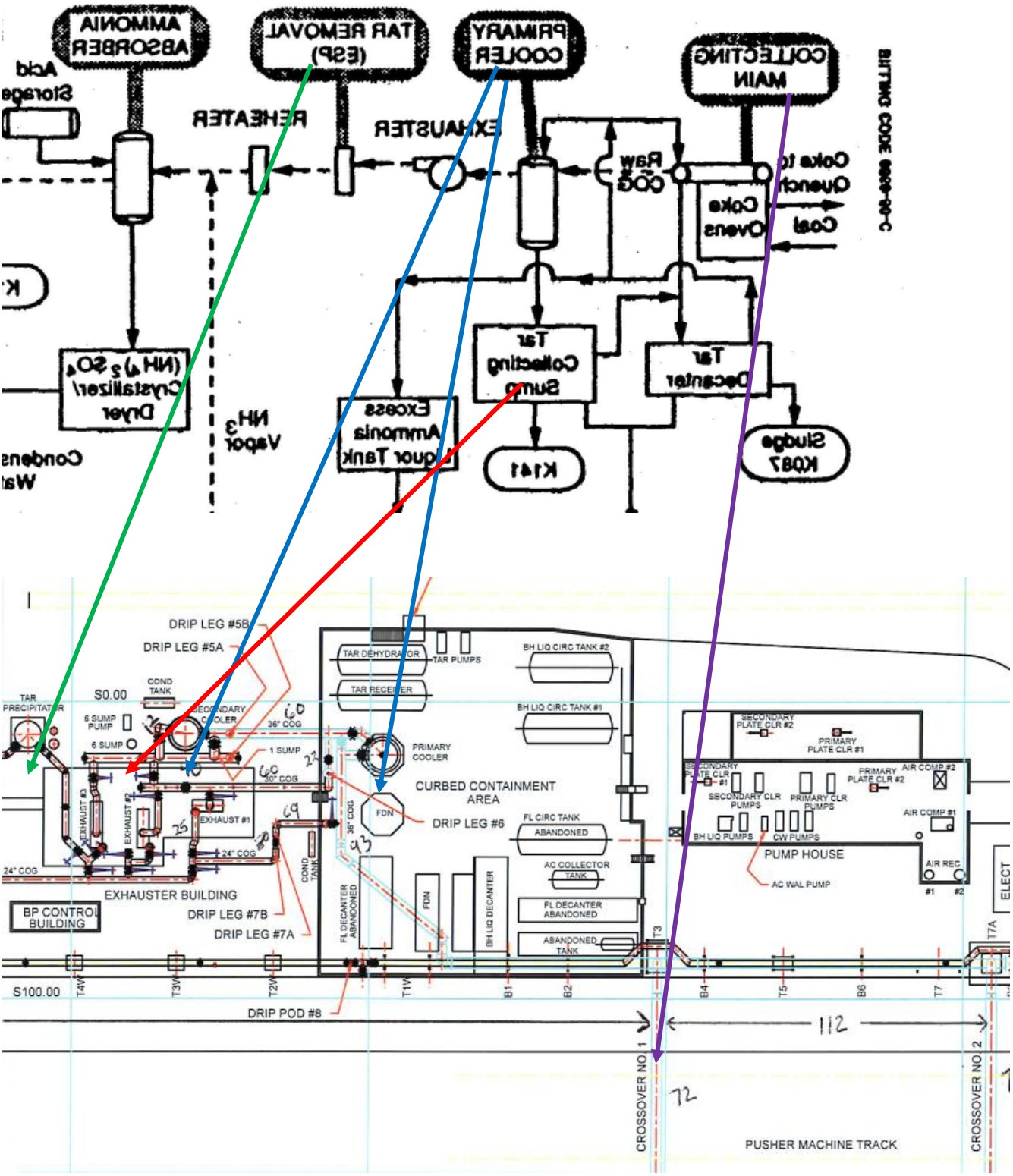


Photograph 10: A 2-inch line from tank north of Secondary cooler to the tar precipitator condensate sump east of Tar Precipitator.

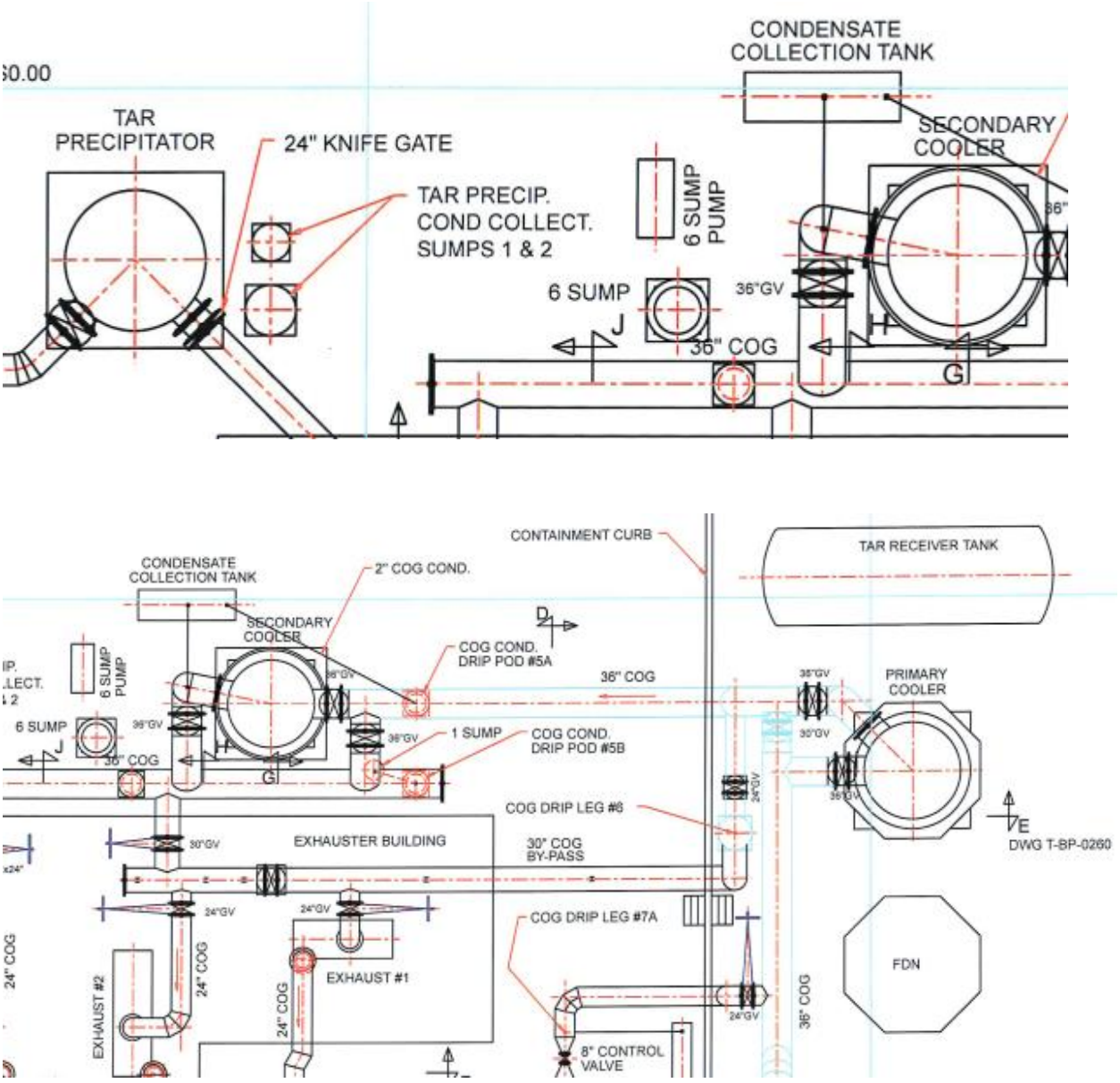


Photograph 11: 2-inch line coming from main vertical drip pod on Secondary Cooler.

Although the equipment arrangement is in the opposite flow direction, i.e. Figure 1 of the Final Rule flows left to right, and at the BCP Site, the flow is right to left, the only difference is the addition of the secondary cooler before the Tar Removal instead of after the ammonia absorbers.



The small tank in Photographs 11, is believed to be the condensate collection tank:



Excerpts: Process Schematic Drawing No. T-BP-0258

The tar collection sump is believed to be the "6 Sump" that was backfilled by the US EPA. The gravel in Photographs 10 and 11 is not representative of fill that was from the TCC production period. The USEPA representatives mentioned they filled some pits for "safety reasons". There is no indication that anything other than filling was completed.

The 1982 schematic of this equipment (Attachment A) does not show a Tar Collecting Sump. All non-COG residuals appear to have been assumed to be in a pumpable liquor phase in the 1982 design. While possible in, and from, the primary cooler at temperatures well above 300^{0}F and it seems unlikely that all residuals in the secondary cooler would have stayed in a liquid phase. As a result, it is our interpretation that any tar like phase, the K141, any associated with the COG process equipment, would have originated

from the 6 sump, would have been pumped with the 6 sump pump (no longer on-site) to the decanter, or remains.

Conclusion

It is Inventum's interpretation that the residual materials in the primary and secondary cooler are solid waste, potentially, characteristically hazardous waste, but not a listed waste because the origin of the waste is not from the concentrated tar from the Tar Collecting Sump.

While seemingly semantics since the hazardous waste will be incinerated whether listed or characteristically hazardous, it is a logistical issue. The disposal facility for the listed and characteristic wastes requires listed wastes to be transported separately and under their own profile, while characteristic hazardous wastes can be combined with other waste steams for more efficient and timely transportation and disposal.

Attachment A

1982 Process Schematic

OVEN BATT. COLLECTOR MAINS

CROSSOVER #2

CROSSOVER #1

TO QUENCH STATION

TO TOWN OF TONAWANDA SANITARY SEWER

WATER SAMPLE STATION

ACID TANK

EQUALIZATION TANK

PLANT SANITARY SEWER FROM LOCKER BUILDING, MAIN OFFICE, COAL HANDLING, A.C., MACH. SHOP, OVENS, POWER HOUSE, BOILER HOUSE, & GAS COMP.

#2 F.L. DECANTER (OUT OF SERVICE)
LIQUOR
TAR

#1 F.L. DECANTER
LIQUOR
TAR

LIQUOR DECANTER
LIQUOR
TAR

SURGE TANK

FINISH LIQUOR PUMPS.

#2 TAR DEH
LIQUOR
TAR

#3 TAR DEH
LIQUOR
TAR

TAR PUMPS.

STEAM

B.H. RECIRCULATION PUMPS.

B.H. COLLECTOR

TAR STORAGE TANK.

TANK CAR LOADING STATION

PRIM. CGA Gas Cooler

LIQUOR

PRIMARY LIQ. RECIRCULATION PUMPS.

STEAM

PRIM. PLATE COOLER

MILL WATER

BOOSTER PUMP.

SEC. CGA Gas Cooler

LIQUOR

SECONDARY LIQ. RECIRC. PUMP.

SEC. PLATE COOLER

MILL WATER

BOOSTER PUMP

To OUTFALL

#1 EXHAUSTER

#2 EXHAUSTER

#3 EXHAUSTER

#1 WEAK LIQUOR TANK
WEAK LIQUOR
TAR

L.G.A.'S (NH_3 REMOVAL)

MILL WATER.

6 5 4 3 2 1

SUMP

To OVENS HEATING

To BOILERS & COMPRESSORS

LBA LIGHT OIL REMOVAL

PURIFIER H_2S REMOVAL

ACTIFIER

L.O. TO STORAGE & SHIPMENT

L.O. STILL

MILLWATER

WASH OIL

COOLER

L.O. DECANTER

TO 55 GAL. DRUMS

SEC. L.O. DECANTER

TO 55 GAL DRUMS

TO OUTFALL

STEAM TO STILL

REVISIONS	TONAWANDA COKE CORPORATION			
	DEPARTMENT: BY PRODUCT			
	SUBJECT: GAS & PROCESS FLOWS SHOWING DISCHARGES TO INDUSTRIAL & SANITARY SEWERS			
	DESIGNED M.E.C.	TRACED	DATE 5-17-82	FIELD BOOK VOL. PAGE
	DRAWN M.E.C.	CHECKED	SCALE NONE	T-BP-187

SULLIVAN-MCKEEHAN CO., INC., BUFFALO NO. 10 8186 ALBANENE TRACING PAPER 100-5-67

PV-1 Waste Manifests

Please print or type.

TRK# 114 79.400

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD 088 413 877	1	(800) 839-3975	017760942 FLE

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION & TECHNOL
140 LEE ST STE 200
BUFFALO, NY 14210
Generator's Phone: (716) 856-3333

Generator's Site Address (if different than mailing address)
3875 RIVER ROAD
TONAWANDA, NY 14150

6. Transporter 1 Company Name
US Bulk Transport, Inc

U.S. EPA ID Number
PAD 987 347 515

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
MICHIGAN DISPOSAL WASTE TREATMEN
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489

U.S. EPA ID Number
MID 000 724 831

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3077, Waste, Hazardous, solid, n.o.s., (Benzene), 9, PGIII, (Benzene), ERG #171	1	DT	23 Est	T	D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. J220030MDI / Debris - D018

PV micro

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: on behalf of RITC
Month 11 Day 17 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Andrea Anderson
Signature:
Month 11 Day 17 Year 22

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H110			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Aaron DePaolo
Signature:
Month 11 Day 18 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 017760942FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☐ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☑ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

The electronic version of this document is the controlled version. Each user is responsible for ensuring that any document being used is the current version.

Please print or type. TRK 114 80,500

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD 088 413 877	1	(800) 839-3975	017760943 FLE

GENERATOR

5. Generator's Name and Mailing Address: RIVERVIEW INNOVATION & TECHNOL
140 LEE ST STE 200
BUFFALO, NY 14210
Generator's Phone: (716) 856-3333

Generator's Site Address (if different than mailing address)
3875 RIVER ROAD
TONAWANDA, NY 14150

6. Transporter 1 Company Name: US BULK TRANSPORT INC — U.S. EPA ID Number: PAD 987347515

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID 000 724 831

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ, NA3077, Waste, Hazardous, solid, n.o.s., (Benzene), 9, PGIII, (Benzene), ERG #171	1	DT	EST 22	Ton	D018		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. J220030MDI / Debris - D018

PU - MICRO

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC — Signature: M.R. on behalf of RITC — Month: 12 — Day: 8 — Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Andrew P Anderson — Signature: [signature] — Month: 12 — Day: 8 — Year: 22

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H110			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Antonio Gibson — Signature: [signature] — Month: 12 — Day: 9 — Year: 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

Invoice: 880082 Receipt 02-00 631748 Cod COD #3

US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 017760943FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)
☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)
☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

124 79300

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD 088 413 877	1	(800) 839-3975	017760944 FLE

GENERATOR

5. Generator's Name and Mailing Address: RIVERVIEW INNOVATION & TECHNOL
140 LEE ST STE 200
BUFFALO, NY 14210
Generator's Phone: (716) 856-3333

Generator's Site Address (if different than mailing address):
3875 RIVER ROAD
TONAWANDA, NY 14150

6. Transporter 1 Company Name: U.S. BULK TRANSPORT INC
U.S. EPA ID Number: PAD 987347515

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID 000 724 831

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ, NA3077, Waste, Hazardous, solid, n.o.s., (Benzene), 9, PGIII, (Benzene), ERG #171	1	DT	23 EST	T	D018		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. J220030MDI / Debris - D018

PU MICRO

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(e) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC
Signature: MReardon on behalf of RITC
Month: 12 Day: 8 Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Chris Tatro
Signature:
Month: 12 Day: 8 Year: 22

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H110			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tracy M Larussa
Signature:
Month: 12 Day: 8 Year: 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

Invoice: 880571

Receipt 02-00 631755

Cod COD #2

CERTIFICATE OF DISPOSAL

US ecology

This certificate is to verify the wastes specified on Manifest # 017760944fle

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

SC 196 8.1640 CMN 1811139

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD 088 413 377	1	(800) 839-3975	017760959 FLE

GENERATOR

5. Generator's Name and Mailing Address: RIVERVIEW INNOVATION & TECHNOL
140 LEE ST STE 200
BUFFALO, NY 14210
Generator's Phone: (716) 856-3333

Generator's Site Address (if different than mailing address)
3875 RIVER ROAD
TONAWANDA, NY 14150

6. Transporter 1 Company Name: S+C TRANS. — U.S. EPA ID Number: MIK1263 99684

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN — U.S. EPA ID Number: MID 000 724 631
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt/Vol.	13. Waste Codes
X	1. RQ, NA3077, Waste, Hazardous, solid, n.o.s., (Benzene), 9, PGIII, (Benzene), ERG #171	1	DT	20 EST	ton	D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. J220030MDI / Debris - D018

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC — Signature: MR on behalf of RITC — Month: 8 — Day: 7 — Year: 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. — Port of entry/exit:
Transporter signature (for exports only): — Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TIM CURRY — Signature: — Month: 8 — Day: 7 — Year: 23

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H110			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Vernia Saunders — Signature: — Month: 08 — Day: 08 — Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

US ecology

Weight Ticket Summary

Customer ID: 013552

ONTARIO SPECIALTY CONTRACTING INC
140 LEE STREET, SUITE 200
BUFFALO, NY 14203

Facility: Michigan Disposal Waste Treatment Plant, 49350 North I-94 Service Drive, Belleville, Michigan 48111

Reference ID			Weight	
02-00 638785-1	**Manifest:** 017760959FLE	**Hauler:** SC	**Gross:**	81,640
08/08/2023	**Generator:** NYD088413877 RIVERVIEW INNOVATION & TECHNOLOGY CAMPUS (8		**Tare:**	39,800
	Approval: J220030MDI - Debris - D018		**Net:**	41,840

CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 017760959 FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et seq.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: Bmuron

US ecology

Appendix E2: PV-2, Secondary Cooler

PV-2 Photographic Log

Client Name: RITC	Date Photo was Taken: 7/7/2022	Project: RITC
Photo No. 1 **Direction Photo Taken:** View is south. **Description:** Process vessel PV-2, the secondary cooler.		
Client Name: RITC	**Date Photo was Taken:** 7/7/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is east. **Description:** The base of PV-2.		

Client Name: RITC	**Date Photo was Taken:** 9/8/2022	**Project:** RITC
Photo No. 3 **Direction Photo Taken:** View is north. **Description:** The base of PV-2 contained rust scale, observable through an open flange.		
Client Name: RITC	**Date Photo was Taken:** 9/20/2022	**Project:** RITC
Photo No. 4 **Direction Photo Taken:** View is northeast. **Description:** PV-2 is prepared to be tipped.		

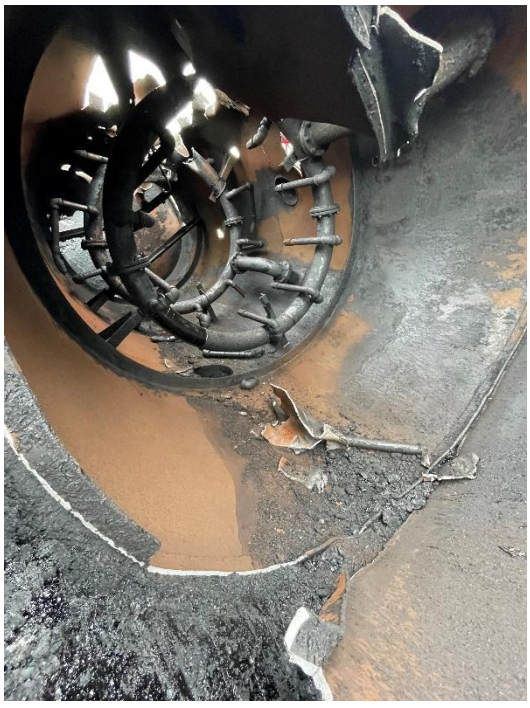
Client Name: RITC	Date Photo was Taken: 9/20/2022	Project: RITC
Photo No. 5		
Direction Photo Taken: View is north.		
Description: PV-2 is prepared to be tipped.		

Client Name: RITC	Date Photo was Taken: 9/20/2022	Project: RITC
Photo No. 6		
Direction Photo Taken: View is north.		
Description: PV-2 is tipped.		

Client Name: RITC	Date Photo was Taken: 9/20/2022	Project: RITC
Photo No. 7		
Direction Photo Taken: View is north.		
Description: PV-2 is tipped.		

Client Name: RITC	Date Photo was Taken: 9/20/2022	Project: RITC
Photo No. 8		
Direction Photo Taken: View is north.		
Description: PV-2 is tipped.		

Client Name: RITC	**Date Photo was Taken:** 9/21/2022	**Project:** RITC
Photo No. 9 **Direction Photo Taken:** View is north. **Description:** PV-2 is sheared for recycling.		
Client Name: RITC	**Date Photo was Taken:** 9/21/2022	**Project:** RITC
Photo No. 10 **Direction Photo Taken:** View is north. **Description:** PV-2 is sheared for recycling.		

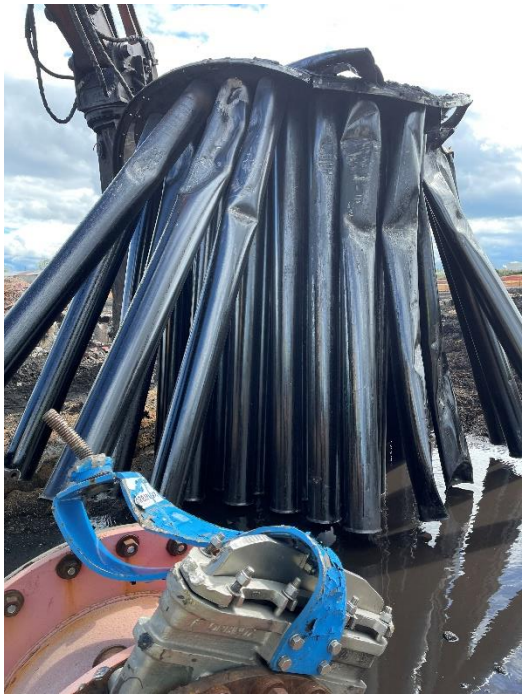
Client Name: RITC	**Date Photo was Taken:** 9/21/2022	**Project:** RITC
Photo No. 11 **Direction Photo Taken:** View is north. **Description:** PV-2 nearly empty, containing rust scale.		
Client Name: RITC	**Date Photo was Taken:** 9/21/2022	**Project:** RITC
Photo No. 12 **Direction Photo Taken:** View is PV-2 interior. **Description:** The interior of PV-2 (empty).		

Appendix E3: PV-3, Tar Precipitator

PV-3 Photographic Log

Client Name: RITC	**Date Photo was Taken:** 10/24/2019	**Project:** RITC
Photo No. 1 **Direction Photo Taken:** View is north. **Description:** Process Vessel PV-3 was located just north of the former Exhauster Building.		
Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is north. **Description:** PV-3 is tipped on the Tar Management Area slab to contain potential contents.		

Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 3 **Direction Photo Taken:** View is south. **Description:** The PV-3 interior, at former base of the process vessel.		
Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 4 **Direction Photo Taken:** View is PV-3 interior. **Description:** The PV-3 interior, at former base of the process vessel.		

Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 5 **Direction Photo Taken:** View is south. **Description:** The PV-3 interior (empty).		
Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 6 **Direction Photo Taken:** View is south. **Description:** The PV-3 interior.		

Client Name: RITC	**Date Photo was Taken:** 9/22/2022	**Project:** RITC
Photo No. 7 **Direction Photo Taken:** View is interior. **Description:** The interior of the steel piping was empty.		
Client Name: RITC	**Date Photo was Taken:** 10/7/2022	**Project:** RITC
Photo No. 8 **Direction Photo Taken:** View is northeast. **Description:** PV-3 is sheared for recycling.		

Appendix E4: PV-4, PV-5, PV-6, and PV-7, Ammonia Concentrators



PV-4, PV-5, PV-6, and PV-7 Photographic Log

Client Name: RITC	**Date Photo was Taken:** 8/25/2022	**Project:** RITC
Photo No. 1 **Direction Photo Taken:** View is southwest. **Description:** Process vessels 4, 5, and 6 as pictured from left (east) to right (west) were the Ammonia Concentrators.		
Client Name: RITC	**Date Photo was Taken:** 9/13/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is north. **Description:** PV-7 was an Ammonia Concentrator installed just south of PV-4, 5, and 6. The vessels are being purged with nitrogen in preparation for tipping.		

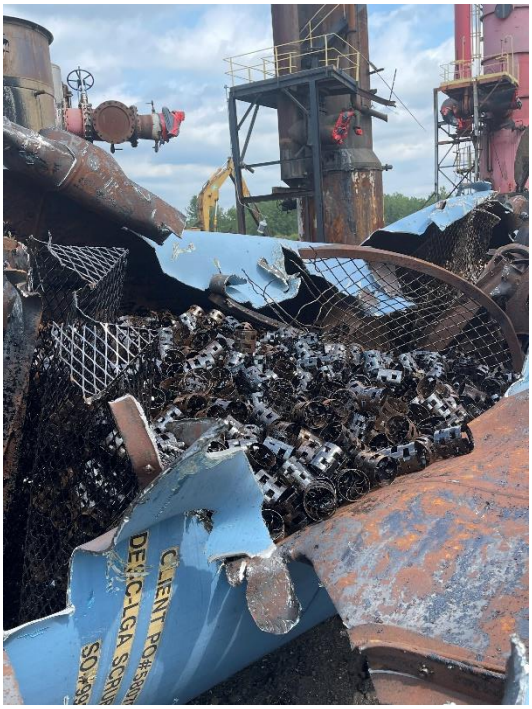
Client Name: RITC	**Date Photo was Taken:** 9/14/2022	**Project:** RITC
Photo No. 3 **Direction Photo Taken:** View is north. **Description:** PV-7 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 9/14/2022	**Project:** RITC
Photo No. 4 **Direction Photo Taken:** View is north. **Description:** PV-7 is tipped.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 5 **Direction Photo Taken:** View is north. **Description:** PV-7 is tipped.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 6 **Direction Photo Taken:** View is north. **Description:** Ancillary coke oven gas (COG) piping (pink) is removed from the PV-7 exterior.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 7 **Direction Photo Taken:** View is COG pipe interior. **Description:** Most of the COG pipe did not contain residuals.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 8 **Direction Photo Taken:** View is PV-7 interior. **Description:** The base of PV-7, looking toward the top of the vessel.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 9 **Direction Photo Taken:** View is north. **Description:** PV-7 contained stainless steel packing media.		
Client Name: RITC	**Date Photo was Taken:** 9/14/2022	**Project:** RITC
Photo No. 10 **Direction Photo Taken:** View is northeast. **Description:** The vessel interior is checked with a temperature sensor.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 11 **Direction Photo Taken:** View is aerial. **Description:** The PV-7 packing media was dry to the touch.		
Client Name: RITC	**Date Photo was Taken:** 9/14/2022	**Project:** RITC
Photo No. 12 **Direction Photo Taken:** View is north. **Description:** The packing media is segregated from the steel shelving and vessel shell. All metal is prepared for recycling.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 13 **Direction Photo Taken:** View is north. **Description:** The base of PV-7 is sheared for recycling.		

Client Name: RITC	Date Photo was Taken: 9/14/2022	Project: RITC
Photo No. 14 **Direction Photo Taken:** View is north. **Description:** PV-6 is tipped.		

Client Name: RITC	**Date Photo was Taken:** 9/14/2022	**Project:** RITC
Photo No. 15 **Direction Photo Taken:** View is north. **Description:** PV-6 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 9/15/2022	**Project:** RITC
Photo No. 16 **Direction Photo Taken:** View is north. **Description:** The interior of PV-6.		

Client Name: RITC	**Date Photo was Taken:** 9/15/2022	**Project:** RITC
Photo No. 17 **Direction Photo Taken:** View is north. **Description:** PV-4 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 9/15/2022	**Project:** RITC
Photo No. 18 **Direction Photo Taken:** View is north. **Description:** PV-5 is tipped.		

Client Name: RITC	**Date Photo was Taken:** 9/15/2022	**Project:** RITC
Photo No. 19 **Direction Photo Taken:** View is north. **Description:** PV-5 interior.		
Client Name: RITC	**Date Photo was Taken:** 9/15/2022	**Project:** RITC
Photo No. 20 **Direction Photo Taken:** View is north. **Description:** PV-6 interior.		

PV-4, PV-5, PV-6, and PV-7 Analytical Results – Table 1

Table 1
Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	PV5-SD-08252022	
		COLLECTION DATE:	8/25/2022	
		LAB REPORT:	L2246304	
		WASTE CODE(S):	D018	
		DESCRIPTION:	PV5, Black sludge	
	EPA TCLP	UNITS		
VOCs SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<21000	U
1,1,2,2-Tetrachloroethane		ug/kg	<20000	U
1,1,2-Trichloroethane		ug/kg	<33000	U
1,1-Dichloroethane		ug/kg	<18000	U
1,1-Dichloroethene		ug/kg	<29000	U
1,2,3-Trichlorobenzene		ug/kg	<40000	U
1,2,4-Trichlorobenzene		ug/kg	<34000	U
1,2-Dibromo-3-Chloropropane		ug/kg	<120000	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<34000	U
1,2-Dichlorobenzene		ug/kg	<18000	U
1,2-Dichloroethane		ug/kg	<32000	U
1,2-Dichloropropane		ug/kg	<15000	U
1,3-Dichlorobenzene		ug/kg	<18000	U
1,4-Dichlorobenzene		ug/kg	<21000	U
1,4-Dioxane (P-Dioxane)		ug/kg	<4300000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<280000	U
2-Hexanone		ug/kg	<150000	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<160000	U
Acetone		ug/kg	<600000	U
Benzene		ug/kg	**80000**	
Bromochloromethane		ug/kg	<25000	U
Bromodichloromethane		ug/kg	<14000	U
Bromoform		ug/kg	<30000	U
Bromomethane		ug/kg	<72000	U
Carbon Disulfide		ug/kg	<560000	U
Carbon Tetrachloride		ug/kg	<28000	U
Chlorobenzene		ug/kg	<16000	U
Chloroethane		ug/kg	<56000	U
Chloroform		ug/kg	<17000	U
Chloromethane		ug/kg	<120000	U
Cyclohexane		ug/kg	NS	
Dibromochloromethane		ug/kg	<17000	U
Dichlorodifluoromethane		ug/kg	<110000	U
Methylene Chloride (Dichloromethane)		ug/kg	<280000	U
Ethylbenzene		ug/kg	**34000**	J
Isopropylbenzene (Cumene)		ug/kg	<14000	U
Methyl Acetate		ug/kg	NS	
Tert-Butyl Methyl Ether		ug/kg	<25000	U
Methylcyclohexane		ug/kg	NS	
Styrene		ug/kg	**140000**	
Tetrachloroethylene (PCE)		ug/kg	<24000	U
Toluene		ug/kg	**270000**	
Trichloroethylene (TCE)		ug/kg	<17000	U
Trichlorofluoromethane		ug/kg	<86000	U

Table 1
Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		PV5-SD-08252022	
	COLLECTION DATE:		8/25/2022	
	LAB REPORT:		L2246304	
	WASTE CODE(S):		D018	
	DESCRIPTION:		PV5, Black sludge	
	EPA TCLP	UNITS		
Vinyl Chloride		ug/kg	<42000	U
Cis-1,2-Dichloroethylene		ug/kg	<22000	U
Cis-1,3-Dichloropropene		ug/kg	<20000	U
m,p-Xylene		ug/kg	**240000**	J
O-Xylene (1,2-Dimethylbenzene)		ug/kg	**79000**	J
Trans-1,2-Dichloroethene		ug/kg	<17000	U
Trans-1,3-Dichloropropene		ug/kg	<34000	U
SVOCs SW8270D				
1,1-Biphenyl		ug/kg	NS	
1,2,4,5-Tetrachlorobenzene		ug/kg	<35000	U
2,3,4,6-Tetrachlorophenol		ug/kg	NS	
2,4,5-Trichlorophenol		ug/kg	<64000	U
2,4,6-Trichlorophenol		ug/kg	<63000	U
2,4-Dichlorophenol		ug/kg	<54000	U
2,4-Dimethylphenol		ug/kg	**220000**	J
2,4-Dinitrophenol		ug/kg	<160000	U
2,4-Dinitrotoluene		ug/kg	<66000	U
2,6-Dinitrotoluene		ug/kg	<57000	U
2-Chloronaphthalene		ug/kg	<33000	U
2-Chlorophenol		ug/kg	<39000	U
2-Methylnaphthalene		ug/kg	**20000000**	
2-Methylphenol (O-Cresol)		ug/kg	**330000**	
2-Nitroaniline		ug/kg	<64000	U
2-Nitrophenol		ug/kg	<120000	U
3,3'-Dichlorobenzidine		ug/kg	<88000	U
Cresols, M & P (3&4-Methylphenol)		ug/kg	**220000**	J
3-Nitroaniline		ug/kg	<63000	U
4,6-Dinitro-2-Methylphenol		ug/kg	<160000	U
4-Bromophenyl Phenyl Ether		ug/kg	<51000	U
4-Chloro-3-Methylphenol		ug/kg	NS	
4-Chloroaniline		ug/kg	<60000	U
4-Chlorophenyl Phenyl Ether		ug/kg	<36000	U
4-Nitroaniline		ug/kg	<140000	U
4-Nitrophenol		ug/kg	<140000	U
Acenaphthene		ug/kg	**460000**	
Acenaphthylene		ug/kg	**9300000**	
Acetophenone		ug/kg	**76000**	J
Anthracene		ug/kg	**4300000**	
Atrazine		ug/kg	NS	
Benzo(A)Anthracene		ug/kg	**4200000**	
Benzaldehyde		ug/kg	NS	
Benzo(A)Pyrene		ug/kg	**2500000**	
Benzo(B)Fluoranthene		ug/kg	**3200000**	
Benzo(G,H,I)Perylene		ug/kg	**860000**	

Table 1
Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

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		COLLECTION DATE:	8/25/2022	
		LAB REPORT:	L2246304	
		WASTE CODE(S):	D018	
		DESCRIPTION:	PV5, Black sludge	
	EPA TCLP	UNITS		
Benzo(K)Fluoranthene		ug/kg	**990000**	
Biphenyl (Diphenyl)		ug/kg	**2400000**	
Bis(2-Chloroisopropyl) Ether		ug/kg	<57000	U
Bis(2-Chloroethoxy) Methane		ug/kg	<33000	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<45000	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	<84000	U
Benzyl Butyl Phthalate		ug/kg	<84000	U
Caprolactam		ug/kg	NS	
Carbazole		ug/kg	**1200000**	
Chrysene		ug/kg	**4700000**	
Di-N-Butyl Phthalate		ug/kg	<63000	U
Di-N-Octylphthalate		ug/kg	<110000	U
Dibenz(A,H)Anthracene		ug/kg	**450000**	
Dibenzofuran		ug/kg	**3600000**	
Diethyl Phthalate		ug/kg	<31000	U
Dimethyl Phthalate		ug/kg	<70000	U
Fluoranthene		ug/kg	**7900000**	
Fluorene		ug/kg	**4900000**	
Hexachlorobenzene		ug/kg	<37000	U
Hexachlorobutadiene		ug/kg	<49000	U
Hexachlorocyclopentadiene		ug/kg	<300000	U
Hexachloroethane		ug/kg	<54000	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	**1000000**	
Isophorone		ug/kg	<43000	U
N-Nitrosodi-N-Propylamine		ug/kg	<51000	U
N-Nitrosodiphenylamine		ug/kg	<38000	U
Naphthalene		ug/kg	**510000000**	
Nitrobenzene		ug/kg	<49000	U
Pentachlorophenol		ug/kg	<73000	U
Phenanthrene		ug/kg	**12000000**	
Phenol		ug/kg	<50000	U
Pyrene		ug/kg	**5100000**	
TAL Metals SW6010				
Aluminum		mg/kg	**95.4**	
Antimony		mg/kg	**1.36**	J
Arsenic		mg/kg	**9.28**	
Barium		mg/kg	**6.00**	
Beryllium		mg/kg	<0.044	U
Cadmium		mg/kg	**3.64**	
Calcium		mg/kg	**12700**	
Chromium, Total		mg/kg	**24.8**	
Cobalt		mg/kg	**2.57**	J
Copper		mg/kg	**129**	
Iron		mg/kg	**71900**	

Table 1
Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		PV5-SD-08252022	
	COLLECTION DATE:		8/25/2022	
	LAB REPORT:		L2246304	
	WASTE CODE(S):		D018	
	DESCRIPTION:		PV5, Black sludge	
	EPA TCLP	UNITS		
Lead		mg/kg	**33.1**	
Magnesium		mg/kg	**60.2**	
Manganese		mg/kg	**511**	
Nickel		mg/kg	**7.62**	
Potassium		mg/kg	**36**	J
Selenium		mg/kg	**0.709**	
Silver		mg/kg	<0.379	U
Sodium		mg/kg	**62.4**	J
Thallium		mg/kg	<0.422	U
Vanadium		mg/kg	**5.97**	
Zinc		mg/kg	**11.6**	
Total Mercury SW7471				
Mercury		mg/kg	**25.4**	
PCBs 8082A				
PCB-1016 (Aroclor 1016)		ug/kg	<70.8	U
PCB-1221 (Aroclor 1221)		ug/kg	<79.8	U
PCB-1232 (Aroclor 1232)		ug/kg	<169.0	U
PCB-1242 (Aroclor 1242)		ug/kg	<107.0	U
PCB-1248 (Aroclor 1248)		ug/kg	<120.0	U
PCB-1254 (Aroclor 1254)		ug/kg	<87.2	U
PCB-1260 (Aroclor 1260)		ug/kg	<147.0	U
Ammonia E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	**300**	
Cyanide SW9012B				
Cyanide		mg/kg	**130**	
SOLIDS				
Total Solids		%	**59.2**	
SW9045D				
pH		ph units	**8.5**	

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Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	PV5-SD-08252022	
		COLLECTION DATE:	8/25/2022	
		LAB REPORT:	L2246304	
		WASTE CODE(S):	D018	
		DESCRIPTION:	PV5, Black sludge	
	EPA TCLP	UNITS		
TCLP VOCs SW8260C				
1,2-Dichloroethane	500	ug/l	<1.3	U
Chlorobenzene	100,000	ug/l	<1.8	U
Tetrachloroethylene (PCE)	700	ug/l	<1.8	U
Carbon Tetrachloride	500	ug/l	<1.3	U
Chloroform	6,000	ug/l	<2.2	U
Benzene	500	ug/l	**1100**	
Vinyl Chloride	200	ug/l	<0.71	U
1,1-Dichloroethene	700	ug/l	NS	
Methyl Ethyl Ketone (2-Butanone)	200,000	ug/l	<19.0	U
Trichloroethylene (TCE)	500	ug/l	<1.8	U
TCLP SVOCs SW8270D				
1,4-Dichlorobenzene	7,500	ug/l	NS	
2,4,5-Trichlorophenol	400,000	ug/l	<1.9	U
2,4,6-Trichlorophenol	2,000	ug/l	<2.5	U
2,4-Dinitrotoluene	130	ug/l	<1.9	U
Cresols, (as m,p,o-Cresol)	20,000	ug/l	**8700**	
Hexachlorobenzene	130	ug/l	<3.4	U
Hexachlorobutadiene	500	ug/l	<3.0	U
Hexachloroethane	3,000	ug/l	<2.2	U
Nitrobenzene	2,000	ug/l	<3.3	U
Pentachlorophenol	100,000	ug/l	<9.8	U
Pyridine	5,000	ug/l	**80**	
TCLP Mercury SW7470				
Mercury	0.2	mg/L	**0.0026**	
TCLP Metals SW6010				
Arsenic	5	mg/L	<0.019	U
Barium	100	mg/L	**0.082**	J
Cadmium	1	mg/L	<0.010	U
Chromium, Total	5	mg/L	<0.021	U
Lead	5	mg/L	**0.053**	J
Selenium	1	mg/L	<0.035	U
Silver	5	mg/L	<0.028	U
TCLP Pesticides 8081B				
Chlordane	0.03	mg/L	<0.000232	U
Endrin	0.02	mg/L	<0.000021	U
Gamma Bhc (Lindane)	0.4	mg/L	<0.000022	U
Heptachlor	0.008	mg/L	<0.000016	U
Heptachlor Epoxide	0.008	mg/L	<0.000021	U
Methoxychlor	10	mg/L	<0.000314	U
Toxaphene	0.5	mg/L	<0.000314	U

Table 1
Process Equipment Construction Completion Report
PV-5 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	PV5-SD-08252022	
		COLLECTION DATE:	8/25/2022	
		LAB REPORT:	L2246304	
		WASTE CODE(S):	D018	
		DESCRIPTION:	PV5, Black sludge	
	EPA TCLP	UNITS		
TCLP Herbicides SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<0.001	U
Silvex (2,4,5-TP)	1	mg/L	<0.001	U
Ignitability EPA 1030				
Ignitability		mm/sec	No Burn	
SW7.3.3.2				
Reactive Cyanide		mg/kg	<10	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	<10	U
Chloride (SW9056)				
Chloride		mg/kg	NS	
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**12031**	
Notes:				
NS = Not Sampled				
NA = Sample collected, but not analyzed				
"<" = Analyzed for but detected at or above the quantitation limit				
J = Analyte detected below quantitation limit				
Red Highlight = Analyte concentration exceeds EPA TCLP Limits				
Bold = Analyte was detected				

PV-5 Laboratory Report



ANALYTICAL REPORT

Lab Number:	L2246304
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	PV-4,5,6 AMMONIA CON
Report Date:	09/14/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2246304-01	PV-5-SD-08252022	SOLID	3875 RIVER RD, TONAWANDA	08/25/22 13:15	08/25/22

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analyses of BTU and Moisture were subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Sample Receipt

L2246304-01: The sample was received in an inappropriate container for the TCL Volatiles - EPA 8260C analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Semivolatile Organics

L2246304-01D: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

TCLP Semivolatiles

L2246304-01D: One or more of the internal standard recoveries is outside the acceptance criteria; however, the internal standard is within criteria for the target compounds; therefore, the results are reported.

WG1682100-2: One or more surrogates failed to meet the DKQP recovery limits. Please refer to the sample results and/or QC section of the report for specific details.WG1682100-3: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Difficult analytes may recover at less than 10% recovery, where applicable. Please refer to the QC section of the report for specific details.

PCBs

L2246304-01: The sample has elevated detection limits due to the limited sample volume utilized during

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

Case Narrative (continued)

extraction, as required by the sample matrix.

Total Metals

L2246304-01: The sample has elevated detection limits for all elements due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1681535-2/-3 LCS/LCSD recoveries for cyanide, total (57%/67%), associated with L2246304-01, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 09/14/22

ORGANICS

VOLATILES

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/07/22 16:29
Analyst: MKS
Percent Solids: 59%
TCLP/SPLP Ext. Date: 09/06/22 11:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	1100		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
dibromofluoromethane	101		70-130

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D2 Date Collected: 08/25/22 13:15
Client ID: PV-5-SD-08252022 Date Received: 08/25/22
Sample Location: 3875 RIVER RD, TONAWANDA Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/08/22 21:37
Analyst: NLK
Percent Solids: 59%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	620000	280000	1000
1,1-Dichloroethane	ND		ug/kg	120000	18000	1000
Chloroform	ND		ug/kg	180000	17000	1000
Carbon tetrachloride	ND		ug/kg	120000	28000	1000
1,2-Dichloropropane	ND		ug/kg	120000	15000	1000
Dibromochloromethane	ND		ug/kg	120000	17000	1000
1,1,2-Trichloroethane	ND		ug/kg	120000	33000	1000
Tetrachloroethene	ND		ug/kg	62000	24000	1000
Chlorobenzene	ND		ug/kg	62000	16000	1000
Trichlorofluoromethane	ND		ug/kg	500000	86000	1000
1,2-Dichloroethane	ND		ug/kg	120000	32000	1000
1,1,1-Trichloroethane	ND		ug/kg	62000	21000	1000
Bromodichloromethane	ND		ug/kg	62000	14000	1000
trans-1,3-Dichloropropene	ND		ug/kg	120000	34000	1000
cis-1,3-Dichloropropene	ND		ug/kg	62000	20000	1000
1,3-Dichloropropene, Total	ND		ug/kg	62000	20000	1000
1,1-Dichloropropene	ND		ug/kg	62000	20000	1000
Bromoform	ND		ug/kg	500000	30000	1000
1,1,2,2-Tetrachloroethane	ND		ug/kg	62000	20000	1000
Benzene	80000		ug/kg	62000	20000	1000
Toluene	270000		ug/kg	120000	67000	1000
Ethylbenzene	34000	J	ug/kg	120000	17000	1000
Chloromethane	ND		ug/kg	500000	120000	1000
Bromomethane	ND		ug/kg	250000	72000	1000
Vinyl chloride	ND		ug/kg	120000	42000	1000
Chloroethane	ND		ug/kg	250000	56000	1000
1,1-Dichloroethene	ND		ug/kg	120000	29000	1000
trans-1,2-Dichloroethene	ND		ug/kg	180000	17000	1000

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D2 Date Collected: 08/25/22 13:15

Client ID: PV-5-SD-08252022 Date Received: 08/25/22

Sample Location: 3875 RIVER RD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/kg	62000	17000	1000
1,2-Dichlorobenzene	ND		ug/kg	250000	18000	1000
1,3-Dichlorobenzene	ND		ug/kg	250000	18000	1000
1,4-Dichlorobenzene	ND		ug/kg	250000	21000	1000
Methyl tert butyl ether	ND		ug/kg	250000	25000	1000
p/m-Xylene	240000	J	ug/kg	250000	69000	1000
o-Xylene	79000	J	ug/kg	120000	36000	1000
Xylenes, Total	320000	J	ug/kg	120000	36000	1000
cis-1,2-Dichloroethene	ND		ug/kg	120000	22000	1000
1,2-Dichloroethene, Total	ND		ug/kg	120000	17000	1000
Dibromomethane	ND		ug/kg	250000	29000	1000
Styrene	140000		ug/kg	120000	24000	1000
Dichlorodifluoromethane	ND		ug/kg	1200000	110000	1000
Acetone	ND		ug/kg	1200000	600000	1000
Carbon disulfide	ND		ug/kg	1200000	560000	1000
2-Butanone	ND		ug/kg	1200000	280000	1000
Vinyl acetate	ND		ug/kg	1200000	270000	1000
4-Methyl-2-pentanone	ND		ug/kg	1200000	160000	1000
1,2,3-Trichloropropane	ND		ug/kg	250000	16000	1000
2-Hexanone	ND		ug/kg	1200000	150000	1000
Bromochloromethane	ND		ug/kg	250000	25000	1000
2,2-Dichloropropane	ND		ug/kg	250000	25000	1000
1,2-Dibromoethane	ND		ug/kg	120000	34000	1000
1,3-Dichloropropane	ND		ug/kg	250000	21000	1000
1,1,1,2-Tetrachloroethane	ND		ug/kg	62000	16000	1000
Bromobenzene	ND		ug/kg	250000	18000	1000
n-Butylbenzene	ND		ug/kg	120000	21000	1000
sec-Butylbenzene	ND		ug/kg	120000	18000	1000
tert-Butylbenzene	ND		ug/kg	250000	15000	1000
o-Chlorotoluene	ND		ug/kg	250000	24000	1000
p-Chlorotoluene	ND		ug/kg	250000	13000	1000
1,2-Dibromo-3-chloropropane	ND		ug/kg	370000	120000	1000
Hexachlorobutadiene	ND		ug/kg	500000	21000	1000
Isopropylbenzene	ND		ug/kg	120000	14000	1000
p-Isopropyltoluene	ND		ug/kg	120000	14000	1000
Naphthalene	98000000	E	ug/kg	500000	80000	1000
Acrylonitrile	ND		ug/kg	500000	140000	1000

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D2 Date Collected: 08/25/22 13:15

Client ID: PV-5-SD-08252022 Date Received: 08/25/22

Sample Location: 3875 RIVER RD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/kg	120000	21000	1000
1,2,3-Trichlorobenzene	ND		ug/kg	250000	40000	1000
1,2,4-Trichlorobenzene	ND		ug/kg	250000	34000	1000
1,3,5-Trimethylbenzene	95000	J	ug/kg	250000	24000	1000
1,2,4-Trimethylbenzene	170000	J	ug/kg	250000	41000	1000
1,4-Dioxane	ND		ug/kg	9900000	4300000	1000
p-Diethylbenzene	ND		ug/kg	250000	22000	1000
p-Ethyltoluene	49000	J	ug/kg	250000	48000	1000
1,2,4,5-Tetramethylbenzene	28000	J	ug/kg	250000	24000	1000
Ethyl ether	180000	J	ug/kg	250000	42000	1000
trans-1,4-Dichloro-2-butene	ND		ug/kg	620000	180000	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	78		70-130
Dibromofluoromethane	109		70-130

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/07/22 04:00
Analyst: JC
Percent Solids: 59%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	73000000		ug/kg	990000	160000	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/07/22 11:31
Analyst: MKS
TCLP/SPLP Extraction Date: 09/06/22 10:05

Extraction Date: 09/06/22 10:05

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1684928-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
dibromofluoromethane	111		70-130

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/06/22 20:06
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685343-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/06/22 20:06
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685343-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/06/22 20:06
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685343-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/08/22 16:44
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685348-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	53	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/08/22 16:44
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685348-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/08/22 16:44
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1685348-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	82		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1684928-3 WG1684928-4								
Chloroform	85		87		70-130	2		20
Carbon tetrachloride	87		90		63-132	3		20
Tetrachloroethene	99		100		70-130	1		20
Chlorobenzene	94		97		75-130	3		25
1,2-Dichloroethane	80		84		70-130	5		20
Benzene	90		92		70-130	2		25
Vinyl chloride	80		81		55-140	1		20
1,1-Dichloroethene	90		93		61-145	3		25
Trichloroethene	93		95		70-130	2		25
1,4-Dichlorobenzene	120		130		70-130	8		20
2-Butanone	76		81		63-138	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		101		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	106		107		70-130
dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685343-3 WG1685343-4								
Methylene chloride	82		82		70-130	0		30
1,1-Dichloroethane	89		90		70-130	1		30
Chloroform	73		73		70-130	0		30
Carbon tetrachloride	92		92		70-130	0		30
1,2-Dichloropropane	102		103		70-130	1		30
Dibromochloromethane	87		87		70-130	0		30
1,1,2-Trichloroethane	83		84		70-130	1		30
Tetrachloroethene	95		96		70-130	1		30
Chlorobenzene	91		91		70-130	0		30
Trichlorofluoromethane	79		79		70-139	0		30
1,2-Dichloroethane	82		84		70-130	2		30
1,1,1-Trichloroethane	87		87		70-130	0		30
Bromodichloromethane	85		84		70-130	1		30
trans-1,3-Dichloropropene	84		84		70-130	0		30
cis-1,3-Dichloropropene	86		86		70-130	0		30
1,1-Dichloropropene	92		92		70-130	0		30
Bromoform	87		88		70-130	1		30
1,1,2,2-Tetrachloroethane	98		98		70-130	0		30
Benzene	91		91		70-130	0		30
Toluene	94		95		70-130	1		30
Ethylbenzene	92		93		70-130	1		30
Chloromethane	99		99		52-130	0		30
Bromomethane	77		59		57-147	26		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685343-3 WG1685343-4								
Vinyl chloride	92		92		67-130	0		30
Chloroethane	79		66		50-151	18		30
1,1-Dichloroethene	82		83		65-135	1		30
trans-1,2-Dichloroethene	80		82		70-130	2		30
Trichloroethene	97		97		70-130	0		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	91		90		70-130	1		30
1,4-Dichlorobenzene	89		89		70-130	0		30
Methyl tert butyl ether	92		93		66-130	1		30
p/m-Xylene	96		96		70-130	0		30
o-Xylene	92		92		70-130	0		30
cis-1,2-Dichloroethene	75		76		70-130	1		30
Dibromomethane	74		74		70-130	0		30
Styrene	92		92		70-130	0		30
Dichlorodifluoromethane	51		51		30-146	0		30
Acetone	92		103		54-140	11		30
Carbon disulfide	90		90		59-130	0		30
2-Butanone	70		86		70-130	21		30
Vinyl acetate	92		99		70-130	7		30
4-Methyl-2-pentanone	115		117		70-130	2		30
1,2,3-Trichloropropane	94		94		68-130	0		30
2-Hexanone	113		112		70-130	1		30
Bromochloromethane	75		74		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685343-3 WG1685343-4								
2,2-Dichloropropane	85		82		70-130	4		30
1,2-Dibromoethane	80		80		70-130	0		30
1,3-Dichloropropane	95		94		69-130	1		30
1,1,1,2-Tetrachloroethane	88		88		70-130	0		30
Bromobenzene	92		92		70-130	0		30
n-Butylbenzene	99		99		70-130	0		30
sec-Butylbenzene	102		101		70-130	1		30
tert-Butylbenzene	100		102		70-130	2		30
o-Chlorotoluene	100		101		70-130	1		30
p-Chlorotoluene	97		96		70-130	1		30
1,2-Dibromo-3-chloropropane	84		85		68-130	1		30
Hexachlorobutadiene	86		85		67-130	1		30
Isopropylbenzene	106		106		70-130	0		30
p-Isopropyltoluene	102		100		70-130	2		30
Naphthalene	89		90		70-130	1		30
Acrylonitrile	100		100		70-130	0		30
n-Propylbenzene	105		105		70-130	0		30
1,2,3-Trichlorobenzene	83		83		70-130	0		30
1,2,4-Trichlorobenzene	85		84		70-130	1		30
1,3,5-Trimethylbenzene	98		98		70-130	0		30
1,2,4-Trimethylbenzene	94		94		70-130	0		30
1,4-Dioxane	93		92		65-136	1		30
p-Diethylbenzene	98		98		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685343-3 WG1685343-4								
p-Ethyltoluene	103		102		70-130	1		30
1,2,4,5-Tetramethylbenzene	90		89		70-130	1		30
Ethyl ether	84		84		67-130	0		30
trans-1,4-Dichloro-2-butene	119		118		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		85		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	111		112		70-130
Dibromofluoromethane	81		81		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685348-3 WG1685348-4								
Methylene chloride	95		94		70-130	1		30
1,1-Dichloroethane	97		96		70-130	1		30
Chloroform	98		91		70-130	7		30
Carbon tetrachloride	103		101		70-130	2		30
1,2-Dichloropropane	98		96		70-130	2		30
Dibromochloromethane	98		100		70-130	2		30
1,1,2-Trichloroethane	90		91		70-130	1		30
Tetrachloroethene	106		106		70-130	0		30
Chlorobenzene	95		95		70-130	0		30
Trichlorofluoromethane	111		109		70-139	2		30
1,2-Dichloroethane	98		98		70-130	0		30
1,1,1-Trichloroethane	104		102		70-130	2		30
Bromodichloromethane	99		98		70-130	1		30
trans-1,3-Dichloropropene	88		89		70-130	1		30
cis-1,3-Dichloropropene	96		95		70-130	1		30
1,1-Dichloropropene	100		98		70-130	2		30
Bromoform	98		98		70-130	0		30
1,1,2,2-Tetrachloroethane	87		87		70-130	0		30
Benzene	98		97		70-130	1		30
Toluene	94		94		70-130	0		30
Ethylbenzene	91		90		70-130	1		30
Chloromethane	78		78		52-130	0		30
Bromomethane	**188**	Q	**182**	Q	57-147	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685348-3 WG1685348-4								
Vinyl chloride	**148**	Q	**146**	Q	67-130	1		30
Chloroethane	112		109		50-151	3		30
1,1-Dichloroethene	103		101		65-135	2		30
trans-1,2-Dichloroethene	102		100		70-130	2		30
Trichloroethene	103		102		70-130	1		30
1,2-Dichlorobenzene	99		98		70-130	1		30
1,3-Dichlorobenzene	99		97		70-130	2		30
1,4-Dichlorobenzene	100		98		70-130	2		30
Methyl tert butyl ether	99		97		66-130	2		30
p/m-Xylene	99		97		70-130	2		30
o-Xylene	98		97		70-130	1		30
cis-1,2-Dichloroethene	102		101		70-130	1		30
Dibromomethane	101		101		70-130	0		30
Styrene	103		102		70-130	1		30
Dichlorodifluoromethane	62		60		30-146	3		30
Acetone	106		104		54-140	2		30
Carbon disulfide	89		86		59-130	3		30
2-Butanone	96		96		70-130	0		30
Vinyl acetate	88		81		70-130	8		30
4-Methyl-2-pentanone	85		86		70-130	1		30
1,2,3-Trichloropropane	86		87		68-130	1		30
2-Hexanone	78		77		70-130	1		30
Bromochloromethane	120		118		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685348-3 WG1685348-4								
2,2-Dichloropropane	95		93		70-130	2		30
1,2-Dibromoethane	91		93		70-130	2		30
1,3-Dichloropropane	92		93		69-130	1		30
1,1,1,2-Tetrachloroethane	101		102		70-130	1		30
Bromobenzene	90		91		70-130	1		30
n-Butylbenzene	90		89		70-130	1		30
sec-Butylbenzene	90		89		70-130	1		30
tert-Butylbenzene	89		89		70-130	0		30
o-Chlorotoluene	83		82		70-130	1		30
p-Chlorotoluene	82		82		70-130	0		30
1,2-Dibromo-3-chloropropane	95		99		68-130	4		30
Hexachlorobutadiene	92		92		67-130	0		30
Isopropylbenzene	85		84		70-130	1		30
p-Isopropyltoluene	92		91		70-130	1		30
Naphthalene	92		94		70-130	2		30
Acrylonitrile	91		92		70-130	1		30
n-Propylbenzene	85		83		70-130	2		30
1,2,3-Trichlorobenzene	102		105		70-130	3		30
1,2,4-Trichlorobenzene	97		97		70-130	0		30
1,3,5-Trimethylbenzene	88		87		70-130	1		30
1,2,4-Trimethylbenzene	87		86		70-130	1		30
1,4-Dioxane	100		99		65-136	1		30
p-Diethylbenzene	93		91		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1685348-3 WG1685348-4								
p-Ethyltoluene	86		86		70-130	0		30
1,2,4,5-Tetramethylbenzene	86		86		70-130	0		30
Ethyl ether	105		103		67-130	2		30
trans-1,4-Dichloro-2-butene	80		79		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	93		94		70-130
4-Bromofluorobenzene	77		78		70-130
Dibromofluoromethane	105		106		70-130

SEMIVOLATILES

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/02/22 04:05
Analyst: IM
Percent Solids: 59%
TCLP/SPLP Ext. Date: 08/30/22 04:00

Extraction Method: EPA 3510C
Extraction Date: 08/31/22 18:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	4400	E	ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	3400	E	ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	80		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	95		21-120
Phenol-d6	86		10-120
Nitrobenzene-d5	108		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	90		33-120

Project Name: RITC
Lab Number: L2246304
Project Number: PV-4,5,6 AMMONIA CON
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D2
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/09/22 18:35
Analyst: CMM
Percent Solids: 59%

Extraction Method: EPA 3540C
Extraction Date: 09/05/22 12:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	510000000		ug/kg	13000000	1600000	48000
2-Methylnaphthalene	20000000		ug/kg	16000000	1600000	48000

Project Name: RITC
Lab Number: L2246304
Project Number: PV-4,5,6 AMMONIA CON
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/10/22 18:09
Analyst: CMM
Percent Solids: 59%
TCLP/SPLP Ext. Date: 08/30/22 04:00

Extraction Method: EPA 3510C
Extraction Date: 08/31/22 18:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
2-Methylphenol	4300		ug/l	250	55.	10
3-Methylphenol/4-Methylphenol	4400		ug/l	250	28.	10

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/08/22 00:01
Analyst: WR
Percent Solids: 59%

Extraction Method: EPA 3540C
Extraction Date: 09/05/22 12:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	460000		ug/kg	270000	34000	1200
1,2,4-Trichlorobenzene	ND		ug/kg	330000	38000	1200
Hexachlorobenzene	ND		ug/kg	200000	37000	1200
Bis(2-chloroethyl)ether	ND		ug/kg	300000	45000	1200
2-Chloronaphthalene	ND		ug/kg	330000	33000	1200
1,2-Dichlorobenzene	ND		ug/kg	330000	60000	1200
1,3-Dichlorobenzene	ND		ug/kg	330000	57000	1200
1,4-Dichlorobenzene	ND		ug/kg	330000	58000	1200
3,3'-Dichlorobenzidine	ND		ug/kg	330000	88000	1200
2,4-Dinitrotoluene	ND		ug/kg	330000	66000	1200
2,6-Dinitrotoluene	ND		ug/kg	330000	57000	1200
Fluoranthene	7900000		ug/kg	200000	38000	1200
4-Chlorophenyl phenyl ether	ND		ug/kg	330000	36000	1200
4-Bromophenyl phenyl ether	ND		ug/kg	330000	51000	1200
Bis(2-chloroisopropyl)ether	ND		ug/kg	400000	57000	1200
Bis(2-chloroethoxy)methane	ND		ug/kg	360000	33000	1200
Hexachlorobutadiene	ND		ug/kg	330000	49000	1200
Hexachlorocyclopentadiene	ND		ug/kg	950000	300000	1200
Hexachloroethane	ND		ug/kg	270000	54000	1200
Isophorone	ND		ug/kg	300000	43000	1200
Naphthalene	120000000	E	ug/kg	330000	40000	1200
Nitrobenzene	ND		ug/kg	300000	49000	1200
NDPA/DPA	ND		ug/kg	270000	38000	1200
n-Nitrosodi-n-propylamine	ND		ug/kg	330000	51000	1200
Bis(2-ethylhexyl)phthalate	ND		ug/kg	330000	120000	1200
Butyl benzyl phthalate	ND		ug/kg	330000	84000	1200
Di-n-butylphthalate	ND		ug/kg	330000	63000	1200
Di-n-octylphthalate	ND		ug/kg	330000	110000	1200

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	330000	31000	1200
Dimethyl phthalate	ND		ug/kg	330000	70000	1200
Benzo(a)anthracene	4200000		ug/kg	200000	37000	1200
Benzo(a)pyrene	2500000		ug/kg	270000	81000	1200
Benzo(b)fluoranthene	3200000		ug/kg	200000	56000	1200
Benzo(k)fluoranthene	990000		ug/kg	200000	53000	1200
Chrysene	4700000		ug/kg	200000	35000	1200
Acenaphthylene	9300000		ug/kg	270000	51000	1200
Anthracene	4300000		ug/kg	200000	65000	1200
Benzo(ghi)perylene	860000		ug/kg	270000	39000	1200
Fluorene	4900000		ug/kg	330000	32000	1200
Phenanthrene	12000000		ug/kg	200000	40000	1200
Dibenzo(a,h)anthracene	450000		ug/kg	200000	38000	1200
Indeno(1,2,3-cd)pyrene	1000000		ug/kg	270000	46000	1200
Pyrene	5100000		ug/kg	200000	33000	1200
Biphenyl	2400000		ug/kg	760000	43000	1200
4-Chloroaniline	ND		ug/kg	330000	60000	1200
2-Nitroaniline	ND		ug/kg	330000	64000	1200
3-Nitroaniline	ND		ug/kg	330000	63000	1200
4-Nitroaniline	ND		ug/kg	330000	140000	1200
Dibenzofuran	3600000		ug/kg	330000	31000	1200
2-Methylnaphthalene	25000000	E	ug/kg	400000	40000	1200
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	330000	35000	1200
Acetophenone	76000	J	ug/kg	330000	41000	1200
2,4,6-Trichlorophenol	ND		ug/kg	200000	63000	1200
p-Chloro-m-cresol	ND		ug/kg	330000	50000	1200
2-Chlorophenol	ND		ug/kg	330000	39000	1200
2,4-Dichlorophenol	ND		ug/kg	300000	54000	1200
2,4-Dimethylphenol	220000	J	ug/kg	330000	110000	1200
2-Nitrophenol	ND		ug/kg	720000	120000	1200
4-Nitrophenol	ND		ug/kg	470000	140000	1200
2,4-Dinitrophenol	ND		ug/kg	1600000	160000	1200
4,6-Dinitro-o-cresol	ND		ug/kg	860000	160000	1200
Pentachlorophenol	ND		ug/kg	270000	73000	1200
Phenol	ND		ug/kg	330000	50000	1200
2-Methylphenol	330000		ug/kg	330000	52000	1200
3-Methylphenol/4-Methylphenol	220000	J	ug/kg	480000	52000	1200

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01 D
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	330000	64000	1200
Benzoic Acid	ND		ug/kg	1100000	340000	1200
Benzyl Alcohol	ND		ug/kg	330000	100000	1200
Carbazole	1200000		ug/kg	330000	32000	1200
1,4-Dioxane	ND		ug/kg	50000	15000	1200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	25-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	30-120
2,4,6-Tribromophenol	**0**	Q	10-136
4-Terphenyl-d14	**0**	Q	18-120

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/01/22 16:02
Analyst: JG
TCLP/SPLP Extraction Date: 08/30/22 04:00

Extraction Method: EPA 3510C
Extraction Date: 08/31/22 18:52

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1682100-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	81		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	84		33-120

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/06/22 13:14
Analyst: IM

Extraction Method: EPA 3540C
Extraction Date: 09/05/22 12:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683648-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	860		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/06/22 13:14
Analyst: IM

Extraction Method: EPA 3540C
Extraction Date: 09/05/22 12:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683648-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	22.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/06/22 13:14
Analyst: IM

Extraction Method: EPA 3540C
Extraction Date: 09/05/22 12:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683648-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	59		10-136
4-Terphenyl-d14	68		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1682100-2 WG1682100-3								
Hexachlorobenzene	82		72		40-140	13		30
2,4-Dinitrotoluene	80		70		40-132	13		30
Hexachlorobutadiene	71		60		28-111	17		30
Hexachloroethane	69		60		21-105	14		30
Nitrobenzene	106		95		40-140	11		30
2,4,6-Trichlorophenol	96		84		30-130	13		30
Pentachlorophenol	92		80		9-103	14		30
2-Methylphenol	89		78		30-130	13		30
3-Methylphenol/4-Methylphenol	97		86		30-130	12		30
2,4,5-Trichlorophenol	101		89		30-130	13		30
Pyridine	43		24		10-66	**57**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	96		84		21-120
Phenol-d6	93		82		10-120
Nitrobenzene-d5	**121**	Q	106		23-120
2-Fluorobiphenyl	87		74		15-120
2,4,6-Tribromophenol	107		92		10-120
4-Terphenyl-d14	90		78		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683648-2 WG1683648-3								
Acenaphthene	57		55		31-137	4		50
1,2,4-Trichlorobenzene	58		55		38-107	5		50
Hexachlorobenzene	56		53		40-140	6		50
Bis(2-chloroethyl)ether	63		59		40-140	7		50
2-Chloronaphthalene	58		54		40-140	7		50
1,2-Dichlorobenzene	59		55		40-140	7		50
1,3-Dichlorobenzene	59		56		40-140	5		50
1,4-Dichlorobenzene	59		56		28-104	5		50
3,3'-Dichlorobenzidine	46		45		40-140	2		50
2,4-Dinitrotoluene	59		56		40-132	5		50
2,6-Dinitrotoluene	58		54		40-140	7		50
Fluoranthene	58		56		40-140	4		50
4-Chlorophenyl phenyl ether	55		52		40-140	6		50
4-Bromophenyl phenyl ether	55		51		40-140	8		50
Bis(2-chloroisopropyl)ether	64		61		40-140	5		50
Bis(2-chloroethoxy)methane	61		57		40-117	7		50
Hexachlorobutadiene	54		52		40-140	4		50
Hexachlorocyclopentadiene	**35**	Q	**33**	Q	40-140	6		50
Hexachloroethane	58		56		40-140	4		50
Isophorone	58		54		40-140	7		50
Naphthalene	**260**	Q	**269**	Q	40-140	3		50
Nitrobenzene	62		58		40-140	7		50
NDPA/DPA	57		54		36-157	5		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683648-2 WG1683648-3								
n-Nitrosodi-n-propylamine	62		57		32-121	8		50
Bis(2-ethylhexyl)phthalate	58		53		40-140	9		50
Butyl benzyl phthalate	55		54		40-140	2		50
Di-n-butylphthalate	54		52		40-140	4		50
Di-n-octylphthalate	48		48		40-140	0		50
Diethyl phthalate	54		52		40-140	4		50
Dimethyl phthalate	54		51		40-140	6		50
Benzo(a)anthracene	53		53		40-140	0		50
Benzo(a)pyrene	58		58		40-140	0		50
Benzo(b)fluoranthene	57		58		40-140	2		50
Benzo(k)fluoranthene	58		56		40-140	4		50
Chrysene	54		54		40-140	0		50
Acenaphthylene	58		55		40-140	5		50
Anthracene	59		57		40-140	3		50
Benzo(ghi)perylene	54		53		40-140	2		50
Fluorene	57		54		40-140	5		50
Phenanthrene	58		56		40-140	4		50
Dibenzo(a,h)anthracene	53		52		40-140	2		50
Indeno(1,2,3-cd)pyrene	59		58		40-140	2		50
Pyrene	59		57		35-142	3		50
Biphenyl	57		54		37-127	5		50
4-Chloroaniline	52		50		40-140	4		50
2-Nitroaniline	59		55		47-134	7		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683648-2 WG1683648-3								
3-Nitroaniline	53		50		26-129	6		50
4-Nitroaniline	61		57		41-125	7		50
Dibenzofuran	58		55		40-140	5		50
2-Methylnaphthalene	63		60		40-140	5		50
1,2,4,5-Tetrachlorobenzene	54		52		40-117	4		50
Acetophenone	59		55		14-144	7		50
2,4,6-Trichlorophenol	57		53		30-130	7		50
p-Chloro-m-cresol	61		58		26-103	5		50
2-Chlorophenol	64		59		25-102	8		50
2,4-Dichlorophenol	61		57		30-130	7		50
2,4-Dimethylphenol	60		56		30-130	7		50
2-Nitrophenol	61		55		30-130	10		50
4-Nitrophenol	62		57		11-114	8		50
2,4-Dinitrophenol	52		45		4-130	14		50
4,6-Dinitro-o-cresol	56		52		10-130	7		50
Pentachlorophenol	56		52		17-109	7		50
Phenol	68		62		26-90	9		50
2-Methylphenol	65		59		30-130.	10		50
3-Methylphenol/4-Methylphenol	71		65		30-130	9		50
2,4,5-Trichlorophenol	58		55		30-130	5		50
Benzoic Acid	32		31		10-110	3		50
Benzyl Alcohol	62		58		40-140	7		50
Carbazole	61		58		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683648-2 WG1683648-3								
1,4-Dioxane	52		48		40-140	8		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	69		65		25-120
Phenol-d6	70		65		10-120
Nitrobenzene-d5	65		61		23-120
2-Fluorobiphenyl	58		55		30-120
2,4,6-Tribromophenol	58		55		10-136
4-Terphenyl-d14	60		57		18-120

PCBS

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8082A
Analytical Date: 09/11/22 14:26
Analyst: ER
Percent Solids: 59%

Extraction Method: EPA 3540C
Extraction Date: 09/10/22 11:00
Cleanup Method: EPA 3665A
Cleanup Date: 09/11/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/11/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	797	70.8	1	A
Aroclor 1221	ND		ug/kg	797	79.8	1	A
Aroclor 1232	ND		ug/kg	797	169.	1	A
Aroclor 1242	ND		ug/kg	797	107.	1	A
Aroclor 1248	ND		ug/kg	797	120.	1	A
Aroclor 1254	ND		ug/kg	797	87.2	1	A
Aroclor 1260	ND		ug/kg	797	147.	1	A
Aroclor 1262	ND		ug/kg	797	101.	1	A
Aroclor 1268	ND		ug/kg	797	82.5	1	A
PCBs, Total	ND		ug/kg	797	70.8	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	33		30-150	A
Decachlorobiphenyl	**29**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	34		30-150	B
Decachlorobiphenyl	134		30-150	B

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/11/22 14:00
Analyst: ER

Extraction Method: EPA 3540C
Extraction Date: 09/09/22 12:00
Cleanup Method: EPA 3665A
Cleanup Date: 09/10/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/10/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1685429-1						
Aroclor 1016	ND		ug/kg	89.4	7.94	A
Aroclor 1221	ND		ug/kg	89.4	8.96	A
Aroclor 1232	ND		ug/kg	89.4	19.0	A
Aroclor 1242	ND		ug/kg	89.4	12.0	A
Aroclor 1248	ND		ug/kg	89.4	13.4	A
Aroclor 1254	ND		ug/kg	89.4	9.78	A
Aroclor 1260	ND		ug/kg	89.4	16.5	A
Aroclor 1262	ND		ug/kg	89.4	11.4	A
Aroclor 1268	ND		ug/kg	89.4	9.27	A
PCBs, Total	ND		ug/kg	89.4	7.94	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	83		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1685429-2 WG1685429-3									
Aroclor 1016	59		83		40-140	34		50	A
Aroclor 1260	61		76		40-140	22		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		90		30-150	A
Decachlorobiphenyl	74		93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		91		30-150	B
Decachlorobiphenyl	61		79		30-150	B

PESTICIDES

Project Name: RITC
Lab Number: L2246304
Project Number: PV-4,5,6 AMMONIA CON
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8081B
Analytical Date: 09/02/22 14:37
Analyst: AR
Percent Solids: 59%
TCLP/SPLP Ext. Date: 08/30/22 04:00

Extraction Method: EPA 3510C
Extraction Date: 08/31/22 18:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	145		30-150	B

Project Name: RITC
Lab Number: L2246304
Project Number: PV-4,5,6 AMMONIA CON
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8151A
Analytical Date: 09/02/22 09:01
Analyst: AKM
Percent Solids: 59%
TCLP/SPLP Ext. Date: 08/30/22 04:00
Methylation Date: 09/02/22 03:33

Extraction Method: EPA 8151A
Extraction Date: 09/01/22 00:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	50		30-150	A
DCAA	55		30-150	B

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 09/02/22 13:03
Analyst: AR
TCLP/SPLP Extraction Date: 08/30/22 04:00

Extraction Method: EPA 3510C
Extraction Date: 08/31/22 18:52

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1682103-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 09/02/22 07:47
Analyst: AKM
TCLP/SPLP Extraction Date: 08/30/22 04:00
Methylation Date: 09/02/22 03:33

Extraction Method: EPA 8151A
Extraction Date: 09/01/22 00:19

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1682209-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	82		30-150	A
DCAA	81		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1682103-2 WG1682103-3									
Lindane	127		112		30-150	13		20	A
Heptachlor	99		84		30-150	16		20	A
Heptachlor epoxide	114		100		30-150	13		20	A
Endrin	122		107		30-150	13		20	A
Methoxychlor	132		118		30-150	11		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		75		30-150	A
Decachlorobiphenyl	94		94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		76		30-150	B
Decachlorobiphenyl	105		105		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1682209-2 WG1682209-3									
2,4-D	134		142		30-150	6		25	A
2,4,5-TP (Silvex)	69		73		30-150	6		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	73		75		30-150	A
DCAA	67		71		30-150	B

METALS

Project Name: RITC
Lab Number: L2246304
Project Number: PV-4,5,6 AMMONIA CON
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA
Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 59%
TCLP/SPLP Ext. Date: 08/30/22 04:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Barium, TCLP	0.082	J	mg/l	0.500	0.021	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Lead, TCLP	0.053	J	mg/l	0.500	0.027	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Mercury, TCLP	0.0026		mg/l	0.0010	0.0005	1	08/31/22 13:07	08/31/22 18:14	EPA 7470A	1,7470A	DMB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/31/22 12:53	09/02/22 14:52	EPA 3015	1,6010D	MC

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON
Lab Number: L2246304
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA
Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 59%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	95.4		mg/kg	13.4	3.61	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Antimony, Total	1.36	J	mg/kg	6.69	0.509	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Arsenic, Total	9.28		mg/kg	1.34	0.278	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Barium, Total	6.00		mg/kg	1.34	0.233	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Beryllium, Total	ND		mg/kg	0.669	0.044	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Cadmium, Total	3.64		mg/kg	1.34	0.131	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Calcium, Total	12700		mg/kg	13.4	4.68	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Chromium, Total	24.8		mg/kg	1.34	0.128	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Cobalt, Total	2.57	J	mg/kg	2.68	0.222	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Copper, Total	129		mg/kg	1.34	0.345	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Iron, Total	71900		mg/kg	66.9	12.1	20	08/27/22 09:20	09/13/22 19:21	EPA 3050B	1,6010D	NB
Lead, Total	33.1		mg/kg	6.69	0.359	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Magnesium, Total	60.2		mg/kg	13.4	2.06	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Manganese, Total	511		mg/kg	1.34	0.213	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Mercury, Total	25.4		mg/kg	1.11	0.724	10	08/27/22 11:50	08/27/22 16:33	EPA 7471B	1,7471B	DR
Nickel, Total	7.62		mg/kg	3.35	0.324	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Potassium, Total	36.0	J	mg/kg	335	19.3	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Selenium, Total	0.709	J	mg/kg	2.68	0.345	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Silver, Total	ND		mg/kg	1.34	0.379	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Sodium, Total	62.4	J	mg/kg	268	4.22	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Thallium, Total	ND		mg/kg	2.68	0.422	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Vanadium, Total	5.97		mg/kg	1.34	0.272	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB
Zinc, Total	11.6		mg/kg	6.69	0.392	2	08/27/22 09:20	08/30/22 14:14	EPA 3050B	1,6010D	NB

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1680352-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Antimony, Total	ND		mg/kg	2.00	0.152	1	08/27/22 09:20	08/30/22 13:34	1,6010D	NB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Barium, Total	ND		mg/kg	0.400	0.070	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Calcium, Total	ND		mg/kg	4.00	1.40	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Chromium, Total	ND		mg/kg	0.400	0.038	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Copper, Total	ND		mg/kg	0.400	0.103	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Iron, Total	0.496	J	mg/kg	2.00	0.361	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Lead, Total	ND		mg/kg	2.00	0.107	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Manganese, Total	ND		mg/kg	0.400	0.064	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Nickel, Total	ND		mg/kg	1.00	0.097	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Potassium, Total	ND		mg/kg	100	5.76	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Selenium, Total	ND		mg/kg	0.800	0.103	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Silver, Total	ND		mg/kg	0.400	0.113	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Sodium, Total	1.42	J	mg/kg	80.0	1.26	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Thallium, Total	ND		mg/kg	0.800	0.126	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB
Zinc, Total	ND		mg/kg	2.00	0.117	1	08/27/22 09:20	08/30/22 12:21	1,6010D	NB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1680373-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	08/27/22 11:50	08/27/22 15:12	1,7471B	DR

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1681912-1										
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Barium, TCLP	ND		mg/l	0.500	0.021	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Lead, TCLP	ND		mg/l	0.500	0.027	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/31/22 12:53	09/02/22 13:43	1,6010D	NB

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 08/29/22 17:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1681916-1										
Mercury, TCLP	0.0007	J	mg/l	0.0010	0.0005	1	08/31/22 13:07	08/31/22 17:44	1,7470A	DMB

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 08/29/22 17:34

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1680352-2 SRM Lot Number: D113-540								
Aluminum, Total	73		-		51-149	-		
Antimony, Total	138		-		20-250	-		
Arsenic, Total	94		-		70-130	-		
Barium, Total	91		-		75-125	-		
Beryllium, Total	90		-		75-125	-		
Cadmium, Total	89		-		75-125	-		
Calcium, Total	88		-		73-128	-		
Chromium, Total	90		-		70-130	-		
Cobalt, Total	94		-		75-125	-		
Copper, Total	90		-		75-125	-		
Iron, Total	87		-		36-164	-		
Lead, Total	84		-		72-128	-		
Magnesium, Total	79		-		63-138	-		
Manganese, Total	89		-		77-123	-		
Nickel, Total	89		-		70-130	-		
Potassium, Total	85		-		59-141	-		
Selenium, Total	94		-		66-134	-		
Silver, Total	91		-		70-131	-		
Sodium, Total	94		-		35-164	-		
Thallium, Total	95		-		70-130	-		
Vanadium, Total	95		-		74-126	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1680352-2 SRM Lot Number: D113-540					
Zinc, Total	90	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1680373-2 SRM Lot Number: D113-540					
Mercury, Total	85	-	60-140	-	
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1681912-2					
Arsenic, TCLP	106	-	75-125	-	20
Barium, TCLP	98	-	75-125	-	20
Cadmium, TCLP	99	-	75-125	-	20
Chromium, TCLP	100	-	75-125	-	20
Lead, TCLP	92	-	75-125	-	20
Selenium, TCLP	102	-	75-125	-	20
Silver, TCLP	102	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1681916-2					
Mercury, TCLP	114	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680352-3 QC Sample: L2245570-01 Client ID: MS Sample												
Aluminum, Total	5810	162	6200	**241**	Q	-	-		75-125	-		20
Antimony, Total	ND	40.4	27.4	**68**	Q	-	-		75-125	-		20
Arsenic, Total	1.63	9.7	9.53	81		-	-		75-125	-		20
Barium, Total	48.6	162	178	80		-	-		75-125	-		20
Beryllium, Total	0.193J	4.04	3.48	86		-	-		75-125	-		20
Cadmium, Total	0.514J	4.28	3.74	87		-	-		75-125	-		20
Calcium, Total	1890	808	2460	**70**	Q	-	-		75-125	-		20
Chromium, Total	15.0	16.2	30.8	98		-	-		75-125	-		20
Cobalt, Total	8.30	40.4	36.6	**70**	Q	-	-		75-125	-		20
Copper, Total	22.8	20.2	40.7	88		-	-		75-125	-		20
Iron, Total	12800	80.8	13600	**990**	Q	-	-		75-125	-		20
Lead, Total	4.48	42.8	35.0	**71**	Q	-	-		75-125	-		20
Magnesium, Total	4130	808	4720	**73**	Q	-	-		75-125	-		20
Manganese, Total	272	40.4	294	**54**	Q	-	-		75-125	-		20
Nickel, Total	16.2	40.4	43.9	**68**	Q	-	-		75-125	-		20
Potassium, Total	1470	808	2240	95		-	-		75-125	-		20
Selenium, Total	ND	9.7	7.36	76		-	-		75-125	-		20
Silver, Total	ND	24.2	19.8	82		-	-		75-125	-		20
Sodium, Total	150J	808	839	104		-	-		75-125	-		20
Thallium, Total	ND	9.7	6.44	**66**	Q	-	-		75-125	-		20
Vanadium, Total	22.9	40.4	54.4	78		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680352-3 QC Sample: L2245570-01 Client ID: MS Sample										
Zinc, Total	32.7	40.4	59.7	**67**	Q	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680373-3 QC Sample: L2246419-01 Client ID: MS Sample										
Mercury, Total	2.92	1.7	8.27	**315**	Q	-	-	80-120	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1681912-3 QC Sample: L2246656-01 Client ID: MS Sample										
Arsenic, TCLP	ND	1.2	1.26	105		-	-	75-125	-	20
Barium, TCLP	0.181J	20	19.6	98		-	-	75-125	-	20
Cadmium, TCLP	ND	0.53	0.520	98		-	-	75-125	-	20
Chromium, TCLP	ND	2	1.98	99		-	-	75-125	-	20
Lead, TCLP	ND	5.3	4.86	92		-	-	75-125	-	20
Selenium, TCLP	ND	1.2	1.22	102		-	-	75-125	-	20
Silver, TCLP	ND	0.5	0.510	102		-	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1681916-3 QC Sample: L2246656-01 Client ID: MS Sample										
Mercury, TCLP	0.0007J	0.025	0.0257	103		-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680352-4 QC Sample: L2245570-01 Client ID: DUP Sample						
Aluminum, Total	5810	5370	mg/kg	8		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	1.63	1.68	mg/kg	3		20
Barium, Total	48.6	43.0	mg/kg	12		20
Beryllium, Total	0.193J	0.204J	mg/kg	NC		20
Cadmium, Total	0.514J	0.497J	mg/kg	NC		20
Calcium, Total	1890	1780	mg/kg	6		20
Chromium, Total	15.0	13.8	mg/kg	8		20
Cobalt, Total	8.30	7.04	mg/kg	16		20
Copper, Total	22.8	20.4	mg/kg	11		20
Iron, Total	12800	12400	mg/kg	3		20
Lead, Total	4.48	4.04J	mg/kg	NC		20
Magnesium, Total	4130	3860	mg/kg	7		20
Manganese, Total	272	278	mg/kg	2		20
Nickel, Total	16.2	12.9	mg/kg	**23**	Q	20
Potassium, Total	1470	1140	mg/kg	**25**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	150J	130J	mg/kg	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680352-4 QC Sample: L2245570-01 Client ID: DUP Sample						
Thallium, Total	ND	ND	mg/kg	NC		20
Vanadium, Total	22.9	23.6	mg/kg	3		20
Zinc, Total	32.7	28.5	mg/kg	14		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680373-4 QC Sample: L2246419-01 Client ID: DUP Sample						
Mercury, Total	2.92	6.37	mg/kg	**74**	Q	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1681912-4 QC Sample: L2246656-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.181J	0.188J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1681916-4 QC Sample: L2246656-01 Client ID: DUP Sample						
Mercury, TCLP	0.0007J	0.0007J	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

SAMPLE RESULTS

Lab ID: L2246304-01
Client ID: PV-5-SD-08252022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/25/22 13:15
Date Received: 08/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	59.2		%	0.100	NA	1	-		121,2540G	
Cyanide, Total	130		mg/kg	8.1	1.7	5	08/30/22 20:10	08/31/22 12:23	1,9010C/9012B	JR
pH (H)	8.5		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Nitrogen, Ammonia	300		mg/kg	92	34.	1	08/31/22 20:54	09/01/22 17:53	121,4500NH3-BH	AT
Flash Point	>150		deg F	70	NA	1	-	09/07/22 20:52	1,1010A	MD
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/30/22 10:10	08/30/22 12:50	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/30/22 10:10	08/30/22 12:21	125,7.3	MJ
Paint Filter Liquid	NEGATIVE		-	0	NA	1	-	08/29/22 17:48	1,9095B	AS

Project Name: RITC **Lab Number:** L2246304

Project Number: PV-4,5,6 AMMONIA CON **Report Date:** 09/14/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1680963-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/30/22 10:10	08/30/22 12:14	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1681314-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/30/22 10:10	08/30/22 12:44	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1681535-1										
Cyanide, Total	ND		mg/kg	0.83	0.18	1	08/30/22 20:10	08/31/22 11:32	1,9010C/9012B	JR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1682047-1										
Nitrogen, Ammonia	ND		mg/kg	7.5	0.02	1	08/31/22 20:54	09/01/22 17:50	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304

Report Date: 09/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1680963-2								
Sulfide, Reactive	102		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1681032-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1681314-2								
Cyanide, Reactive	69		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1681535-2 WG1681535-3								
Cyanide, Total	**57**	Q	**67**	Q	80-120	15		35
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1682047-2								
Nitrogen, Ammonia	93		-		83-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1684649-1								
Flash Point	101		-		96-104	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1681535-4 WG1681535-5 QC Sample: L2246343-02 Client ID: MS Sample												
Cyanide, Total	ND	11	12	100		6.7	**58**	Q	75-125	**57**	Q	35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1682047-4 QC Sample: L2246788-01 Client ID: MS Sample												
Nitrogen, Ammonia	9700	420	8300	**0**	Q	-	-		55-144	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
Report Date: 09/14/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1680963-3 QC Sample: L2245858-03 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1681032-2 QC Sample: L2245748-09 Client ID: DUP Sample						
pH	8.3	8.2	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1681314-3 QC Sample: L2245858-03 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1682047-3 QC Sample: L2246788-01 Client ID: DUP Sample						
Nitrogen, Ammonia	9700	9300	mg/kg	4		20

Project Name: RITC
Project Number: PV-4,5,6 AMMONIA CON

Lab Number: L2246304
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Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246304-01A	Plastic 2oz unpreserved for TS	A	NA		4.2	Y	Absent		HOLD-WETCHEM()
L2246304-01B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),SB-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),MG-TI(180),HG-T(28),FE-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),NA-TI(180),K-TI(180)
L2246304-01C	Vial Large Septa unpreserved (4oz)	A	NA		4.2	Y	Absent		TCLP-EXT-ZHE(14),NYTCL-8260(14)
L2246304-01D	Vial Large Septa unpreserved (4oz)	A	NA		4.2	Y	Absent		TCLP-EXT-ZHE(14),NYTCL-8260(14)
L2246304-01E	Glass 250ml/8oz unpreserved	A	NA		4.2	Y	Absent		SUB-MOISTURE(),SUB-BTU()
L2246304-01F	Glass 250ml/8oz unpreserved	A	NA		4.2	Y	Absent		REACTS(14),TCN-9010(14),NYTCL-8270(14),NYTCL-8082-3540C(365),PH-9045(1),PAINTF(),REACTCN(14),NH3-4500(28)
L2246304-01G	Glass 500ml/16oz unpreserved	A	NA		4.2	Y	Absent		REACTS(14),TCN-9010(14),NYTCL-8270(14),NYTCL-8082-3540C(365),PH-9045(1),PAINTF(),REACTCN(14),NH3-4500(28)
L2246304-01R	Plastic 120ml HNO3 preserved Extracts	A	NA		4.2	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2246304-01R9	Tumble Vessel	A	NA		4.2	Y	Absent		-
L2246304-01S	Amber 1000ml unpreserved Extracts	A	NA		4.2	Y	Absent		TCLP-8270(14),PEST-TCLP*(14),HERB-TCLP*(14)
L2246304-01V	Vial unpreserved Extracts	A	NA		4.2	Y	Absent		TCLP-VOA(14)
L2246304-01W	Vial unpreserved Extracts	A	NA		4.2	Y	Absent		TCLP-VOA(14)
L2246304-01X	Vial MeOH preserved split	A	NA		4.2	Y	Absent		NYTCL-8260(14)
L2246304-01Y	Vial Water preserved split	A	NA		4.2	Y	Absent	**03-SEP-22 14:31**	NYTCL-8260(14)
L2246304-01Z	Vial Water preserved split	A	NA		4.2	Y	Absent	**03-SEP-22 14:31**	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2246304
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Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RITC	**Lab Number:**	L2246304
Project Number:	PV-4,5,6 AMMONIA CON	**Report Date:**	09/14/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/26/22

ALPHA Job #: L2246304

Client Information

Client: INVENTUM ENG
Address: 441 CARLISLE DR
HERNDON VA, 20170
Phone: 585734-5255
Fax: roxanne.birk@inventumeng.com
Email: john.black@inventumeng.com

Project Information

Project Name: RITC
Project Location: 3875 RIVER ROAD, TONAWANDA
Project #: PV-4,5,6 AMMONIA CONCENTRATIONS
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

EXTRA VOL PROVIDED
FULL TCLP: 8260, 8270, 6010C, 8081, 8151

Please specify Metals or TAL.

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☒ NY
☐ Other:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL 8260/8270 FULL TCLP	PCBs 8082A	TAL METALS 6010D	BTU; IGNITEABILITY; CORROSIVITY; REACTIVITY	AMMONIA 350.1 CN 9012B	TOTAL SOLIDS MERCURY 7471	PAINT FILTER			Sample Specific Comments
46304-01	PV-5-SD-08252022	8/25/22	13:15	SD	RB	✓	✓	✓	✓	✓	✓	✓			

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

Container Type:
Preservative: NONE →

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	8/25/22 14:20	Jocelyn Foley (AAL)	8/25/22 14:20
Jocelyn Foley (AAL)	8/25/22 14:20	[signature]	8/26/22 0040

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date September 5, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Sample

Samples Analyzed

Enclosed are Report No(s): 77897

BTU reported on "as received" basis.

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

9/6/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Visit our website: www.sterlinganalytical.com

Sample Analysis

Work Order 22-0916

Sample	Description	Source	Taken/Time	Received
77897	L2246304 PV-5-SD	Alpha Analytical Lab	8/25/22 15:34	8/30/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	12,031	500.00	ASTM D5865	08/30/22	sjr
Moisture, %	40.76	0.10	ASTM D3173	08/30/22	sjr

(1) MA & CT do not certify this parameter

PV-4, PV-5, PV-6, and PV-7 Waste Manifest

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD088413877
2. Page 1 of: 1
3. Emergency Response Phone: 716-560-3006 1-800 424-9300 Att. Dan Flanigan
4. Manifest Tracking Number: 006362959 GBF

GENERATOR

5. Generator's Name and Mailing Address:
Riverview Innovation & Technology Campus Inc
140 Lee St, Suite 200
Buffalo NY 14210
Generator's Phone: 716 560-3006

Generator's Site Address (if different than mailing address):
Riverview Innovation & Technology Campus Inc
3875 River Road
Tonawanda NY 14150

6. Transporter 1 Company Name: Frank's Vacuum Truck Service, Inc.
U.S. EPA ID Number: NYD982792814

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
Chemtron Corporation
35850 Schneider Court
Avon OH 44011
Facility's Phone: 440 937-5950
U.S. EPA ID Number: OHD066060609

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ UN3077, WASTE Environmentally hazardous substance, solid, n.o.s 9, PGIII (Benzene)	14	CF ~~CW~~ MGR	28,000	P ~~T~~ MGR	D018	K147	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
PV - 4,5,6,7
1) ERG#171 A230602-016
SO221452
D261106

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC
Signature: MR on behalf of RITC
Month: 6 Day: 23 Year: 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Bob O'Shea
Signature:
Month: 6 Day: 23 Year: 23

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: JOSEPH J. LUSKA
Signature:
Month: 06 Day: 28 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Appendix E5: PV-8, Abandoned Actifier

PV-8 Photographic Log

Client Name: RITC	**Date Photo was Taken:** 10/10/2022	**Project:** RITC
Photo No. 1 **Direction Photo Taken:** View is south. **Description:** Process vessel PV-8 was the Actifier. The vessel is purged with nitrogen in preparation for tipping.		
Client Name: RITC	**Date Photo was Taken:** 10/10/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is north. **Description:** PV-8 is prepared for tipping.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 3		
Direction Photo Taken: View is north.		
Description: PV-8 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 4		
Direction Photo Taken: View is aerial, north.		
Description: PV-8 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 5		
Direction Photo Taken: View is northwest.		
Description: PV-8 contained packing media consisting of plastic balls.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 6		
Direction Photo Taken: View is northwest.		
Description: PV-8 packing media.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 7 **Direction Photo Taken:** View is northeast. **Description:** PV-8 is sheared.		

Client Name: RITC	Date Photo was Taken: 10/10/2022	Project: RITC
Photo No. 8 **Direction Photo Taken:** View is northwest. **Description:** The interior of PV-8 and the packing media.		

Client Name: RITC	Date Photo was Taken: 10/11/2022	Project: RITC
Photo No. 9 **Direction Photo Taken:** View is north. **Description:** PV-8 is sheared for recycling.		

Client Name: RITC	Date Photo was Taken: 10/11/2022	Project: RITC
Photo No. 10 **Direction Photo Taken:** View is northeast. **Description:** The PV-8 packing media is staged on polyethylene sheeting for disposal.		

PV-8 Analytical Results – Table 2

Table 2
Process Equipment Construction Completion Report
PV-8 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	SD-PV8-09092022	
		COLLECTION DATE:	9/9/2022	
		LAB REPORT:	L2249313, L2253872	
		WASTE CODE(S):	None	
		DESCRIPTION:	PV8, Black solid, Ring Media	
	EPA TCLP	UNITS		
VOCs SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<180	U
1,1,2,2-Tetrachloroethane		ug/kg	<180	U
1,1,2-Trichloroethane		ug/kg	<290	U
1,1-Dichloroethane		ug/kg	<160	U
1,1-Dichloroethene		ug/kg	<260	U
1,2,3-Trichlorobenzene		ug/kg	<350	U
1,2,4-Trichlorobenzene		ug/kg	<300	U
1,2-Dibromo-3-Chloropropane		ug/kg	<1100	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<300	U
1,2-Dichlorobenzene		ug/kg	<160	U
1,2-Dichloroethane		ug/kg	<280	U
1,2-Dichloropropane		ug/kg	<140	U
1,3-Dichlorobenzene		ug/kg	<160	U
1,4-Dichlorobenzene		ug/kg	<190	U
1,4-Dioxane (P-Dioxane)		ug/kg	<38000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<2400	U
2-Hexanone		ug/kg	<1300	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<1400	U
Acetone		ug/kg	<5200	U
Benzene		ug/kg	<180	U
Bromochloromethane		ug/kg	<220	U
Bromodichloromethane		ug/kg	<120	U
Bromoform		ug/kg	<270	U
Bromomethane		ug/kg	<630	U
Carbon Disulfide		ug/kg	<4900	U
Carbon Tetrachloride		ug/kg	<250	U
Chlorobenzene		ug/kg	<140	U
Chloroethane		ug/kg	<490	U
Chloroform		ug/kg	<150	U
Chloromethane		ug/kg	<1000	U
Cyclohexane		ug/kg	<590	U
Dibromochloromethane		ug/kg	<150	U
Dichlorodifluoromethane		ug/kg	<1000	U
Methylene Chloride (Dichloromethane)		ug/kg	<2500	U
Ethylbenzene		ug/kg	<150	U
Isopropylbenzene (Cumene)		ug/kg	<120	U
Methyl Acetate		ug/kg	<1000	U
Tert-Butyl Methyl Ether		ug/kg	<220	U
Methylcyclohexane		ug/kg	<660	U
Styrene		ug/kg	**320**	J
Tetrachloroethylene (PCE)		ug/kg	<210	U
Toluene		ug/kg	<590	U
Trichloroethylene (TCE)		ug/kg	<150	U
Trichlorofluoromethane		ug/kg	<760	U
Vinyl Chloride		ug/kg	<360	U

Analytes	SAMPLE ID:		SD-PV8-09092022	
	COLLECTION DATE:		9/9/2022	
	LAB REPORT:		L2249313, L2253872	
	WASTE CODE(S):		None	
	DESCRIPTION:		PV8, Black solid, Ring Media	
	EPA TCLP	UNITS		
Cis-1,2-Dichloroethylene		ug/kg	<190	U
Cis-1,3-Dichloropropene		ug/kg	<170	U
m,p-Xylene		ug/kg	<610	U
O-Xylene (1,2-Dimethylbenzene)		ug/kg	<320	U
Trans-1,2-Dichloroethene		ug/kg	<150	U
Trans-1,3-Dichloropropene		ug/kg	<300	U
SVOCs SW8270D				
1,1-Biphenyl		ug/kg	NS	
1,2,4,5-Tetrachlorobenzene		ug/kg	<920	U
2,3,4,6-Tetrachlorophenol		ug/kg	NS	
2,4,5-Trichlorophenol		ug/kg	<1700	U
2,4,6-Trichlorophenol		ug/kg	<1700	U
2,4-Dichlorophenol		ug/kg	<1400	U
2,4-Dimethylphenol		ug/kg	<2900	U
2,4-Dinitrophenol		ug/kg	<4100	U
2,4-Dinitrotoluene		ug/kg	<1800	U
2,6-Dinitrotoluene		ug/kg	<1500	U
2-Chloronaphthalene		ug/kg	<880	U
2-Chlorophenol		ug/kg	<1000	U
2-Methylnaphthalene		ug/kg	**260000**	
2-Methylphenol (O-Cresol)		ug/kg	<1400	U
2-Nitroaniline		ug/kg	<1700	U
2-Nitrophenol		ug/kg	<3300	U
3,3'-Dichlorobenzidine		ug/kg	<2400	U
Cresols, M & P (3&4-Methylphenol)		ug/kg	**1700**	J
3-Nitroaniline		ug/kg	<1700	U
4,6-Dinitro-2-Methylphenol		ug/kg	<4200	U
4-Bromophenyl Phenyl Ether		ug/kg	<1300	U
4-Chloro-3-Methylphenol		ug/kg	<1300	U
4-Chloroaniline		ug/kg	<1600	U
4-Chlorophenyl Phenyl Ether		ug/kg	<950	U
4-Nitroaniline		ug/kg	<3700	U
4-Nitrophenol		ug/kg	<3600	U
Acenaphthene		ug/kg	**13000**	
Acenaphthylene		ug/kg	**92000**	
Acetophenone		ug/kg	**4800**	J
Anthracene		ug/kg	**88000**	
Atrazine		ug/kg	NS	
Benzo(A)Anthracene		ug/kg	**220000**	
Benzaldehyde		ug/kg	NS	
Benzo(A)Pyrene		ug/kg	**99000**	
Benzo(B)Fluoranthene		ug/kg	**240000**	
Benzo(G,H,I)Perylene		ug/kg	**70000**	
Benzo(K)Fluoranthene		ug/kg	**73000**	
Biphenyl (Diphenyl)		ug/kg	**44000**	

Table 2
Process Equipment Construction Completion Report
PV-8 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		SD-PV8-09092022	
	COLLECTION DATE:		9/9/2022	
	LAB REPORT:		L2249313, L2253872	
	WASTE CODE(S):		None	
	DESCRIPTION:		PV8, Black solid, Ring Media	
	EPA TCLP	UNITS		
Bis(2-Chloroisopropyl) Ether		ug/kg	<1500	U
Bis(2-Chloroethoxy) Methane		ug/kg	<890	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<1200	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	**10000**	
Benzyl Butyl Phthalate		ug/kg	<2200	U
Caprolactam		ug/kg	NS	
Carbazole		ug/kg	**63000**	
Chrysene		ug/kg	**270000**	
Di-N-Butyl Phthalate		ug/kg	<1700	U
Di-N-Octylphthalate		ug/kg	<3000	U
Dibenz(A,H)Anthracene		ug/kg	**27000**	
Dibenzofuran		ug/kg	**170000**	
Diethyl Phthalate		ug/kg	<820	U
Dimethyl Phthalate		ug/kg	<1800	U
Fluoranthene		ug/kg	**300000**	
Fluorene		ug/kg	**120000**	
Hexachlorobenzene		ug/kg	<990	U
Hexachlorobutadiene		ug/kg	<1300	U
Hexachlorocyclopentadiene		ug/kg	<8000	U
Hexachloroethane		ug/kg	<1400	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	**88000**	
Isophorone		ug/kg	<1100	U
N-Nitrosodi-N-Propylamine		ug/kg	<1400	U
N-Nitrosodiphenylamine		ug/kg	<1000	U
Naphthalene		ug/kg	**370000**	
Nitrobenzene		ug/kg	<1300	U
Pentachlorophenol		ug/kg	<1900	U
Phenanthrene		ug/kg	**320000**	
Phenol		ug/kg	<1300	U
Pyrene		ug/kg	**300000**	
TAL Metals SW6010				
Aluminum		mg/kg	**257**	
Antimony		mg/kg	**6.68**	J
Arsenic		mg/kg	**9.94**	
Barium		mg/kg	**20.8**	
Beryllium		mg/kg	<0.276	U
Cadmium		mg/kg	**4.51**	J
Calcium		mg/kg	**13400**	
Chromium, Total		mg/kg	**65.8**	
Cobalt		mg/kg	<1.39	U
Copper		mg/kg	**10.0**	
Iron		mg/kg	**206000**	
Lead		mg/kg	**22.6**	J
Magnesium		mg/kg	**4720**	
Manganese		mg/kg	**774**	

Table 2
Process Equipment Construction Completion Report
PV-8 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		SD-PV8-09092022	
	COLLECTION DATE:		9/9/2022	
	LAB REPORT:		L2249313, L2253872	
	WASTE CODE(S):		None	
	DESCRIPTION:		PV8, Black solid, Ring Media	
	EPA TCLP	UNITS		
Nickel		mg/kg	**6.35**	J
Potassium		mg/kg	<120.0	U
Selenium		mg/kg	<2.16	U
Silver		mg/kg	<2.36	U
Sodium		mg/kg	**15300**	
Thallium		mg/kg	<2.63	U
Vanadium		mg/kg	**4.43**	J
Zinc		mg/kg	**60.1**	
Total Mercury SW7471				
Mercury		mg/kg	**230**	
PCBs 8082A				
PCB-1016 (Aroclor 1016)		ug/kg	<8.01	U
PCB-1221 (Aroclor 1221)		ug/kg	<9.04	U
PCB-1232 (Aroclor 1232)		ug/kg	<19.1	U
PCB-1242 (Aroclor 1242)		ug/kg	<12.2	U
PCB-1248 (Aroclor 1248)		ug/kg	<13.5	U
PCB-1254 (Aroclor 1254)		ug/kg	<9.87	U
PCB-1260 (Aroclor 1260)		ug/kg	<16.7	U
Ammonia E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	**11000**	
Cyanide SW9012B				
Cyanide		mg/kg	**1000**	
SOLIDS				
Total Solids		%	**93.0**	
SW9045D				
pH		ph units	**5.9**	
TCLP VOCs SW8260C				
1,2-Dichloroethane	500	ug/l	<1.3	U
Chlorobenzene	100,000	ug/l	<1.8	U
Tetrachloroethylene (PCE)	700	ug/l	<1.8	U
Carbon Tetrachloride	500	ug/l	<1.3	U
Chloroform	6,000	ug/l	<2.2	U
Benzene	500	ug/l	<1.6	U
Vinyl Chloride	200	ug/l	<0.71	U
1,1-Dichloroethene	700	ug/l	<1.7	U
Methyl Ethyl Ketone (2-Butanone)	200,000	ug/l	<19.0	U
Trichloroethylene (TCE)	500	ug/l	<1.8	U

Table 2
Process Equipment Construction Completion Report
PV-8 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes			SAMPLE ID:	SD-PV8-09092022
			COLLECTION DATE:	9/9/2022
			LAB REPORT:	L2249313, L2253872
			WASTE CODE(S):	None
			DESCRIPTION:	PV8, Black solid, Ring Media
	EPA TCLP	UNITS		
TCLP SVOCs SW8270D				
1,4-Dichlorobenzene	7,500	ug/l	NS	
2,4,5-Trichlorophenol	400,000	ug/l	<1.9	U
2,4,6-Trichlorophenol	2,000	ug/l	<2.5	U
2,4-Dinitrotoluene	130	ug/l	<1.9	U
Cresols, (as m,p,o-Cresol)	20,000	ug/l	**5.4**	J
Hexachlorobenzene	130	ug/l	<3.4	U
Hexachlorobutadiene	500	ug/l	<3.0	U
Hexachloroethane	3,000	ug/l	<2.2	U
Nitrobenzene	2,000	ug/l	<3.3	U
Pentachlorophenol	100,000	ug/l	<9.8	U
Pyridine	5,000	ug/l	<4.5	U
TCLP Mercury SW7470				
Mercury	0.2	mg/L	**0.0330**	
TCLP Metals SW6010				
Arsenic	5	mg/L	<0.019	U
Barium	100	mg/L	**0.077**	J
Cadmium	1	mg/L	<0.010	U
Chromium, Total	5	mg/L	<0.021	U
Lead	5	mg/L	<0.027	U
Selenium	1	mg/L	<0.035	U
Silver	5	mg/L	<0.028	U
TCLP Pesticides 8081B				
Chlordane	0.03	mg/L	<0.232	U
Endrin	0.02	mg/L	<0.021	U
Gamma Bhc (Lindane)	0.4	mg/L	<0.022	U
Heptachlor	0.008	mg/L	<0.016	U
Heptachlor Epoxide	0.008	mg/L	<0.021	U
Methoxychlor	10	mg/L	<0.034	U
Toxaphene	0.5	mg/L	<0.314	U
TCLP Herbicides SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<1	U
Silvex (2,4,5-TP)	1	mg/L	<1	U

Table 2
Process Equipment Construction Completion Report
PV-8 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	SD-PV8-09092022	
		COLLECTION DATE:	9/9/2022	
		LAB REPORT:	L2249313, L2253872	
		WASTE CODE(S):	None	
		DESCRIPTION:	PV8, Black solid, Ring Media	
	EPA TCLP	UNITS		
Ignitability EPA 1030				
Ignitability		mm/sec	No Burn	
SW7.3.3.2				
Reactive Cyanide		mg/kg	<10.0	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	<10.0	U
Chloride (SW9056)				
Chloride		mg/kg	NS	
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**6362**	
Notes:				
NS = Not Sampled				
NA = Sample collected, but not analyzed				
"<" = Analyzed for but detected at or above the quantitation limit				
J = Analyte detected below quantitation limit				
Red Highlight = Analyte concentration exceeds EPA TCLP Limits				
Bold = Analyte was detected				

PV-8 Laboratory Report



ANALYTICAL REPORT

Lab Number:	L2249313
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RIVERVIEW
Project Number:	PV-8 TOWER
Report Date:	09/29/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2249313-01	SDPV8-09092022	SOLID	3875 RIVER ROAD TONAWANDA	09/09/22 10:00	09/09/22

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: RIVERVIEW **Lab Number:** L2249313
Project Number: PV-8 TOWER **Report Date:** 09/29/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of BTU was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Semivolatile Organics

L2249313-01D: The sample has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the sample matrix.

L2249313-01D: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

The WG1689813-2 LCS recovery, associated with L2249313-01D, is below the acceptance criteria for benzoic acid (3%); however, it has been identified as a "difficult" analyte. The results of the associated sample are reported.

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

Case Narrative (continued)

Cyanide, Total

The WG1687574-3 LCSD recovery for cyanide, total (71%), associated with L2249313-01, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Nitrogen, Ammonia

The WG1690917-4 MS recovery for nitrogen, ammonia (0%), performed on L2249313-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 09/29/22

ORGANICS

VOLATILES

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 Date Collected: 09/09/22 10:00
Client ID: SDPV8-09092022 Date Received: 09/09/22
Sample Location: 3875 RIVER ROAD TONAWANDA Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/23/22 07:46
Analyst: MM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 09/21/22 14:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
dibromofluoromethane	116		70-130

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D2 Date Collected: 09/09/22 10:00
Client ID: SDPV8-09092022 Date Received: 09/09/22
Sample Location: 3875 RIVER ROAD TONAWANDA Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/20/22 16:46
Analyst: AJK
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	990000		ug/kg	22000	3500	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/18/22 21:51
Analyst: JC
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	5400	2500	20
1,1-Dichloroethane	ND		ug/kg	1100	160	20
Chloroform	ND		ug/kg	1600	150	20
Carbon tetrachloride	ND		ug/kg	1100	250	20
1,2-Dichloropropane	ND		ug/kg	1100	140	20
Dibromochloromethane	ND		ug/kg	1100	150	20
1,1,2-Trichloroethane	ND		ug/kg	1100	290	20
Tetrachloroethene	ND		ug/kg	540	210	20
Chlorobenzene	ND		ug/kg	540	140	20
Trichlorofluoromethane	ND		ug/kg	4400	760	20
1,2-Dichloroethane	ND		ug/kg	1100	280	20
1,1,1-Trichloroethane	ND		ug/kg	540	180	20
Bromodichloromethane	ND		ug/kg	540	120	20
trans-1,3-Dichloropropene	ND		ug/kg	1100	300	20
cis-1,3-Dichloropropene	ND		ug/kg	540	170	20
1,3-Dichloropropene, Total	ND		ug/kg	540	170	20
Bromoform	ND		ug/kg	4400	270	20
1,1,2,2-Tetrachloroethane	ND		ug/kg	540	180	20
Benzene	ND		ug/kg	540	180	20
Toluene	ND		ug/kg	1100	590	20
Ethylbenzene	ND		ug/kg	1100	150	20
Chloromethane	ND		ug/kg	4400	1000	20
Bromomethane	ND		ug/kg	2200	630	20
Vinyl chloride	ND		ug/kg	1100	360	20
Chloroethane	ND		ug/kg	2200	490	20
1,1-Dichloroethene	ND		ug/kg	1100	260	20
trans-1,2-Dichloroethene	ND		ug/kg	1600	150	20
Trichloroethene	ND		ug/kg	540	150	20

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D Date Collected: 09/09/22 10:00

Client ID: SDPV8-09092022 Date Received: 09/09/22

Sample Location: 3875 RIVER ROAD TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	2200	160	20
1,3-Dichlorobenzene	ND		ug/kg	2200	160	20
1,4-Dichlorobenzene	ND		ug/kg	2200	190	20
Methyl tert butyl ether	ND		ug/kg	2200	220	20
p/m-Xylene	ND		ug/kg	2200	610	20
o-Xylene	ND		ug/kg	1100	320	20
Xylenes, Total	ND		ug/kg	1100	320	20
cis-1,2-Dichloroethene	ND		ug/kg	1100	190	20
1,2-Dichloroethene, Total	ND		ug/kg	1100	150	20
Styrene	320	J	ug/kg	1100	210	20
Dichlorodifluoromethane	ND		ug/kg	11000	1000	20
Acetone	ND		ug/kg	11000	5200	20
Carbon disulfide	ND		ug/kg	11000	4900	20
2-Butanone	ND		ug/kg	11000	2400	20
4-Methyl-2-pentanone	ND		ug/kg	11000	1400	20
2-Hexanone	ND		ug/kg	11000	1300	20
Bromochloromethane	ND		ug/kg	2200	220	20
1,2-Dibromoethane	ND		ug/kg	1100	300	20
n-Butylbenzene	ND		ug/kg	1100	180	20
sec-Butylbenzene	ND		ug/kg	1100	160	20
tert-Butylbenzene	ND		ug/kg	2200	130	20
1,2-Dibromo-3-chloropropane	ND		ug/kg	3300	1100	20
Isopropylbenzene	ND		ug/kg	1100	120	20
p-Isopropyltoluene	ND		ug/kg	1100	120	20
Naphthalene	670000	E	ug/kg	4400	710	20
n-Propylbenzene	ND		ug/kg	1100	190	20
1,2,3-Trichlorobenzene	ND		ug/kg	2200	350	20
1,2,4-Trichlorobenzene	ND		ug/kg	2200	300	20
1,3,5-Trimethylbenzene	ND		ug/kg	2200	210	20
1,2,4-Trimethylbenzene	ND		ug/kg	2200	360	20
Methyl Acetate	ND		ug/kg	4400	1000	20
Cyclohexane	ND		ug/kg	11000	590	20
1,4-Dioxane	ND		ug/kg	87000	38000	20
Freon-113	ND		ug/kg	4400	750	20
Methyl cyclohexane	ND		ug/kg	4400	660	20

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	122		70-130

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/18/22 14:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689109-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/18/22 14:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689109-5					
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/18/22 14:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689109-5					
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	112		70-130

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/20/22 09:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689908-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/20/22 09:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689908-5					
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Styrene	32	J	ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/20/22 09:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689908-5					
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/23/22 07:01
Analyst: MM
TCLP/SPLP Extraction Date: 09/21/22 14:03

Extraction Date: 09/21/22 14:03

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1691200-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689109-3 WG1689109-4								
Methylene chloride	105		110		70-130	5		30
1,1-Dichloroethane	100		104		70-130	4		30
Chloroform	99		107		70-130	8		30
Carbon tetrachloride	106		109		70-130	3		30
1,2-Dichloropropane	106		111		70-130	5		30
Dibromochloromethane	98		106		70-130	8		30
1,1,2-Trichloroethane	95		102		70-130	7		30
Tetrachloroethene	108		114		70-130	5		30
Chlorobenzene	103		110		70-130	7		30
Trichlorofluoromethane	96		102		70-139	6		30
1,2-Dichloroethane	103		108		70-130	5		30
1,1,1-Trichloroethane	107		112		70-130	5		30
Bromodichloromethane	108		114		70-130	5		30
trans-1,3-Dichloropropene	98		106		70-130	8		30
cis-1,3-Dichloropropene	99		103		70-130	4		30
Bromoform	82		93		70-130	13		30
1,1,2,2-Tetrachloroethane	95		106		70-130	11		30
Benzene	104		108		70-130	4		30
Toluene	101		108		70-130	7		30
Ethylbenzene	102		108		70-130	6		30
Chloromethane	98		98		52-130	0		30
Bromomethane	89		93		57-147	4		30
Vinyl chloride	101		104		67-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689109-3 WG1689109-4								
Chloroethane	96		101		50-151	5		30
1,1-Dichloroethene	101		105		65-135	4		30
trans-1,2-Dichloroethene	102		106		70-130	4		30
Trichloroethene	95		99		70-130	4		30
1,2-Dichlorobenzene	102		114		70-130	11		30
1,3-Dichlorobenzene	102		114		70-130	11		30
1,4-Dichlorobenzene	103		113		70-130	9		30
Methyl tert butyl ether	107		112		66-130	5		30
p/m-Xylene	108		112		70-130	4		30
o-Xylene	107		111		70-130	4		30
cis-1,2-Dichloroethene	102		106		70-130	4		30
Styrene	105		111		70-130	6		30
Dichlorodifluoromethane	100		103		30-146	3		30
Acetone	80		83		54-140	4		30
Carbon disulfide	99		102		59-130	3		30
2-Butanone	91		97		70-130	6		30
4-Methyl-2-pentanone	102		107		70-130	5		30
2-Hexanone	90		96		70-130	6		30
Bromochloromethane	102		108		70-130	6		30
1,2-Dibromoethane	94		102		70-130	8		30
n-Butylbenzene	103		113		70-130	9		30
sec-Butylbenzene	102		112		70-130	9		30
tert-Butylbenzene	101		111		70-130	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689109-3 WG1689109-4								
1,2-Dibromo-3-chloropropane	84		95		68-130	12		30
Isopropylbenzene	101		112		70-130	10		30
p-Isopropyltoluene	104		113		70-130	8		30
Naphthalene	96		109		70-130	13		30
n-Propylbenzene	102		112		70-130	9		30
1,2,3-Trichlorobenzene	99		113		70-130	13		30
1,2,4-Trichlorobenzene	101		115		70-130	13		30
1,3,5-Trimethylbenzene	104		114		70-130	9		30
1,2,4-Trimethylbenzene	102		113		70-130	10		30
Methyl Acetate	93		94		51-146	1		30
Cyclohexane	105		109		59-142	4		30
1,4-Dioxane	88		91		65-136	3		30
Freon-113	104		108		50-139	4		30
Methyl cyclohexane	103		106		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		102		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	99		102		70-130
Dibromofluoromethane	99		101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689908-3 WG1689908-4								
Methylene chloride	97		96		70-130	1		30
1,1-Dichloroethane	105		103		70-130	2		30
Chloroform	99		97		70-130	2		30
Carbon tetrachloride	95		93		70-130	2		30
1,2-Dichloropropane	105		106		70-130	1		30
Dibromochloromethane	104		104		70-130	0		30
1,1,2-Trichloroethane	104		104		70-130	0		30
Tetrachloroethene	99		98		70-130	1		30
Chlorobenzene	100		100		70-130	0		30
Trichlorofluoromethane	97		96		70-139	1		30
1,2-Dichloroethane	101		100		70-130	1		30
1,1,1-Trichloroethane	98		96		70-130	2		30
Bromodichloromethane	103		102		70-130	1		30
trans-1,3-Dichloropropene	108		107		70-130	1		30
cis-1,3-Dichloropropene	105		105		70-130	0		30
Bromoform	88		89		70-130	1		30
1,1,2,2-Tetrachloroethane	102		103		70-130	1		30
Benzene	100		99		70-130	1		30
Toluene	100		98		70-130	2		30
Ethylbenzene	101		100		70-130	1		30
Chloromethane	101		99		52-130	2		30
Bromomethane	97		95		57-147	2		30
Vinyl chloride	92		90		67-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689908-3 WG1689908-4								
Chloroethane	110		107		50-151	3		30
1,1-Dichloroethene	101		99		65-135	2		30
trans-1,2-Dichloroethene	100		99		70-130	1		30
Trichloroethene	101		101		70-130	0		30
1,2-Dichlorobenzene	103		102		70-130	1		30
1,3-Dichlorobenzene	103		102		70-130	1		30
1,4-Dichlorobenzene	104		103		70-130	1		30
Methyl tert butyl ether	94		95		66-130	1		30
p/m-Xylene	100		99		70-130	1		30
o-Xylene	99		98		70-130	1		30
cis-1,2-Dichloroethene	98		97		70-130	1		30
Styrene	92		90		70-130	2		30
Dichlorodifluoromethane	91		89		30-146	2		30
Acetone	106		108		54-140	2		30
Carbon disulfide	94		92		59-130	2		30
2-Butanone	100		100		70-130	0		30
4-Methyl-2-pentanone	109		109		70-130	0		30
2-Hexanone	106		108		70-130	2		30
Bromochloromethane	100		100		70-130	0		30
1,2-Dibromoethane	103		103		70-130	0		30
n-Butylbenzene	106		105		70-130	1		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	100		99		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689908-3 WG1689908-4								
1,2-Dibromo-3-chloropropane	102		101		68-130	1		30
Isopropylbenzene	98		97		70-130	1		30
p-Isopropyltoluene	104		103		70-130	1		30
Naphthalene	107		108		70-130	1		30
n-Propylbenzene	103		101		70-130	2		30
1,2,3-Trichlorobenzene	114		113		70-130	1		30
1,2,4-Trichlorobenzene	111		110		70-130	1		30
1,3,5-Trimethylbenzene	101		100		70-130	1		30
1,2,4-Trimethylbenzene	103		102		70-130	1		30
Methyl Acetate	112		113		51-146	1		30
Cyclohexane	103		103		59-142	0		30
1,4-Dioxane	85		84		65-136	1		30
Freon-113	101		99		50-139	2		30
Methyl cyclohexane	98		95		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	95		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1691200-3 WG1691200-4								
Chloroform	100		99		70-130	1		20
Carbon tetrachloride	100		110		63-132	10		20
Tetrachloroethene	100		97		70-130	3		20
Chlorobenzene	99		94		75-130	5		25
1,2-Dichloroethane	93		91		70-130	2		20
Benzene	99		94		70-130	5		25
Vinyl chloride	95		89		55-140	7		20
1,1-Dichloroethene	100		99		61-145	1		25
Trichloroethene	100		97		70-130	3		25
1,4-Dichlorobenzene	97		92		70-130	5		20
2-Butanone	72		75		63-138	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	94		94		70-130
dibromofluoromethane	103		103		70-130

SEMIVOLATILES

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/21/22 23:46
Analyst: JG
Percent Solids: 93%
TCLP/SPLP Ext. Date: 09/14/22 08:30

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 01:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	5.4	J	ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	75		33-120

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D2
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/26/22 14:22
Analyst: MG
Percent Solids: 93%

Extraction Method: EPA 3540C
Extraction Date: 09/20/22 17:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	300000		ug/kg	13000	2500	125
Naphthalene	370000		ug/kg	22000	2700	125
Phenanthrene	320000		ug/kg	13000	2700	125

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/22/22 11:53
Analyst: CMM
Percent Solids: 93%

Extraction Method: EPA 3540C
Extraction Date: 09/20/22 17:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	13000		ug/kg	7100	920	50
1,2,4-Trichlorobenzene	ND		ug/kg	8800	1000	50
Hexachlorobenzene	ND		ug/kg	5300	990	50
Bis(2-chloroethyl)ether	ND		ug/kg	8000	1200	50
2-Chloronaphthalene	ND		ug/kg	8800	880	50
1,2-Dichlorobenzene	ND		ug/kg	8800	1600	50
1,3-Dichlorobenzene	ND		ug/kg	8800	1500	50
1,4-Dichlorobenzene	ND		ug/kg	8800	1500	50
3,3'-Dichlorobenzidine	ND		ug/kg	8800	2400	50
2,4-Dinitrotoluene	ND		ug/kg	8800	1800	50
2,6-Dinitrotoluene	ND		ug/kg	8800	1500	50
Fluoranthene	420000	E	ug/kg	5300	1000	50
4-Chlorophenyl phenyl ether	ND		ug/kg	8800	950	50
4-Bromophenyl phenyl ether	ND		ug/kg	8800	1300	50
Bis(2-chloroisopropyl)ether	ND		ug/kg	11000	1500	50
Bis(2-chloroethoxy)methane	ND		ug/kg	9600	890	50
Hexachlorobutadiene	ND		ug/kg	8800	1300	50
Hexachlorocyclopentadiene	ND		ug/kg	25000	8000	50
Hexachloroethane	ND		ug/kg	7100	1400	50
Isophorone	ND		ug/kg	8000	1100	50
Naphthalene	600000	E	ug/kg	8800	1100	50
Nitrobenzene	ND		ug/kg	8000	1300	50
NDPA/DPA	ND		ug/kg	7100	1000	50
n-Nitrosodi-n-propylamine	ND		ug/kg	8800	1400	50
Bis(2-ethylhexyl)phthalate	10000		ug/kg	8800	3000	50
Butyl benzyl phthalate	ND		ug/kg	8800	2200	50
Di-n-butylphthalate	ND		ug/kg	8800	1700	50
Di-n-octylphthalate	ND		ug/kg	8800	3000	50

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D Date Collected: 09/09/22 10:00

Client ID: SDPV8-09092022 Date Received: 09/09/22

Sample Location: 3875 RIVER ROAD TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	8800	820	50
Dimethyl phthalate	ND		ug/kg	8800	1800	50
Benzo(a)anthracene	220000		ug/kg	5300	1000	50
Benzo(a)pyrene	99000		ug/kg	7100	2200	50
Benzo(b)fluoranthene	240000		ug/kg	5300	1500	50
Benzo(k)fluoranthene	73000		ug/kg	5300	1400	50
Chrysene	270000		ug/kg	5300	920	50
Acenaphthylene	92000		ug/kg	7100	1400	50
Anthracene	88000		ug/kg	5300	1700	50
Benzo(ghi)perylene	70000		ug/kg	7100	1000	50
Fluorene	120000		ug/kg	8800	860	50
Phenanthrene	540000	E	ug/kg	5300	1100	50
Dibenzo(a,h)anthracene	27000		ug/kg	5300	1000	50
Indeno(1,2,3-cd)pyrene	88000		ug/kg	7100	1200	50
Pyrene	300000		ug/kg	5300	880	50
Biphenyl	44000		ug/kg	20000	1100	50
4-Chloroaniline	ND		ug/kg	8800	1600	50
2-Nitroaniline	ND		ug/kg	8800	1700	50
3-Nitroaniline	ND		ug/kg	8800	1700	50
4-Nitroaniline	ND		ug/kg	8800	3700	50
Dibenzofuran	170000		ug/kg	8800	840	50
2-Methylnaphthalene	260000		ug/kg	11000	1100	50
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	8800	920	50
Acetophenone	4800	J	ug/kg	8800	1100	50
2,4,6-Trichlorophenol	ND		ug/kg	5300	1700	50
p-Chloro-m-cresol	ND		ug/kg	8800	1300	50
2-Chlorophenol	ND		ug/kg	8800	1000	50
2,4-Dichlorophenol	ND		ug/kg	8000	1400	50
2,4-Dimethylphenol	ND		ug/kg	8800	2900	50
2-Nitrophenol	ND		ug/kg	19000	3300	50
4-Nitrophenol	ND		ug/kg	12000	3600	50
2,4-Dinitrophenol	ND		ug/kg	42000	4100	50
4,6-Dinitro-o-cresol	ND		ug/kg	23000	4200	50
Pentachlorophenol	ND		ug/kg	7100	1900	50
Phenol	ND		ug/kg	8800	1300	50
2-Methylphenol	ND		ug/kg	8800	1400	50
3-Methylphenol/4-Methylphenol	1700	J	ug/kg	13000	1400	50

Project Name: RIVERVIEW **Lab Number:** L2249313

Project Number: PV-8 TOWER **Report Date:** 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01 D
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	8800	1700	50
Benzoic Acid	ND		ug/kg	29000	8900	50
Benzyl Alcohol	ND		ug/kg	8800	2700	50
Carbazole	63000		ug/kg	8800	860	50
1,4-Dioxane	ND		ug/kg	1300	410	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	25-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	30-120
2,4,6-Tribromophenol	**0**	Q	10-136
4-Terphenyl-d14	**0**	Q	18-120

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/20/22 04:53
Analyst: IM
TCLP/SPLP Extraction Date: 09/13/22 18:40

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 01:53

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1688640-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	92		33-120

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/22/22 09:28
Analyst: CMM

Extraction Method: EPA 3540C
Extraction Date: 09/20/22 17:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689813-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	49	J	ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/22/22 09:28
Analyst: CMM

Extraction Method: EPA 3540C
Extraction Date: 09/20/22 17:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689813-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/22/22 09:28
Analyst: CMM

Extraction Method: EPA 3540C
Extraction Date: 09/20/22 17:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689813-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	92		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	84		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1688640-2 WG1688640-3								
Hexachlorobenzene	79		71		40-140	11		30
2,4-Dinitrotoluene	102		90		40-132	13		30
Hexachlorobutadiene	53		48		28-111	10		30
Hexachloroethane	58		52		21-105	11		30
Nitrobenzene	89		82		40-140	8		30
2,4,6-Trichlorophenol	81		73		30-130	10		30
Pentachlorophenol	82		73		9-103	12		30
2-Methylphenol	80		71		30-130	12		30
3-Methylphenol/4-Methylphenol	81		73		30-130	10		30
2,4,5-Trichlorophenol	86		77		30-130	11		30
Pyridine	53		47		10-66	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	72		67		21-120
Phenol-d6	68		63		10-120
Nitrobenzene-d5	94		87		23-120
2-Fluorobiphenyl	74		69		15-120
2,4,6-Tribromophenol	96		88		10-120
4-Terphenyl-d14	86		79		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689813-2 WG1689813-3								
Acenaphthene	97		94		31-137	3		50
1,2,4-Trichlorobenzene	84		87		38-107	4		50
Hexachlorobenzene	92		88		40-140	4		50
Bis(2-chloroethyl)ether	88		96		40-140	9		50
2-Chloronaphthalene	88		87		40-140	1		50
1,2-Dichlorobenzene	82		85		40-140	4		50
1,3-Dichlorobenzene	82		87		40-140	6		50
1,4-Dichlorobenzene	80		84		28-104	5		50
3,3'-Dichlorobenzidine	82		83		40-140	1		50
2,4-Dinitrotoluene	108		107		40-132	1		50
2,6-Dinitrotoluene	93		91		40-140	2		50
Fluoranthene	92		91		40-140	1		50
4-Chlorophenyl phenyl ether	99		96		40-140	3		50
4-Bromophenyl phenyl ether	98		92		40-140	6		50
Bis(2-chloroisopropyl)ether	95		102		40-140	7		50
Bis(2-chloroethoxy)methane	89		91		40-117	2		50
Hexachlorobutadiene	85		84		40-140	1		50
Hexachlorocyclopentadiene	83		86		40-140	4		50
Hexachloroethane	77		82		40-140	6		50
Isophorone	81		83		40-140	2		50
Naphthalene	95		93		40-140	2		50
Nitrobenzene	88		90		40-140	2		50
NDPA/DPA	99		96		36-157	3		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689813-2 WG1689813-3								
n-Nitrosodi-n-propylamine	83		86		32-121	4		50
Bis(2-ethylhexyl)phthalate	110		106		40-140	4		50
Butyl benzyl phthalate	96		92		40-140	4		50
Di-n-butylphthalate	94		93		40-140	1		50
Di-n-octylphthalate	102		104		40-140	2		50
Diethyl phthalate	96		91		40-140	5		50
Dimethyl phthalate	87		82		40-140	6		50
Benzo(a)anthracene	96		96		40-140	0		50
Benzo(a)pyrene	108		105		40-140	3		50
Benzo(b)fluoranthene	92		93		40-140	1		50
Benzo(k)fluoranthene	106		104		40-140	2		50
Chrysene	97		96		40-140	1		50
Acenaphthylene	90		88		40-140	2		50
Anthracene	92		94		40-140	2		50
Benzo(ghi)perylene	93		91		40-140	2		50
Fluorene	100		96		40-140	4		50
Phenanthrene	91		92		40-140	1		50
Dibenzo(a,h)anthracene	94		92		40-140	2		50
Indeno(1,2,3-cd)pyrene	99		98		40-140	1		50
Pyrene	89		90		35-142	1		50
Biphenyl	88		85		37-127	3		50
4-Chloroaniline	77		77		40-140	0		50
2-Nitroaniline	95		96		47-134	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689813-2 WG1689813-3								
3-Nitroaniline	94		88		26-129	7		50
4-Nitroaniline	104		100		41-125	4		50
Dibenzofuran	99		98		40-140	1		50
2-Methylnaphthalene	92		90		40-140	2		50
1,2,4,5-Tetrachlorobenzene	85		84		40-117	1		50
Acetophenone	86		88		14-144	2		50
2,4,6-Trichlorophenol	96		92		30-130	4		50
p-Chloro-m-cresol	95		94		26-103	1		50
2-Chlorophenol	88		91		25-102	3		50
2,4-Dichlorophenol	90		92		30-130	2		50
2,4-Dimethylphenol	84		86		30-130	2		50
2-Nitrophenol	96		100		30-130	4		50
4-Nitrophenol	112		107		11-114	5		50
2,4-Dinitrophenol	55		66		4-130	18		50
4,6-Dinitro-o-cresol	104		107		10-130	3		50
Pentachlorophenol	93		93		17-109	0		50
Phenol	**91**	Q	**95**	Q	26-90	4		50
2-Methylphenol	91		94		30-130.	3		50
3-Methylphenol/4-Methylphenol	98		102		30-130	4		50
2,4,5-Trichlorophenol	96		93		30-130	3		50
Benzoic Acid	**3**	Q	10		10-110	**117**	Q	50
Benzyl Alcohol	89		92		40-140	3		50
Carbazole	93		94		54-128	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689813-2 WG1689813-3								
1,4-Dioxane	55		65		40-140	17		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	92		99		25-120
Phenol-d6	96		101		10-120
Nitrobenzene-d5	93		97		23-120
2-Fluorobiphenyl	91		91		30-120
2,4,6-Tribromophenol	102		97		10-136
4-Terphenyl-d14	94		95		18-120

PCBS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8082A
Analytical Date: 09/28/22 16:43
Analyst: ER
Percent Solids: 93%

Extraction Method: EPA 3540C
Extraction Date: 09/27/22 12:30
Cleanup Method: EPA 3665A
Cleanup Date: 09/28/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	90.2	8.01	1	A
Aroclor 1221	ND		ug/kg	90.2	9.04	1	A
Aroclor 1232	ND		ug/kg	90.2	19.1	1	A
Aroclor 1242	ND		ug/kg	90.2	12.2	1	A
Aroclor 1248	ND		ug/kg	90.2	13.5	1	A
Aroclor 1254	ND		ug/kg	90.2	9.87	1	A
Aroclor 1260	ND		ug/kg	90.2	16.7	1	A
Aroclor 1262	ND		ug/kg	90.2	11.4	1	A
Aroclor 1268	ND		ug/kg	90.2	9.34	1	A
PCBs, Total	ND		ug/kg	90.2	8.01	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	99		30-150	B

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/28/22 02:06
Analyst: ER

Extraction Method: EPA 3540C
Extraction Date: 09/26/22 20:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/27/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/27/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1692240-1						
Aroclor 1016	ND		ug/kg	95.8	8.50	A
Aroclor 1221	ND		ug/kg	95.8	9.60	A
Aroclor 1232	ND		ug/kg	95.8	20.3	A
Aroclor 1242	ND		ug/kg	95.8	12.9	A
Aroclor 1248	ND		ug/kg	95.8	14.4	A
Aroclor 1254	ND		ug/kg	95.8	10.5	A
Aroclor 1260	ND		ug/kg	95.8	17.7	A
Aroclor 1262	ND		ug/kg	95.8	12.2	A
Aroclor 1268	ND		ug/kg	95.8	9.92	A
PCBs, Total	ND		ug/kg	95.8	8.50	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	102		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1692240-2 WG1692240-3									
Aroclor 1016	80		78		40-140	3		50	A
Aroclor 1260	76		73		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		82		30-150	A
Decachlorobiphenyl	84		80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		83		30-150	B
Decachlorobiphenyl	103		100		30-150	B

PESTICIDES

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8081B
Analytical Date: 09/18/22 15:22
Analyst: MMG
Percent Solids: 93%
TCLP/SPLP Ext. Date: 09/14/22 08:30

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 02:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	136		30-150	A
Decachlorobiphenyl	110		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	132		30-150	B

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8151A
Analytical Date: 09/17/22 09:24
Analyst: AKM
Percent Solids: 93%
TCLP/SPLP Ext. Date: 09/14/22 08:30
Methylation Date: 09/16/22 06:38

Extraction Method: EPA 8151A
Extraction Date: 09/15/22 14:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	51		30-150	A
DCAA	41		30-150	B

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 09/16/22 01:01
Analyst: AR
TCLP/SPLP Extraction Date: 09/13/22 18:40
Methylation Date: 09/15/22 08:10

Extraction Method: EPA 8151A
Extraction Date: 09/14/22 16:51

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1687475-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	49		30-150	A
DCAA	39		30-150	B

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 09/18/22 14:10
Analyst: MMG
TCLP/SPLP Extraction Date: 09/13/22 18:40

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 02:12

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1688642-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	139		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	108		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1687475-2 WG1687475-3									
2,4-D	121		127		30-150	5		25	A
2,4,5-TP (Silvex)	73		76		30-150	4		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	71		70		30-150	A
DCAA	59		60		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1688642-2 WG1688642-3									
Lindane	104		106		30-150	2		20	A
Heptachlor	106		110		30-150	4		20	A
Heptachlor epoxide	108		111		30-150	3		20	A
Endrin	111		115		30-150	4		20	A
Methoxychlor	126		134		30-150	6		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		95		30-150	A
Decachlorobiphenyl	118		125		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		94		30-150	B
Decachlorobiphenyl	91		96		30-150	B

METALS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA
Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 93%
TCLP/SPLP Ext. Date: 09/14/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Barium, TCLP	0.077	J	mg/l	0.500	0.021	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Mercury, TCLP	0.0330		mg/l	0.0010	0.0005	1	09/15/22 16:13	09/15/22 21:31	EPA 7470A	1,7470A	ZK
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/15/22 16:35	09/16/22 02:09	EPA 3015	1,6010D	MC

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1687849-1										
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Barium, TCLP	ND		mg/l	0.500	0.021	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/15/22 16:35	09/15/22 20:28	1,6010D	MC

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 09/09/22 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1687851-1										
Mercury, TCLP	0.0005	J	mg/l	0.0010	0.0005	1	09/15/22 16:13	09/15/22 20:46	1,7470A	ZK

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 09/09/22 07:30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1687849-2								
Arsenic, TCLP	102		-		75-125	-		20
Barium, TCLP	94		-		75-125	-		20
Cadmium, TCLP	93		-		75-125	-		20
Chromium, TCLP	94		-		75-125	-		20
Lead, TCLP	90		-		75-125	-		20
Selenium, TCLP	98		-		75-125	-		20
Silver, TCLP	93		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1687851-2								
Mercury, TCLP	104		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1687849-3 QC Sample: L2248716-01 Client ID: MS Sample												
Arsenic, TCLP	ND	1.2	1.20	100		-	-		75-125	-		20
Barium, TCLP	0.074J	20	18.2	91		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.478	90		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.83	92		-	-		75-125	-		20
Lead, TCLP	ND	5.3	4.66	88		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.12	93		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.452	90		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1687851-3 QC Sample: L2248716-01 Client ID: MS Sample												
Mercury, TCLP	0.0005J	0.025	0.0237	95		-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1687849-4 QC Sample: L2248716-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.074J	0.079J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1687851-4 QC Sample: L2248716-01 Client ID: DUP Sample						
Mercury, TCLP	0.0005J	0.0005J	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/21/22 13:16	1,1030	MJ

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

SAMPLE RESULTS

Lab ID: L2249313-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.0		%	0.100	NA	1	-	09/13/22 13:41	121,2540G	RI
Cyanide, Total	1000		mg/kg	77	16.	75	09/14/22 04:05	09/15/22 11:54	1,9010C/9012B	CS
pH (H)	5.9		SU	-	NA	1	-	09/20/22 12:16	1,9045D	KS
Nitrogen, Ammonia	11000		mg/kg	280	110	50	09/22/22 22:40	09/23/22 17:25	121,4500NH3-BH	AT
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/22/22 11:00	09/22/22 13:22	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/22/22 11:00	09/22/22 12:51	125,7.3	MJ
Paint Filter Liquid	NEGATIVE		-	0	NA	1	-	09/19/22 18:05	1,9095B	AS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2249313
Report Date: 09/29/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1687574-1										
Cyanide, Total	ND		mg/kg	0.98	0.21	1	09/15/22 04:05	09/15/22 11:02	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1690651-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/22/22 11:00	09/22/22 12:45	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1690654-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/22/22 11:00	09/22/22 13:17	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1690917-1										
Nitrogen, Ammonia	4.7	J	mg/kg	7.5	0.02	1	09/22/22 22:40	09/23/22 17:22	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1687574-2 WG1687574-3								
Cyanide, Total	105		**71**	Q	80-120	26		35
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1689482-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1690651-2								
Sulfide, Reactive	114		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1690654-2								
Cyanide, Reactive	72		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1690917-2								
Nitrogen, Ammonia	110		-		83-115	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1687574-4 WG1687574-5 QC Sample: L2249283-01 Client ID: MS Sample												
Cyanide, Total	ND	16	15	97		12	**71**	Q	75-125	22		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1690917-4 QC Sample: L2249313-01 Client ID: SDPV8-09092022												
Nitrogen, Ammonia	11000	310	11000	**0**	Q	-	-		55-144	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1686818-1 QC Sample: L2245910-07 Client ID: DUP Sample						
Solids, Total	72.9	78.2	%	7		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689482-2 QC Sample: L2251045-03 Client ID: DUP Sample						
pH	8.1	8.2	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1690651-3 QC Sample: L2249109-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1690654-3 QC Sample: L2249109-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1690917-3 QC Sample: L2249313-01 Client ID: SDPV8-09092022						
Nitrogen, Ammonia	11000	11000	mg/kg	0		20

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2249313
Report Date: 09/29/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2249313-01A	Glass 60mL/2oz unpreserved	A	NA		2.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),IGNIT-1030(14),REACTS(14),NYTCL-8082-3540C(365),PH-9045(1),PAINTF(),REACTCN(14),NH3-4500(28)
L2249313-01B	Plastic 2oz unpreserved for TS	A	NA		2.5	Y	Absent		TS(7)
L2249313-01C	Vial Large Septa unpreserved (4oz)	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L2249313-01D	Vial Large Septa unpreserved (4oz)	A	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2249313-01E	Glass 250ml/8oz unpreserved	A	N/A	N/A	2.5	Y	Absent		SUB-BTU()
L2249313-01F	Glass 500ml/16oz unpreserved	A	NA		2.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),IGNIT-1030(14),REACTS(14),NYTCL-8082-3540C(365),PH-9045(1),PAINTF(),REACTCN(14),NH3-4500(28)
L2249313-01S	Vial unpreserved Extracts	A	NA		2.5	Y	Absent		TCLP-VOA(14)
L2249313-01T	Vial unpreserved Extracts	A	NA		2.5	Y	Absent		TCLP-VOA(14)
L2249313-01V	Plastic 120ml HNO3 preserved Extracts	A	NA		2.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2249313-01V9	Tumble Vessel	A	NA		2.5	Y	Absent		-
L2249313-01W	Amber 1000ml unpreserved Extracts	A	NA		2.5	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L2249313-01X	Vial MeOH preserved split	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L2249313-01Y	Vial Water preserved split	A	NA		2.5	Y	Absent	**17-SEP-22 03:32**	NYTCL-8260-R2(14)
L2249313-01Z	Vial Water preserved split	A	NA		2.5	Y	Absent	**16-SEP-22 06:17**	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RIVERVIEW	**Lab Number:**	L2249313
Project Number:	PV-8 TOWER	**Report Date:**	09/29/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/10/22

ALPHA Job #: L2249313

Project Information
Project Name: RIVERVIEW
Project Location: 3875 Riverview Road Tonawanda
Project #: PV-B tower
(Use Project name as Project #) ☐
Project Manager: JOHN BLACH
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: INVENTUM ENGINEERING
Address: 441 Carlisle drive
Herndon VA, 20170
Phone: 716 553-5729
Fax:
Email: Peter.Zaffanella@inventumeng.com

Deliverables
☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

FULL TCLP, 8260, 8270, 6010C, 8081, 8151
Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP 8260/8270 Full TCLP	RCRA 8 Metals 6010C Full TAL Metals	STARS Ignitability Corrosivity Reactivity	Ammonia 350.1 CN 9012B	TCLP Soils Mercury 7471	Paint Filter			Total Bottle
49313 -01	SD PVB-09092022	09/09/22	1000	SD	DB	X	X	X	X	X	X			

Sample Specific Comments

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative	NONE				1				

Relinquished By:	Date/Time	Received By:	Date/Time
	9/9/22 1505		9/9/22 1505
	9/9/22 1505	Wendy Manny	9/10/22 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date September 21, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Sample

Samples Analyzed

Enclosed are Report No(s): 78019

Reported on dry basis.

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

9/21/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Sample Analysis

Work Order 22-0964

Sample	Description	Source	Taken/Time	Received
78019	L2249313 SDPV8	Alpha Analytical Lab	9/9/22 10:00	9/14/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	6,362	500.00	ASTM D5865	09/20/22	sjr

(1) MA & CT do not certify this parameter

ANALYTICAL REPORT

Lab Number:	L2253872
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RIVERVIEW
Project Number:	PV-8 TOWER
Report Date:	09/30/22

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2253872-01	SDPV8-09092022	SOLID	3875 RIVER ROAD TONAWANDA	09/09/22 10:00	09/09/22

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Metals

L2253872-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Total Mercury

The WG1693842-3 MS recovery for mercury (0%), performed on L2253872-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 09/30/22

METALS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER
Lab Number: L2253872
Report Date: 09/30/22

SAMPLE RESULTS

Lab ID: L2253872-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA
Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	257		mg/kg	83.5	22.6	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Antimony, Total	6.68	J	mg/kg	41.8	3.17	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Arsenic, Total	9.94		mg/kg	8.35	1.74	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Barium, Total	20.8		mg/kg	8.35	1.45	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Beryllium, Total	ND		mg/kg	4.18	0.276	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Cadmium, Total	4.51	J	mg/kg	8.35	0.819	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Calcium, Total	13400		mg/kg	83.5	29.2	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Chromium, Total	65.8		mg/kg	8.35	0.802	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Cobalt, Total	ND		mg/kg	16.7	1.39	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Copper, Total	10.0		mg/kg	8.35	2.16	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Iron, Total	206000		mg/kg	41.8	7.54	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Lead, Total	22.6	J	mg/kg	41.8	2.24	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Magnesium, Total	4720		mg/kg	83.5	12.9	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Manganese, Total	774		mg/kg	8.35	1.33	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Mercury, Total	230		mg/kg	6.86	4.47	100	09/30/22 08:40	09/30/22 12:26	EPA 7471B	1,7471B	ZK
Nickel, Total	6.35	J	mg/kg	20.9	2.02	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Potassium, Total	ND		mg/kg	2090	120.	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Selenium, Total	ND		mg/kg	16.7	2.16	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Silver, Total	ND		mg/kg	8.35	2.36	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Sodium, Total	15300		mg/kg	1670	26.3	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Thallium, Total	ND		mg/kg	16.7	2.63	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Vanadium, Total	4.43	J	mg/kg	8.35	1.70	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB
Zinc, Total	60.1		mg/kg	41.8	2.45	20	09/30/22 08:20	09/30/22 13:17	EPA 3050B	1,6010D	NB

Project Name: RIVERVIEW **Lab Number:** L2253872

Project Number: PV-8 TOWER **Report Date:** 09/30/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1693838-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Antimony, Total	ND		mg/kg	2.00	0.152	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Barium, Total	ND		mg/kg	0.400	0.070	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Copper, Total	ND		mg/kg	0.400	0.103	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Iron, Total	ND		mg/kg	2.00	0.361	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Lead, Total	ND		mg/kg	2.00	0.107	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Manganese, Total	ND		mg/kg	0.400	0.064	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Potassium, Total	ND		mg/kg	100	5.76	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Silver, Total	ND		mg/kg	0.400	0.113	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Sodium, Total	3.98	J	mg/kg	80.0	1.26	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/30/22 08:20	09/30/22 11:22	1,6010D	NB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1693842-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	09/30/22 08:40	09/30/22 11:32	1,7471B	ZK

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW

Project Number: PV-8 TOWER

Lab Number: L2253872

Report Date: 09/30/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1693838-2 SRM Lot Number: D113-540								
Aluminum, Total	70		-		51-149	-		
Antimony, Total	162		-		20-250	-		
Arsenic, Total	103		-		70-130	-		
Barium, Total	94		-		75-125	-		
Beryllium, Total	98		-		75-125	-		
Cadmium, Total	96		-		75-125	-		
Calcium, Total	99		-		73-128	-		
Chromium, Total	98		-		70-130	-		
Cobalt, Total	100		-		75-125	-		
Copper, Total	96		-		75-125	-		
Iron, Total	95		-		36-164	-		
Lead, Total	97		-		72-128	-		
Magnesium, Total	89		-		63-138	-		
Manganese, Total	96		-		77-123	-		
Nickel, Total	97		-		70-130	-		
Potassium, Total	89		-		59-141	-		
Selenium, Total	102		-		66-134	-		
Silver, Total	100		-		70-131	-		
Sodium, Total	97		-		35-164	-		
Thallium, Total	96		-		70-130	-		
Vanadium, Total	98		-		74-126	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1693838-2 SRM Lot Number: D113-540					
Zinc, Total	96	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1693842-2 SRM Lot Number: D113-540					
Mercury, Total	98	-	60-140	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1693838-3 WG1693838-4 QC Sample: L2252964-01 Client ID: MS Sample												
Aluminum, Total	6340	199	6870	**266**	Q	7640	**664**	Q	75-125	11		20
Antimony, Total	ND	49.8	38.6	78		34.9	**71**	Q	75-125	10		20
Arsenic, Total	0.763J	11.9	11.6	97		11.2	95		75-125	4		20
Barium, Total	60.2	199	233	87		234	89		75-125	0		20
Beryllium, Total	0.188J	4.98	4.62	93		4.43	90		75-125	4		20
Cadmium, Total	0.268J	5.28	4.86	92		4.64	89		75-125	5		20
Calcium, Total	15000	996	18600	**362**	Q	17900	**296**	Q	75-125	4		20
Chromium, Total	18.8	19.9	36.5	89		36.6	91		75-125	0		20
Cobalt, Total	6.83	49.8	46.5	80		45.6	79		75-125	2		20
Copper, Total	16.7	24.9	38.8	89		39.4	93		75-125	2		20
Iron, Total	14000	99.6	14600	**603**	Q	15600	**1630**	Q	75-125	7		20
Lead, Total	4.08J	52.8	45.8	87		43.5	84		75-125	5		20
Magnesium, Total	8650	996	10800	**216**	Q	10600	**199**	Q	75-125	2		20
Manganese, Total	211	49.8	266	110		312	**206**	Q	75-125	16		20
Nickel, Total	14.0	49.8	52.0	76		52.8	79		75-125	2		20
Potassium, Total	2250	996	3280	103		3430	120		75-125	4		20
Selenium, Total	ND	11.9	9.95	83		9.25	79		75-125	7		20
Silver, Total	ND	29.9	26.8	90		25.6	87		75-125	5		20
Sodium, Total	195J	996	1120	112		1100	112		75-125	2		20
Thallium, Total	ND	11.9	9.25	77		8.94	76		75-125	3		20
Vanadium, Total	26.0	49.8	69.8	88		68.1	86		75-125	2		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1693838-3 WG1693838-4 QC Sample: L2252964-01 Client ID: MS Sample										
Zinc, Total	36.0	49.8	77.0	82		76.9	84	75-125	0	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1693842-3 QC Sample: L2253872-01 Client ID: SDPV8-09092022										
Mercury, Total	230	1.35	193	**0**	Q	-	-	80-120	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1693842-4 QC Sample: L2253872-01 Client ID: SDPV8-09092022						
Mercury, Total	230	230	mg/kg	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

SAMPLE RESULTS

Lab ID: L2253872-01
Client ID: SDPV8-09092022
Sample Location: 3875 RIVER ROAD TONAWANDA

Date Collected: 09/09/22 10:00
Date Received: 09/09/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.0		%	0.100	NA	1	-	09/13/22 13:41	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1686818-1 QC Sample: L2245910-07 Client ID: DUP Sample						
Solids, Total	72.9	78.2	%	7		20

Project Name: RIVERVIEW
Project Number: PV-8 TOWER

Lab Number: L2253872
Report Date: 09/30/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2253872-01A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),NI-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),HG-T(28),MN-TI(180),CD-TI(180),NA-TI(180),K-TI(180),CA-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	RIVERVIEW	**Lab Number:**	L2253872
Project Number:	PV-8 TOWER	**Report Date:**	09/30/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L2253872

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/10/22

ALPHA Job #: ~~L2249313~~ ED 9/29/22

Client Information

Client: INVENTUM ENGINEERING
Address: 441 Carlisle drive
Herndon VA, 20170
Phone: 716 553-5729
Fax:
Email: Peter.Zaffanella@inventumeng.com

Project Information

Project Name: RIVERVIEW
Project Location: 3875 River Road Tonawanda
Project # PV-8 tower
(Use Project name as Project #) ☐
Project Manager: JOHN BLACH
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

FULL TCLP, 8260, 8270, 6010C, 8081, 8151

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP 8260/8270 Full List	TCLP RCRA 8 Metals 6010C	TAL Metals 6010C Aluminum Reactivity Corrosivity Ignitability	Aluminum 6010C	CN 9012B	Total Solids Melting Point	Paint Filter	Sample Specific Comments
49313 -01	SD PV8-09092022	09/09/22	1000	SD	DB	X	X	X	X	X	X	X	
53872													

Total Bottle

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative NONE

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9/9/22 1505	[signature]	9/9/22 1505
[signature]	9/9/22 1505	Wendy Harvey	9/10/22 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

PV-8 Material Classification Memorandum

INVENTUM ENGINEERING, PC

October 14, 2022

To: Benjamin McPherson

From: John Black, Roxanne Birx

CC: Daniel Flanigan, Kirsten Colligan, Peter Zaffram

RE: Process Vessel PV-8 Packing Material Classification
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York
NYSDEC Site No. C915353

The Process Vessel PV-8, the former Actifier[1], located in the By-Products area at the Riverview Innovation & Technology Campus, Inc. (RITC) Brownfield Cleanup Program Site (BCP Site) in the Town of Tonawanda, New York, NYSDEC Site No. C915353 was demolished on October 10, 2022, in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Process Equipment IRM Work Plan Revision 2, dated July 11, 2022. Upon shearing open the top of the vessel, it was observed that sections contained plastic cage ball packing media that had been supported by a series of perforated stainless steel plates. RITC has classified the material and is proposing to dispose of the packing media as solid waste.

The abandoned Process Vessel PV-8 was formerly part of the process of liquid purification of coke oven gas. PV-8 was a vertical steel cylinder with a total capacity of 50,000 gallons (Photograph No. 1). When performing characterization sampling, it was estimated that the vessel contained dry, black, granular residuals at least 4 feet thick, or 12 cubic yards, at the base of the vessel. The granular residuals were sampled for DER 10 parameters, excluding PFAS, and did not display any characteristics of hazardous waste (Table 1). The granular residuals also did not react with the atmosphere. Based on site history, it was stated in the workplan that PV-8 may contain caustic material. Of note, the pH of the material was 5.9 SU (Table 1), slightly acidic but not characteristically corrosive.

The PV-8 packing material is shown in Photograph No. 2 and in greater detail in Photograph No. 3. The packing media has been found in, and removed from, multiple chambers of the vessel. The upper chambers contained packing media that was visually unimpacted by vessel residuals. The middle to lower chambers contained residuals mixed with the packing material. All unimpacted cage balls were segregated and will be disposed as solid waste. Cage balls that were mixed with residuals and that could not be separated by reasonable effort were staged with the residuals for disposal (Photograph No. 4) as solid waste.

[1] Actifiers were typically used to remove hydrogen sulfide from wash oil.

RITC would like to transport the materials offsite by October 21st and is seeking confirmation of the characterization and providing this memorandum as the required 5 day notice.



Photograph No. 1: Process Vessel PV-8, the former Actifier. View is to the north as it is prepared for demolition.



Photograph No. 2: PV-8 contained plastic ball packing media.



Photograph No. 3: Detailed view of PV-8 packing media. The cage balls were visually unimpacted by residuals.



Photograph No. 4: Packing media in PV-8. Note the yellow line designates where granular residuals were observed, and segregation of the two solid waste streams occurred. Any packing material visibly mixed with granular residuals were removed and staged with the granular residuals.

Table 1

PV-8 Analytical Results

Analytes	Standards (a)	Units	SD-PV8-09092022	
Contents			Black dry solid	
Volume			12 CY	
Odor			Medium Strong	
Waste Code			None	
SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<180	U
1,1,2,2-Tetrachloroethane		ug/kg	<180	U
1,1,2-Trichloroethane		ug/kg	<290	U
1,1-Dichloroethane		ug/kg	<160	U
1,1-Dichloroethene		ug/kg	<260	U
1,2,3-Trichlorobenzene		ug/kg	<350	U
1,2,4-Trichlorobenzene		ug/kg	<300	U
1,2-Dibromo-3-Chloropropane		ug/kg	<1100	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<300	U
1,2-Dichlorobenzene		ug/kg	<160	U
1,2-Dichloroethane		ug/kg	<280	U
1,2-Dichloropropane		ug/kg	<140	U
1,3-Dichlorobenzene		ug/kg	<160	U
1,4-Dichlorobenzene		ug/kg	<190	U
1,4-Dioxane (P-Dioxane)		ug/kg	<38000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<2400	U
2-Hexanone		ug/kg	<1300	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<1400	U
Acetone		ug/kg	<5200	U
Benzene		ug/kg	<180	U
Bromochloromethane		ug/kg	<220	U
Bromodichloromethane		ug/kg	<120	U
Bromoform		ug/kg	<270	U
Bromomethane		ug/kg	<630	U
Carbon Disulfide		ug/kg	<4900	U
Carbon Tetrachloride		ug/kg	<250	U
Chlorobenzene		ug/kg	<140	U
Chloroethane		ug/kg	<490	U
Chloroform		ug/kg	<150	U
Chloromethane		ug/kg	<1000	U
Cyclohexane		ug/kg	<590	U
Dibromochloromethane		ug/kg	<150	U
Dichlorodifluoromethane		ug/kg	<1000	U
Methylene Chloride (Dichloromethane)		ug/kg	<2500	U
Ethylbenzene		ug/kg	<150	U
Isopropylbenzene (Cumene)		ug/kg	<120	U
Methyl Acetate		ug/kg	<1000	U
Tert-Butyl Methyl Ether		ug/kg	<220	U
Methylcyclohexane		ug/kg	<660	U
Styrene		ug/kg	**320**	J
Tetrachloroethylene (PCE)		ug/kg	<210	U
Toluene		ug/kg	<590	U
Trichloroethylene (TCE)		ug/kg	<150	U
Trichlorofluoromethane		ug/kg	<760	U
Vinyl Chloride		ug/kg	<360	U
Cis-1,2-Dichloroethylene		ug/kg	<190	U
Cis-1,3-Dichloropropene		ug/kg	<170	U
m,p-Xylene		ug/kg	<610	U
O-Xylene (1,2-Dimethylbenzene)		ug/kg	<320	U
Trans-1,2-Dichloroethene		ug/kg	<150	U
Trans-1,3-Dichloropropene		ug/kg	<300	U

Analytes	Standards (a)	Units	SD-PV8-09092022	
SW8270D				
1,1-Biphenyl		ug/kg	NS	
1,2,4,5-Tetrachlorobenzene		ug/kg	<920	U
2,3,4,6-Tetrachlorophenol		ug/kg	NS	
2,4,5-Trichlorophenol		ug/kg	<1700	U
2,4,6-Trichlorophenol		ug/kg	<1700	U
2,4-Dichlorophenol		ug/kg	<1400	U
2,4-Dimethylphenol		ug/kg	<2900	U
2,4-Dinitrophenol		ug/kg	<4100	U
2,4-Dinitrotoluene		ug/kg	<1800	U
2,6-Dinitrotoluene		ug/kg	<1500	U
2-Chloronaphthalene		ug/kg	<880	U
2-Chlorophenol		ug/kg	<1000	U
2-Methylnaphthalene		ug/kg	**260000**	
2-Methylphenol (O-Cresol)		ug/kg	<1400	U
2-Nitroaniline		ug/kg	<1700	U
2-Nitrophenol		ug/kg	<3300	U
3,3'-Dichlorobenzidine		ug/kg	<2400	U
Cresols, M & P (3&4-Methylphenol)		ug/kg	**1700**	J
3-Nitroaniline		ug/kg	<1700	U
4,6-Dinitro-2-Methylphenol		ug/kg	<4200	U
4-Bromophenyl Phenyl Ether		ug/kg	<1300	U
4-Chloro-3-Methylphenol		ug/kg	<1300	U
4-Chloroaniline		ug/kg	<1600	U
4-Chlorophenyl Phenyl Ether		ug/kg	<950	U
4-Nitroaniline		ug/kg	<3700	U
4-Nitrophenol		ug/kg	<3600	U
Acenaphthene		ug/kg	**13000**	
Acenaphthylene		ug/kg	**92000**	
Acetophenone		ug/kg	**4800**	J
Anthracene		ug/kg	**88000**	
Atrazine		ug/kg	NS	
Benzo(A)Anthracene		ug/kg	**220000**	
Benzaldehyde		ug/kg	NS	
Benzo(A)Pyrene		ug/kg	**99000**	
Benzo(B)Fluoranthene		ug/kg	**240000**	
Benzo(G,H,I)Perylene		ug/kg	**70000**	
Benzo(K)Fluoranthene		ug/kg	**73000**	
Biphenyl (Diphenyl)		ug/kg	**44000**	
Bis(2-Chloroisopropyl) Ether		ug/kg	<1500	U
Bis(2-Chloroethoxy) Methane		ug/kg	<890	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<1200	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	**10000**	
Benzyl Butyl Phthalate		ug/kg	<2200	U
Caprolactam		ug/kg	NS	
Carbazole		ug/kg	**63000**	
Chrysene		ug/kg	**270000**	
Di-N-Butyl Phthalate		ug/kg	<1700	U
Di-N-Octylphthalate		ug/kg	<3000	U
Dibenz(A,H)Anthracene		ug/kg	**27000**	
Dibenzofuran		ug/kg	**170000**	
Diethyl Phthalate		ug/kg	<820	U
Dimethyl Phthalate		ug/kg	<1800	U
Fluoranthene		ug/kg	**300000**	
Fluorene		ug/kg	**120000**	
Hexachlorobenzene		ug/kg	<990	U
Hexachlorobutadiene		ug/kg	<1300	U
Hexachlorocyclopentadiene		ug/kg	<8000	U
Hexachloroethane		ug/kg	<1400	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	**88000**	
Isophorone		ug/kg	<1100	U
N-Nitrosodi-N-Propylamine		ug/kg	<1400	U
N-Nitrosodiphenylamine		ug/kg	<1000	U
Naphthalene		ug/kg	**370000**	
Nitrobenzene		ug/kg	<1300	U
Pentachlorophenol		ug/kg	<1900	U
Phenanthrene		ug/kg	**320000**	
Phenol		ug/kg	<1300	U
Pyrene		ug/kg	**300000**	

Analytes	Standards (a)	Units	SD-PV8-09092022	
SW6010				
Aluminum		mg/kg	**257**	
Antimony		mg/kg	**6.68**	J
Arsenic		mg/kg	**9.94**	
Barium		mg/kg	**20.8**	
Beryllium		mg/kg	<0.276	U
Cadmium		mg/kg	**4.51**	J
Calcium		mg/kg	**13400**	
Chromium, Total		mg/kg	**65.8**	
Cobalt		mg/kg	<1.39	U
Copper		mg/kg	**10.0**	
Iron		mg/kg	**206000**	
Lead		mg/kg	**22.6**	J
Magnesium		mg/kg	**4720**	
Manganese		mg/kg	**774**	
Nickel		mg/kg	**6.35**	J
Potassium		mg/kg	<120.0	U
Selenium		mg/kg	<2.16	U
Silver		mg/kg	<2.36	U
Sodium		mg/kg	**15300**	
Thallium		mg/kg	<2.63	U
Vanadium		mg/kg	**4.43**	J
Zinc		mg/kg	**60.1**	
SW7471				
Mercury		mg/kg	**230**	
8082A				
PCB-1016 (Aroclor 1016)		ug/kg	<8.01	U
PCB-1221 (Aroclor 1221)		ug/kg	<9.04	U
PCB-1232 (Aroclor 1232)		ug/kg	<19.1	U
PCB-1242 (Aroclor 1242)		ug/kg	<12.2	U
PCB-1248 (Aroclor 1248)		ug/kg	<13.5	U
PCB-1254 (Aroclor 1254)		ug/kg	<9.87	U
PCB-1260 (Aroclor 1260)		ug/kg	<16.7	U
E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	**11000**	
SW9012B				
Cyanide		mg/kg	**1000**	
SOLIDS				
Total Solids		%	**93.0**	
SW9045D				
pH		ph units	**5.9**	
TCLP - SW8260C				
1,2-Dichloroethane	500	ug/l	<1.3	U
Chlorobenzene	100000	ug/l	<1.8	U
Tetrachloroethylene (PCE)	700	ug/l	<1.8	U
Carbon Tetrachloride	500	ug/l	<1.3	U
Chloroform	6000	ug/l	<2.2	U
Benzene	500	ug/l	<1.6	U
Vinyl Chloride	200	ug/l	<0.71	U
1,1-Dichloroethene	700	ug/l	<1.7	U
Methyl Ethyl Ketone (2-Butanone)	200000	ug/l	<19.0	U
Trichloroethylene (TCE)	500	ug/l	<1.8	U
TCLP - SW8270D				
1,4-Dichlorobenzene	7500	ug/l	NS	
2,4,5-Trichlorophenol	400000	ug/l	<1.9	U
2,4,6-Trichlorophenol	2000	ug/l	<2.5	U
2,4-Dinitrotoluene	130	ug/l	<1.9	U
Cresols, (as m,p,o-Cresol)	20000	ug/l	**5.4**	J
Hexachlorobenzene	130	ug/l	<3.4	U
Hexachlorobutadiene	500	ug/l	<3.0	U
Hexachloroethane	3000	ug/l	<2.2	U
Nitrobenzene	2000	ug/l	<3.3	U
Pentachlorophenol	100000	ug/l	<9.8	U
Pyridine	5000	ug/l	<4.5	U

Analytes	Standards (a)	Units	SD-PV8-09092022	
TCLP- SW7470				
Mercury	0.2	mg/L	**0.0330**	
TCLP - SW6010				
Arsenic	5	mg/L	<0.019	U
Barium	100	mg/L	**0.077**	J
Cadmium	1	mg/L	<0.010	U
Chromium, Total	5	mg/L	<0.021	U
Lead	5	mg/L	<0.027	U
Selenium	1	mg/L	<0.035	U
Silver	5	mg/L	<0.028	U
TCLP - 8081B				
Chlordane	0.03	mg/L	<0.232	U
Endrin	0.02	mg/L	<0.021	U
Gamma Bhc (Lindane)	0.4	mg/L	<0.022	U
Heptachlor	0.008	mg/L	<0.016	U
Heptachlor Epoxide	0.008	mg/L	<0.021	U
Methoxychlor	10	mg/L	<0.034	U
Toxaphene	0.5	mg/L	<0.314	U
TCLP- SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<1	U
Silvex (2,4,5-TP)	1	mg/L	<1	U
Ignitability EPA 1030				
Ignitability		mm/sec	No Burn	
SW7.3.3.2				
Reactive Cyanide		mg/kg	<10.0	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	<10.0	U
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**6362**	
Notes:				
NS = Not Sampled				
NC = Not Calculable				
NA = Sample collected, but not analyzed				
"<" = Analyzed for but detected at or above the quantitation limit				
J = Analyte detected below quantitation limit				
C = Continuing Calibration Verification (CCV) below acceptable limits				
S: Lab Control Sample (LCS) Spike recovery is below acceptable limits				
Bold = Analyte was detected				

PV-8 Waste Manifests

MODERN Landfill NON-HAZARDOUS WA[illegible] ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0018629

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0018629
c: Generator's Name and Location: Riverview Innovation and Technology Campus 3875 River Road Tonawanda, New York 14150 d: Generators Phone: 716-560-3006	e: Generator's Mailing Address: Riverview Innovation and Technology Campus 140 Lee Street, Suite 200 Buffalo, New York 14210 f: Phone: 716-560-3006
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M23-3539	1/27/24	Plastic Media / Coal / Coke Breeze R030.1307 PV8	1	cm	15 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	[signature] on behalf of RITC	04/11/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
Modern
1445 Pletcher Rd, Model City NY
b: Phone:

c. Transporter Authorized Agent Name (Print)	d. Signature	e. Date
[illegible]	Daniel A HATHAWAY	4/11/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	4/11/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003304941
Date: 4/11/2023
Time: 12:08:04 - 12:48:36
Scale

Gross: 67540 POU In Scale 1-INBOU
Tare: 40420 POU Out Scale 2-OUTB
Net: 27120 POU

Truck: 2815-30
Customer: 0250310002/MODERN DISPOSAL ROI
Carrier: MDS-001/MODERN DISPOSAL
Driver: DANHATHAWA/DANHATHAWA

Truck Type: RO30
Route: M0116/MODERN ROLL OFF 16
Profile: M23-3539/RIVERVIEW INNOVATIOI

WO: 0003857080
Manifest: 18629

Generator: 01698-001/MODERN DISPOSAL INC
Service Site: 0005730122 OSC @ TONAWANDA COKE
PO: .
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	13.56	TON

Driver:

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0018631

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0018631
c: Generator's Name and Location: Riverview Innovation and Technology Campus 3875 River Road Tonawanda, New York 14150 d: Generators Phone: 716-560-3006	e: Generator's Mailing Address: Riverview Innovation and Technology Campus 140 Lee Street, Suite 200 Buffalo, New York 14210 f: Phone: 716-560-3006
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M23-3539	1/27/24	Plastic Media / Coal / Coke Breeze	1	CM	12 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Ryan O'Rourke on behalf of RITC	Ryan O'Rourke on behalf of RITC	3/23/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address: Modern

b: Phone:

c. Transporter Authorized Agent Name (Print)	d. Signature	e. Date
Pam Bauer		3/23/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	3/23/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

RETURN TO GENERATOR

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003299120
Date: 3/23/2023
Time: 09:41:40 - 10:06:16

******** Reprinted Ticket ********

Scale
Gross: 78520 POU In Scale 1-INBOU
Tare: 39420 POU Out Manual Wt M
Net: 39100 POU

Truck: 2512-30
Customer: 0250310002/MODERN DISPOSAL ROI
Carrier: MDS-001/MODERN DISPOSAL
Driver: PAULBAUTH/PAULBAUTH
Truck Type: RO
Route: M0113/MODERN ROLL OFF 13
Profile: M23-3539/RIVERVIEW INNOVATION
WO: 0003845696
Manifest: 018631
Generator: 01698-001/MODERN DISPOSAL INC
PO: .
Service Site: 0005730122 OSC @ TONAWANDA COKE
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	19.55	TON

Driver: _____

Weighmaster: Michelle Petrea

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003299120
Date: 3/23/2023
Time: 09:41:40 - 10:06:16

******** Reprinted Ticket ********

Scale
Gross: 78520 POUIn Scale 1-INBOU
Tare: 39420 POUOut Manual Wt M
Net: 39100 POU

Truck: 2512-30
Customer: 0250310002/MODERN DISPOSAL ROI
Carrier: MDS-001/MODERN DISPOSAL
Driver: PAULBAUTH/PAULBAUTH
Truck Type: RO
Route: M0113/MODERN ROLL OFF 13
Profile: M23-3539/RIVERVIEW INNOVATI
WO: 0003845696
Manifest: 018631
Generator: 01698-001/MODERN DISPOSAL INC
PO: .
Service Site: 0005730122 OSC @ TONAWANDA COKE
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	19.55	TON

Driver: _____

Weighmaster: Michelle Petrea

Appendix E6: PV-9, Abandoned Scrubber

PV-9 Photographic Log

Client Name: RITC	**Date Photo was Taken:** 9/23/2022	**Project:** RITC
Photo No. 1 **Direction Photo Taken:** View is south. **Description:** Process vessel PV-9 is pictured on the left (east).		
Client Name: RITC	**Date Photo was Taken:** 9/23/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is north. **Description:** PV-9 is tipped.		

Client Name: RITC	Date Photo was Taken: 9/23/2022	Project: RITC
Photo No. 3 **Direction Photo Taken:** View is north. **Description:** PV-9 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 9/23/2022	**Project:** RITC
Photo No. 4 **Direction Photo Taken:** View is north. **Description:** PV-9 is tipped.		

Client Name: RITC	**Date Photo was Taken:** 9/23/2022	**Project:** RITC
Photo No. 5		
Direction Photo Taken: View is south.		
Description: PV-9 is tipped.		
Client Name: RITC	**Date Photo was Taken:** 8/30/2022	**Project:** RITC
Photo No. 6		
Direction Photo Taken: View is PV-9 interior (south).		
Description: PV-9 was empty, containing only organic debris and site detritus.		

Client Name: RITC	Date Photo was Taken: 10/3/2022	Project: RITC
Photo No. 7 **Direction Photo Taken:** View is south. **Description:** PV-9 is sheared for recycling.		

Client Name: RITC	Date Photo was Taken: 10/3/2022	Project: RITC
Photo No. 8 **Direction Photo Taken:** View is south. **Description:** PV-9 is sheared for recycling.		

Appendix E7: PV-10, Light Oil Scrubber

PV-10 Photographic Log

Client Name: RITC	**Date Photo was Taken:** 10/24/2019	**Project:** RITC
Photo No. 1 **Direction Photo Taken:** View south. **Description:** Process vessel PV-10 was located at the western end of the former Production Area.		
Client Name: RITC	**Date Photo was Taken:** 5/4/2022	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is PV-10 interior, north. **Description:** Solid residuals are present in the base of the vessel, observable through a previously opened flange.		

Client Name: RITC	**Date Photo was Taken:** 10/13/2022	**Project:** RITC
Photo No. 3		
Direction Photo Taken: View is southeast.		
Description: PV-10 is purged with nitrogen and prepared to be tipped.		
Client Name: RITC	**Date Photo was Taken:** 10/18/2022	**Project:** RITC
Photo No. 4		
Direction Photo Taken: View is northeast.		
Description: PV-10 is purged with nitrogen and prepared to be tipped.		

Client Name: RITC	Date Photo was Taken: 10/19/2022	Project: RITC
Photo No. 5		
Direction Photo Taken: View is north.		
Description: PV-10 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/19/2022	Project: RITC
Photo No. 6		
Direction Photo Taken: View is north.		
Description: PV-10 is tipped.		

Client Name: RITC	**Date Photo was Taken:** 10/19/2022	**Project:** RITC
Photo No. 7 **Direction Photo Taken:** View is east. **Description:** A coke oven gas (COG) line spans the length of PV-10.		
Client Name: RITC	**Date Photo was Taken:** 10/19/2022	**Project:** RITC
Photo No. 8 **Direction Photo Taken:** View is north. **Description:** COG lines at the base of PV-10.		

Client Name: RITC	Date Photo was Taken: 10/19/2022	Project: RITC
Photo No. 9 **Direction Photo Taken:** View is north. **Description:** The COG pipe contained residuals (documented and managed under separate cover).		

Client Name: RITC	Date Photo was Taken: 10/19/2022	Project: RITC
Photo No. 10 **Direction Photo Taken:** View is north. **Description:** PV-10 is tipped.		

Client Name: RITC	Date Photo was Taken: 10/20/2022	Project: RITC
Photo No. 11 **Direction Photo Taken:** View is northwest. **Description:** PV-10 contained residuals and wooden packing media.		
Client Name: RITC	**Date Photo was Taken:** 10/20/2022	**Project:** RITC
Photo No. 12 **Direction Photo Taken:** View is northwest. **Description:** PV-10 contained residuals and wooden packing media.		

Client Name: RITC	**Date Photo was Taken:** 10/20/2022	**Project:** RITC
Photo No. 13 **Direction Photo Taken:** View is east. **Description:** PV-10 contained residuals and wooden packing media.		
Client Name: RITC	**Date Photo was Taken:** 10/21/2022	**Project:** RITC
Photo No. 14 **Direction Photo Taken:** View is north. **Description:** PV-10 is sheared.		

Client Name: RITC	Date Photo was Taken: 10/21/2022	Project: RITC
Photo No. 15 **Direction Photo Taken:** View is east. **Description:** The contents of PV-10 are staged for disposal before being covered by polyethylene sheeting.		

Client Name: RITC	Date Photo was Taken: 10/24/2022	Project: RITC
Photo No. 16 **Direction Photo Taken:** View is north. **Description:** PV-10 is sheared for recycling.		

PV10 Wood Packing Analytical Results – Table 3

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes			SAMPLE ID:	West LBA-05042022		PV10-WOOD-10252022	
			COLLECTION DATE:	5/4/2022		10/25/2022	
			LAB REPORT:	222043		225099	
			WASTE CODE(S):	K143, D018, D009		K143	
			DESCRIPTION:	PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS					
VOCs SW8260C							
1,1,1-Trichloroethane (TCA)		ug/kg	<10900	U	<93500	U
1,1,2,2-Tetrachloroethane		ug/kg	<10900	U	<93500	U
1,1,2-Trichloroethane		ug/kg	<10900	U	<93500	U
1,1-Dichloroethane		ug/kg	<10900	U	<93500	U
1,1-Dichloroethene		ug/kg	<10900	U	<93500	U
1,2,3-Trichlorobenzene		ug/kg	<27100	U	<234000	U
1,2,4-Trichlorobenzene		ug/kg	<27100	U	<234000	U
1,2-Dibromo-3-Chloropropane		ug/kg	<54300	U	<467000	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<10900	U	<93500	U
1,2-Dichlorobenzene		ug/kg	<10900	U	<93500	U
1,2-Dichloroethane		ug/kg	<10900	U	<93500	U
1,2-Dichloropropane		ug/kg	<10900	U	<93500	U
1,3-Dichlorobenzene		ug/kg	<10900	U	<93500	U
1,4-Dichlorobenzene		ug/kg	<10900	U	<93500	U
1,4-Dioxane (P-Dioxane)		ug/kg	<54300	U	<467000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<54300	U	<467000	U
2-Hexanone		ug/kg	<27100	U	<234000	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<27100	U	<234000	U
Acetone		ug/kg	<54300	U	<467000	U
Benzene		ug/kg	**307000**		<93500	U
Bromochloromethane		ug/kg	<27100	U	<234000	U
Bromodichloromethane		ug/kg	<10900	U	<93500	U
Bromoform		ug/kg	<27100	U	<234000	U
Bromomethane		ug/kg	<10900	U	<93500	U
Carbon Disulfide		ug/kg	<10900	U	<93500	U
Carbon Tetrachloride		ug/kg	<10900	U	<93500	U
Chlorobenzene		ug/kg	<10900	U	<93500	U
Chloroethane		ug/kg	<10900	U	<93500	U
Chloroform		ug/kg	<10900	U	<93500	U
Chloromethane		ug/kg	<10900	U	<93500	U
Cyclohexane		ug/kg	<54300	U	<467000	U
Dibromochloromethane		ug/kg	<10900	U	<93500	U
Dichlorodifluoromethane		ug/kg	<10900	U	<93500	U
Methylene Chloride (Dichloromethane)		ug/kg	<27100	U	<234000	U
Ethylbenzene		ug/kg	**11200**		<93500	U
Isopropylbenzene (Cumene)		ug/kg	<10900	U	<935000	U
Methyl Acetate		ug/kg	<10900	U	<93500	U
Tert-Butyl Methyl Ether		ug/kg	<10900	U	<93500	U
Methylcyclohexane		ug/kg	<10900	U	<93500	U
Styrene		ug/kg	<27100	U	<234000	U
Tetrachloroethylene (PCE)		ug/kg	<10900	U	<93500	U
Toluene		ug/kg	**365000**		<93500	U
Trichloroethylene (TCE)		ug/kg	<10900	U	<93500	U
Trichlorofluoromethane		ug/kg	<10900	U	<93500	U

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		West LBA-05042022		PV10-WOOD-10252022	
	COLLECTION DATE:		5/4/2022		10/25/2022	
	LAB REPORT:		222043		225099	
	WASTE CODE(S):		K143, D018, D009		K143	
	DESCRIPTION:		PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS				
Vinyl Chloride		ug/kg	<10900	U	<93500	U
Cis-1,2-Dichloroethylene		ug/kg	<10900	U	<93500	U
Cis-1,3-Dichloropropene		ug/kg	<10900	U	<93500	U
m,p-Xylene		ug/kg	**302000**		**210000**	
O-Xylene (1,2-Dimethylbenzene)		ug/kg	**75200**		<93500	U
Trans-1,2-Dichloroethene		ug/kg	<10900	U	<93500	U
Trans-1,3-Dichloropropene		ug/kg	<10900	U	<93500	U
SVOCs SW8270D						
1,1-Biphenyl		ug/kg	<7910000	U	<2180000	U
1,2,4,5-Tetrachlorobenzene		ug/kg	<7910000	U	<2180000	U
2,3,4,6-Tetrachlorophenol		ug/kg	<7910000	U	<2180000	U
2,4,5-Trichlorophenol		ug/kg	<7910000	U	<2180000	U
2,4,6-Trichlorophenol		ug/kg	<7910000	U	<2180000	U
2,4-Dichlorophenol		ug/kg	<7910000	U	<2180000	U
2,4-Dimethylphenol		ug/kg	<7910000	U	<2180000	U
2,4-Dinitrophenol		ug/kg	<31700000	U	<8730000	U
2,4-Dinitrotoluene		ug/kg	<7910000	U	<2180000	U
2,6-Dinitrotoluene		ug/kg	<7910000	U	<2180000	U
2-Chloronaphthalene		ug/kg	<7910000	U	<2180000	U
2-Chlorophenol		ug/kg	<7910000	U	<2180000	U
2-Methylnaphthalene		ug/kg	<7910000	U	**3180000**	
2-Methylphenol (O-Cresol)		ug/kg	<7910000	U	<2180000	U
2-Nitroaniline		ug/kg	<7910000	U	<2180000	U
2-Nitrophenol		ug/kg	<7910000	U	<2180000	U
3,3'-Dichlorobenzidine		ug/kg	<7910000	U	<2180000	U
Cresols, M & P (3&4-Methylphenol)		ug/kg	<7910000	U	<2180000	U
3-Nitroaniline		ug/kg	<7910000	U	<2180000	U
4,6-Dinitro-2-Methylphenol		ug/kg	<10600000	U	<2920000	U
4-Bromophenyl Phenyl Ether		ug/kg	<7910000	U	<2180000	U
4-Chloro-3-Methylphenol		ug/kg	<7910000	U	<2180000	U
4-Chloroaniline		ug/kg	<7910000	U	<2180000	U
4-Chlorophenyl Phenyl Ether		ug/kg	<7910000	U	<2180000	U
4-Nitroaniline		ug/kg	<7910000	U	<2180000	U
4-Nitrophenol		ug/kg	<7910000	U	<2180000	U
Acenaphthene		ug/kg	<7910000	U	<2180000	U
Acenaphthylene		ug/kg	<7910000	U	<2180000	U
Acetophenone		ug/kg	<7910000	U	<2180000	U
Anthracene		ug/kg	<7910000	U	<2180000	U
Atrazine		ug/kg	<7910000	U	<2180000	U
Benzo(A)Anthracene		ug/kg	<7910000	U	<2180000	U
Benzaldehyde		ug/kg	<7910000	U	<2180000	U
Benzo(A)Pyrene		ug/kg	<7910000	U	<2180000	U
Benzo(B)Fluoranthene		ug/kg	<7910000	U	<2180000	U
Benzo(G,H,I)Perylene		ug/kg	<7910000	U	<2180000	U

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		West LBA-05042022		PV10-WOOD-10252022	
	COLLECTION DATE:		5/4/2022		10/25/2022	
	LAB REPORT:		222043		225099	
	WASTE CODE(S):		K143, D018, D009		K143	
	DESCRIPTION:		PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS				
Benzo(K)Fluoranthene		ug/kg	<7910000	U	<2180000	U
Biphenyl (Diphenyl)		ug/kg	<7910000	U	<2180000	U
Bis(2-Chloroisopropyl) Ether		ug/kg	<7910000	U	<2180000	U
Bis(2-Chloroethoxy) Methane		ug/kg	<7910000	U	<2180000	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<7910000	U	<2180000	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	<7910000	U	<2180000	U
Benzyl Butyl Phthalate		ug/kg	<7910000	U	<2180000	U
Caprolactam		ug/kg	<7910000	U	<2180000	U
Carbazole		ug/kg	<7910000	U	<2180000	U
Chrysene		ug/kg	<7910000	U	<2180000	U
Di-N-Butyl Phthalate		ug/kg	<7910000	U	<2180000	U
Di-N-Octylphthalate		ug/kg	<7910000	U	<2180000	U
Dibenz(A,H)Anthracene		ug/kg	<7910000	U	<2180000	U
Dibenzofuran		ug/kg	<7910000	U	<2180000	U
Diethyl Phthalate		ug/kg	<7910000	U	<2180000	U
Dimethyl Phthalate		ug/kg	<7910000	U	<2180000	U
Fluoranthene		ug/kg	<7910000	U	<2180000	U
Fluorene		ug/kg	<7910000	U	<2180000	U
Hexachlorobenzene		ug/kg	<7910000	U	<2180000	U
Hexachlorobutadiene		ug/kg	<7910000	U	<2180000	U
Hexachlorocyclopentadiene		ug/kg	<31700000	U	<8730000	U
Hexachloroethane		ug/kg	<7910000	U	<2180000	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	<7910000	U	<2180000	U
Isophorone		ug/kg	<7910000	U	<2180000	U
N-Nitrosodi-N-Propylamine		ug/kg	<7910000	U	<2180000	U
N-Nitrosodiphenylamine		ug/kg	<7910000	U	<2180000	U
Naphthalene		ug/kg	**48100000**		**35400000**	
Nitrobenzene		ug/kg	<7910000	U	<2180000	U
Pentachlorophenol		ug/kg	<15800000	U	<4360000	U
Phenanthrene		ug/kg	<7910000	U	<2180000	U
Phenol		ug/kg	<7910000	U	<2180000	U
Pyrene		ug/kg	<7910000	U	<2180000	U
Pyridine		ug/kg	NS		<2180000	U
TAL Metals SW6010						
Aluminum		mg/kg	**180**		NS	
Antimony		mg/kg	<4.08	U	NS	
Arsenic		mg/kg	**23.3**		**6.45**	
Barium		mg/kg	**8.19**		<4.76	U
Beryllium		mg/kg	<0.340	U	NS	
Cadmium		mg/kg	**3.33**		**0.530**	
Calcium		mg/kg	**2970**		NS	
Chromium, Total		mg/kg	**9.54**		**1.42**	
Cobalt		mg/kg	<3.40	U	<2.38	U
Copper		mg/kg	**3.05**		**2.78**	

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		West LBA-05042022		PV10-WOOD-10252022	
	COLLECTION DATE:		5/4/2022		10/25/2022	
	LAB REPORT:		222043		225099	
	WASTE CODE(S):		K143, D018, D009		K143	
	DESCRIPTION:		PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS				
Iron		mg/kg	**14000**		NS	
Lead		mg/kg	**150**		**14.3**	
Magnesium		mg/kg	<170	U	NS	
Manganese		mg/kg	**101**		**42.5**	
Nickel		mg/kg	<2.72	U	<1.90	U
Potassium		mg/kg	<170	U	NS	
Selenium		mg/kg	**5.34**		**3.03**	
Silver		mg/kg	<0.680	U	<0.476	U
Sodium		mg/kg	<170	U	NS	
Thallium		mg/kg	<1.70	U	NS	
Vanadium		mg/kg	**2.02**		NS	
Zinc		mg/kg	**490**		**108**	
Total Mercury SW7471						
Mercury		mg/kg	NS		**98.7**	
PCBs 8082A						
PCB-1016 (Aroclor 1016)		ug/kg	<1.07	U	NS	
PCB-1221 (Aroclor 1221)		ug/kg	<1.07	U	NS	
PCB-1232 (Aroclor 1232)		ug/kg	<1.07	U	NS	
PCB-1242 (Aroclor 1242)		ug/kg	<1.07	U	NS	
PCB-1248 (Aroclor 1248)		ug/kg	<1.07	U	NS	
PCB-1254 (Aroclor 1254)		ug/kg	<1.07	U	NS	
PCB-1260 (Aroclor 1260)		ug/kg	<1.07	U	NS	
Ammonia E350.1M						
Nitrogen, Ammonia (As N)		mg/kg	**7810**		NS	
Cyanide SW9012B						
Cyanide		mg/kg	**296**		NS	
SOLIDS						
Total Solids		%	**71.4**		**76.2**	
SW9045D						
pH		ph units	**7.38**		**6.47**	

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes			SAMPLE ID:		West LBA-05042022		PV10-WOOD-10252022	
			COLLECTION DATE:		5/4/2022		10/25/2022	
			LAB REPORT:		222043		225099	
			WASTE CODE(S):		K143, D018, D009		K143	
			DESCRIPTION:		PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS						
TCLP VOCs SW8260C								
1,2-Dichloroethane	500	ug/l	<400	U	<100	U		
Chlorobenzene	100,000	ug/l	<400	U	<100	U		
Tetrachloroethylene (PCE)	700	ug/l	<400	U	<100	U		
Carbon Tetrachloride	500	ug/l	<400	U	<100	U		
Chloroform	6,000	ug/l	<400	U	<100	U		
Benzene	500	ug/l	**6740**		**142**			
Vinyl Chloride	200	ug/l	<400	U	<100	U		
1,1-Dichloroethene	700	ug/l	<400	U	<100	U		
Methyl Ethyl Ketone (2-Butanone)	200,000	ug/l	<2000	U	<500	U		
Trichloroethylene (TCE)	500	ug/l	<400	U	<100	U		
TCLP SVOCs SW8270D								
1,4-Dichlorobenzene	7,500	ug/l	<50	U	<40.0	U		
2,4,5-Trichlorophenol	400,000	ug/l	<50	U	<40.0	U		
2,4,6-Trichlorophenol	2,000	ug/l	<50	U	<40.0	U		
2,4-Dinitrotoluene	130	ug/l	<50	U	<40.0	U		
Cresols, (as m,p,o-Cresol)	20,000	ug/l	**1500**		**679**			
Hexachlorobenzene	130	ug/l	<50	U	<40.0	U		
Hexachlorobutadiene	500	ug/l	<50	U	<40.0	U		
Hexachloroethane	3,000	ug/l	<50	U	<40.0	U		
Nitrobenzene	2,000	ug/l	<50	U	<40.0	U		
Pentachlorophenol	100,000	ug/l	<250	**C**	<80.0	U		
Pyridine	5,000	ug/l	**320**		**477**			
TCLP Mercury SW7470								
Mercury	0.2	mg/L	**0.226**		**0.00901**			
TCLP Metals SW6010								
Arsenic	5	mg/L	<0.500	U	<0.500	U		
Barium	100	mg/L	<0.500	U	<0.500	U		
Cadmium	1	mg/L	<0.0250	U	<0.0250	U		
Chromium, Total	5	mg/L	<0.500	U	<0.500	U		
Lead	5	mg/L	<0.500	U	<0.500	U		
Selenium	1	mg/L	<0.200	U	<0.200	U		
Silver	5	mg/L	<0.500	U	<0.500	U		
TCLP Pesticides 8081B								
Chlordane	0.03	mg/L	<0.010	U	NS			
Endrin	0.02	mg/L	<0.0020	U	NS			
Gamma Bhc (Lindane)	0.4	mg/L	<0.0020	U	NS			
Heptachlor	0.008	mg/L	<0.0020	U	NS			
Heptachlor Epoxide	0.008	mg/L	<0.0020	U	NS			
Methoxychlor	10	mg/L	<0.010	U	NS			
Toxaphene	0.5	mg/L	<0.020	U	NS			

Table 3
Process Equipment Construction Completion Report
PV-10 Contents
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		West LBA-05042022		PV10-WOOD-10252022	
	COLLECTION DATE:		5/4/2022		10/25/2022	
	LAB REPORT:		222043		225099	
	WASTE CODE(S):		K143, D018, D009		K143	
	DESCRIPTION:		PV10, Black solid		PV10, Black Wood Media	
	EPA TCLP	UNITS				
TCLP Herbicides SW8151A						
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<0.050	U	NS	
Silvex (2,4,5-TP)	1	mg/L	<0.050	U	NS	
Ignitability EPA 1030						
Ignitability		mm/sec	No Burn		No Burn	
SW7.3.3.2						
Reactive Cyanide		mg/kg	**1.2**		<0.9	U
SW7.3.4.2						
Sulfide Reactive		mg/kg	**28**		**180**	
Chloride (SW9056)						
Chloride		mg/kg	<1400	U	NS	
ASTM D5865-04 BTUS/High Heat Value						
BTU (As Received)		BTU/lb	**11400**		**9000**	
Notes:						
NS = Not Sampled						
NA = Sample collected, but not analyzed						
"<" = Analyzed for but detected at or above the quantitation limit						
J = Analyte detected below quantitation limit						
Red Highlight = Analyte concentration exceeds EPA TCLP Limits						
Bold = Analyte was detected						

PV10 Residual Fines Analytical Results – Table 4

Table 4
Process Equipment Construction Completion Report
PV-10 Contents - Fines
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	PV10-Hg-05162023	
		COLLECTION DATE:	5/16/2023	
		LAB REPORT:	232087	
		WASTE CODE(S):	K143, D018, D009	
		DESCRIPTION:	PV10, Black solid	
	EPA TCLP	UNITS		
Mercury (7471)				
Mercury		mg/kg	**290**	
Notes:				
NS = Not Sampled				
NA = Sample collected, but not analyzed				
"<" = Analyzed for but detected at or above the quantitation limit				
J = Analyte detected below quantitation limit				
Red Highlight = Analyte concentration exceeds EPA TCLP Limits				
Bold = Analyte was detected				

PV10 Laboratory Reports

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Inventum Engineering, P.C.

For Lab Project ID

222043

Referencing

Western LBA Scrubber

Prepared

Monday, May 16, 2022

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Portions of the enclosed report reflects analysis that has been subcontracted and are presented in their original form.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

Corrosivity as pH

Analyte	Result	Units	Qualifier	Date Analyzed
Corrosivity (as pH)	7.38 @ 20.1 C	S.U.		5/9/2022 11:58

Method Reference(s): EPA 9045D

Ignitability

Analyte	Result	Units	Qualifier	Date Analyzed
Ignitability	No Burn	mm / sec		5/10/2022

Method Reference(s): EPA 1030

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	**180**	mg/Kg		5/9/2022 19:59
Antimony	< 4.08	mg/Kg		5/9/2022 19:59
Arsenic	**23.3**	mg/Kg		5/9/2022 19:59
Barium	**8.19**	mg/Kg		5/9/2022 19:59
Beryllium	< 0.340	mg/Kg		5/9/2022 19:59
Cadmium	**3.33**	mg/Kg		5/9/2022 19:59
Calcium	**2970**	mg/Kg		5/9/2022 19:59
Chromium	**9.54**	mg/Kg		5/9/2022 19:59
Cobalt	< 3.40	mg/Kg		5/9/2022 19:59
Copper	**3.05**	mg/Kg		5/12/2022 10:18
Iron	**14000**	mg/Kg		5/9/2022 19:59
Lead	**150**	mg/Kg		5/9/2022 19:59
Magnesium	< 170	mg/Kg		5/9/2022 19:59
Manganese	**101**	mg/Kg		5/9/2022 19:59
Nickel	< 2.72	mg/Kg		5/9/2022 19:59
Potassium	< 170	mg/Kg		5/9/2022 19:59
Selenium	**5.34**	mg/Kg		5/9/2022 19:59
Silver	< 0.680	mg/Kg		5/9/2022 19:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

Sodium	< 170	mg/Kg		5/11/2022	09:00
Sulfur	**98000**	mg/Kg	A	5/11/2022	06:12
Thallium	< 1.70	mg/Kg		5/9/2022	19:59
Vanadium	**2.02**	mg/Kg		5/9/2022	19:59
Zinc	**490**	mg/Kg		5/9/2022	19:59

Due to elevated moisture content in the sample, results reported on a dry weight basis.

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/6/2022
Data File: 220509C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1221	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1232	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1242	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1248	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1254	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1260	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1262	< 1.07	mg/Kg		5/12/2022 12:29
PCB-1268	< 1.07	mg/Kg		5/12/2022 12:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**35.5**	12.7 - 101		5/12/2022 12:29

Reporting limit elevated due to sample matrix. Due to elevated moisture content in the sample, results reported on a dry weight basis.

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 5/6/2022

Percent Solids

Analyte	Result	Units	Qualifier	Date Analyzed
Percent Solids	**71.4**	%		5/6/2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 7910000	ug/Kg		5/13/2022 14:47
1,2,4,5-Tetrachlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
1,2,4-Trichlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
1,2-Dichlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
1,3-Dichlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
1,4-Dichlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
2,2-Oxybis (1-chloropropane)	< 7910000	ug/Kg		5/13/2022 14:47
2,3,4,6-Tetrachlorophenol	< 7910000	ug/Kg		5/13/2022 14:47
2,4,5-Trichlorophenol	< 7910000	ug/Kg		5/13/2022 14:47
2,4,6-Trichlorophenol	< 7910000	ug/Kg		5/13/2022 14:47
2,4-Dichlorophenol	< 7910000	ug/Kg		5/13/2022 14:47
2,4-Dimethylphenol	< 7910000	ug/Kg		5/13/2022 14:47
2,4-Dinitrophenol	< 31700000	ug/Kg		5/13/2022 14:47
2,4-Dinitrotoluene	< 7910000	ug/Kg		5/13/2022 14:47
2,6-Dinitrotoluene	< 7910000	ug/Kg		5/13/2022 14:47
2-Chloronaphthalene	< 7910000	ug/Kg		5/13/2022 14:47
2-Chlorophenol	< 7910000	ug/Kg		5/13/2022 14:47
2-Methylnapthalene	< 7910000	ug/Kg		5/13/2022 14:47
2-Methylphenol	< 7910000	ug/Kg		5/13/2022 14:47
2-Nitroaniline	< 7910000	ug/Kg		5/13/2022 14:47
2-Nitrophenol	< 7910000	ug/Kg		5/13/2022 14:47
3&4-Methylphenol	< 7910000	ug/Kg		5/13/2022 14:47
3,3'-Dichlorobenzidine	< 7910000	ug/Kg		5/13/2022 14:47
3-Nitroaniline	< 7910000	ug/Kg		5/13/2022 14:47
4,6-Dinitro-2-methylphenol	< 10600000	ug/Kg		5/13/2022 14:47
4-Bromophenyl phenyl ether	< 7910000	ug/Kg		5/13/2022 14:47

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

4-Chloro-3-methylphenol	< 7910000	ug/Kg	5/13/2022	14:47
4-Chloroaniline	< 7910000	ug/Kg	5/13/2022	14:47
4-Chlorophenyl phenyl ether	< 7910000	ug/Kg	5/13/2022	14:47
4-Nitroaniline	< 7910000	ug/Kg	5/13/2022	14:47
4-Nitrophenol	< 7910000	ug/Kg	5/13/2022	14:47
Acenaphthene	< 7910000	ug/Kg	5/13/2022	14:47
Acenaphthylene	< 7910000	ug/Kg	5/13/2022	14:47
Acetophenone	< 7910000	ug/Kg	5/13/2022	14:47
Anthracene	< 7910000	ug/Kg	5/13/2022	14:47
Atrazine	< 7910000	ug/Kg	5/13/2022	14:47
Benzaldehyde	< 7910000	ug/Kg	5/13/2022	14:47
Benzo (a) anthracene	< 7910000	ug/Kg	5/13/2022	14:47
Benzo (a) pyrene	< 7910000	ug/Kg	5/13/2022	14:47
Benzo (b) fluoranthene	< 7910000	ug/Kg	5/13/2022	14:47
Benzo (g,h,i) perylene	< 7910000	ug/Kg	5/13/2022	14:47
Benzo (k) fluoranthene	< 7910000	ug/Kg	5/13/2022	14:47
Bis (2-chloroethoxy) methane	< 7910000	ug/Kg	5/13/2022	14:47
Bis (2-chloroethyl) ether	< 7910000	ug/Kg	5/13/2022	14:47
Bis (2-ethylhexyl) phthalate	< 7910000	ug/Kg	5/13/2022	14:47
Butylbenzylphthalate	< 7910000	ug/Kg	5/13/2022	14:47
Caprolactam	< 7910000	ug/Kg	5/13/2022	14:47
Carbazole	< 7910000	ug/Kg	5/13/2022	14:47
Chrysene	< 7910000	ug/Kg	5/13/2022	14:47
Dibenz (a,h) anthracene	< 7910000	ug/Kg	5/13/2022	14:47
Dibenzofuran	< 7910000	ug/Kg	5/13/2022	14:47
Diethyl phthalate	< 7910000	ug/Kg	5/13/2022	14:47
Dimethyl phthalate	< 7910000	ug/Kg	5/13/2022	14:47
Di-n-butyl phthalate	< 7910000	ug/Kg	5/13/2022	14:47
Di-n-octylphthalate	< 7910000	ug/Kg	5/13/2022	14:47
Fluoranthene	< 7910000	ug/Kg	5/13/2022	14:47

Sample Identifier: West LBA - 05042022
Lab Sample ID: 222043-01 **Date Sampled:** 5/4/2022 11:20
Matrix: Solid **Date Received** 5/5/2022

Fluorene	< 7910000	ug/Kg		5/13/2022 14:47
Hexachlorobenzene	< 7910000	ug/Kg		5/13/2022 14:47
Hexachlorobutadiene	< 7910000	ug/Kg		5/13/2022 14:47
Hexachlorocyclopentadiene	< 31700000	ug/Kg		5/13/2022 14:47
Hexachloroethane	< 7910000	ug/Kg		5/13/2022 14:47
Indeno (1,2,3-cd) pyrene	< 7910000	ug/Kg		5/13/2022 14:47
Isophorone	< 7910000	ug/Kg		5/13/2022 14:47
Naphthalene	**48100000**	ug/Kg		5/13/2022 14:47
Nitrobenzene	< 7910000	ug/Kg		5/13/2022 14:47
N-Nitroso-di-n-propylamine	< 7910000	ug/Kg		5/13/2022 14:47
N-Nitrosodiphenylamine	< 7910000	ug/Kg		5/13/2022 14:47
Pentachlorophenol	< 15800000	ug/Kg		5/13/2022 14:47
Phenanthrene	< 7910000	ug/Kg		5/13/2022 14:47
Phenol	< 7910000	ug/Kg		5/13/2022 14:47
Pyrene	< 7910000	ug/Kg		5/13/2022 14:47

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	NC	35.4 - 92.4		5/13/2022 14:47
2-Fluorobiphenyl	NC	39.6 - 84.4		5/13/2022 14:47
2-Fluorophenol	NC	35.5 - 78.9		5/13/2022 14:47
Nitrobenzene-d5	NC	36.5 - 78.2		5/13/2022 14:47
Phenol-d5	NC	37.1 - 78.3		5/13/2022 14:47
Terphenyl-d14	NC	42.3 - 103		5/13/2022 14:47

Due to elevated moisture content in the sample, results reported on a dry weight basis.

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 5/6/2022
Data File: B61761.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 10900	ug/Kg		5/13/2022 12:03
1,1,2,2-Tetrachloroethane	< 10900	ug/Kg		5/13/2022 12:03

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

1,1,2-Trichloroethane	< 10900	ug/Kg	5/13/2022	12:03
1,1-Dichloroethane	< 10900	ug/Kg	5/13/2022	12:03
1,1-Dichloroethene	< 10900	ug/Kg	5/13/2022	12:03
1,2,3-Trichlorobenzene	< 27100	ug/Kg	5/13/2022	12:03
1,2,4-Trichlorobenzene	< 27100	ug/Kg	5/13/2022	12:03
1,2-Dibromo-3-Chloropropane	< 54300	ug/Kg	5/13/2022	12:03
1,2-Dibromoethane	< 10900	ug/Kg	5/13/2022	12:03
1,2-Dichlorobenzene	< 10900	ug/Kg	5/13/2022	12:03
1,2-Dichloroethane	< 10900	ug/Kg	5/13/2022	12:03
1,2-Dichloropropane	< 10900	ug/Kg	5/13/2022	12:03
1,3-Dichlorobenzene	< 10900	ug/Kg	5/13/2022	12:03
1,4-Dichlorobenzene	< 10900	ug/Kg	5/13/2022	12:03
1,4-Dioxane	< 54300	ug/Kg	5/13/2022	12:03
2-Butanone	< 54300	ug/Kg	5/13/2022	12:03
2-Hexanone	< 27100	ug/Kg	5/13/2022	12:03
4-Methyl-2-pentanone	< 27100	ug/Kg	5/13/2022	12:03
Acetone	< 54300	ug/Kg	5/13/2022	12:03
Benzene	**307000**	ug/Kg	5/13/2022	12:03
Bromochloromethane	< 27100	ug/Kg	5/13/2022	12:03
Bromodichloromethane	< 10900	ug/Kg	5/13/2022	12:03
Bromoform	< 27100	ug/Kg	5/13/2022	12:03
Bromomethane	< 10900	ug/Kg	5/13/2022	12:03
Carbon disulfide	< 10900	ug/Kg	5/13/2022	12:03
Carbon Tetrachloride	< 10900	ug/Kg	5/13/2022	12:03
Chlorobenzene	< 10900	ug/Kg	5/13/2022	12:03
Chloroethane	< 10900	ug/Kg	5/13/2022	12:03
Chloroform	< 10900	ug/Kg	5/13/2022	12:03
Chloromethane	< 10900	ug/Kg	5/13/2022	12:03
cis-1,2-Dichloroethene	< 10900	ug/Kg	5/13/2022	12:03
cis-1,3-Dichloropropene	< 10900	ug/Kg	5/13/2022	12:03

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01	**Date Sampled:** 5/4/2022	11:20
Matrix:	Solid	**Date Received** 5/5/2022	

Cyclohexane	< 54300	ug/Kg	5/13/2022	12:03
Dibromochloromethane	< 10900	ug/Kg	5/13/2022	12:03
Dichlorodifluoromethane	< 10900	ug/Kg	5/13/2022	12:03
Ethylbenzene	**11200**	ug/Kg	5/13/2022	12:03
Freon 113	< 10900	ug/Kg	5/13/2022	12:03
Isopropylbenzene	< 10900	ug/Kg	5/13/2022	12:03
m,p-Xylene	**302000**	ug/Kg	5/13/2022	12:03
Methyl acetate	< 10900	ug/Kg	5/13/2022	12:03
Methyl tert-butyl Ether	< 10900	ug/Kg	5/13/2022	12:03
Methylcyclohexane	< 10900	ug/Kg	5/13/2022	12:03
Methylene chloride	< 27100	ug/Kg	5/13/2022	12:03
o-Xylene	**75200**	ug/Kg	5/13/2022	12:03
Styrene	< 27100	ug/Kg	5/13/2022	12:03
Tetrachloroethene	< 10900	ug/Kg	5/13/2022	12:03
Toluene	**365000**	ug/Kg	5/13/2022	12:03
trans-1,2-Dichloroethene	< 10900	ug/Kg	5/13/2022	12:03
trans-1,3-Dichloropropene	< 10900	ug/Kg	5/13/2022	12:03
Trichloroethene	< 10900	ug/Kg	5/13/2022	12:03
Trichlorofluoromethane	< 10900	ug/Kg	5/13/2022	12:03
Vinyl chloride	< 10900	ug/Kg	5/13/2022	12:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**109**	74.7 - 140		5/13/2022	12:03
4-Bromofluorobenzene	**93.4**	68 - 130		5/13/2022	12:03
Pentafluorobenzene	**123**	70.3 - 140		5/13/2022	12:03
Toluene-D8	**115**	69 - 138		5/13/2022	12:03

Due to elevated moisture content in the sample, results reported on a dry weight basis.

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z09194.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01A	**Date Sampled:** 5/4/2022	11:20
Matrix:	TCLP Extract	**Date Received** 5/5/2022	

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	**0.226**	mg/L	0.2		5/11/2022 07:53

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 5/10/2022
Data File: Hg220511A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.500	mg/L	5		5/6/2022 22:01
Barium	< 0.500	mg/L	100		5/6/2022 22:01
Cadmium	< 0.0250	mg/L	1		5/6/2022 22:01
Chromium	< 0.500	mg/L	5		5/6/2022 22:01
Lead	< 0.500	mg/L	5		5/6/2022 22:01
Selenium	< 0.200	mg/L	1		5/6/2022 22:01
Silver	< 0.500	mg/L	5		5/6/2022 22:01

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 5/6/2022
Data File: 220506D

TCLP Volatile Organics

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
1,1-Dichloroethene	< 400	ug/L	700		5/12/2022 20:27
1,2-Dichloroethane	< 400	ug/L	500		5/12/2022 20:27
2-Butanone	< 2000	ug/L	200000		5/12/2022 20:27
Benzene	**6740**	ug/L	500		5/12/2022 20:27
Carbon Tetrachloride	< 400	ug/L	500		5/12/2022 20:27
Chlorobenzene	< 400	ug/L	100000		5/12/2022 20:27
Chloroform	< 400	ug/L	6000		5/12/2022 20:27
Tetrachloroethene	< 400	ug/L	700		5/12/2022 20:27

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222043

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Sample Identifier:	West LBA - 05042022		
Lab Sample ID:	222043-01A	**Date Sampled:** 5/4/2022	11:20
Matrix:	TCLP Extract	**Date Received** 5/5/2022	

Trichloroethene	< 400	ug/L	500		5/12/2022 20:27
Vinyl chloride	< 400	ug/L	200		5/12/2022 20:27

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**112**	81.1 - 136		5/12/2022 20:27
4-Bromofluorobenzene	**95.4**	75.8 - 132		5/12/2022 20:27
Pentafluorobenzene	**115**	82 - 132		5/12/2022 20:27
Toluene-D8	**114**	64.6 - 137		5/12/2022 20:27

Method Reference(s): EPA 8260C
EPA 1311 / 5030C

Data File: z09184.D

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Aluminum	<4.76	mg/Kg		5/9/2022	19:22
Antimony	<2.86	mg/Kg		5/9/2022	19:22
Arsenic	<0.476	mg/Kg		5/9/2022	19:22
Barium	<4.76	mg/Kg		5/9/2022	19:22
Beryllium	<0.238	mg/Kg		5/9/2022	19:22
Cadmium	<0.238	mg/Kg		5/9/2022	19:22
Calcium	<119	mg/Kg		5/9/2022	19:22
Chromium	<0.476	mg/Kg		5/9/2022	19:22
Cobalt	<2.38	mg/Kg		5/9/2022	19:22
Copper	<0.952	mg/Kg		5/11/2022	08:04
Iron	<9.52	mg/Kg		5/9/2022	19:22
Lead	<0.476	mg/Kg		5/9/2022	19:22
Magnesium	<119	mg/Kg		5/9/2022	19:22
Manganese	<0.714	mg/Kg		5/9/2022	19:22
Nickel	<1.90	mg/Kg		5/9/2022	19:22
Potassium	<119	mg/Kg		5/9/2022	19:22
Selenium	<0.952	mg/Kg		5/9/2022	19:22
Silver	<0.476	mg/Kg		5/9/2022	19:22
Sodium	<119	mg/Kg		5/11/2022	08:04
Sulfur	<23.8	mg/Kg		5/11/2022	05:17
Thallium	<1.19	mg/Kg		5/9/2022	19:22
Vanadium	<1.19	mg/Kg		5/9/2022	19:22
Zinc	<2.86	mg/Kg		5/9/2022	19:22

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 5/6/2022

Data File: 220509C

QC Batch ID: QC220506Soil

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Aluminum	124	120	mg/Kg	123	119	99.6	98.7	80 - 120			0.877	20		5/9/2022
Antimony	124	120	mg/Kg	131	127	106	105	80 - 120			0.455	20		5/9/2022
Arsenic	124	120	mg/Kg	118	114	95.6	95.0	80 - 120			0.673	20		5/9/2022
Barium	124	120	mg/Kg	131	127	106	105	80 - 120			0.151	20		5/9/2022
Beryllium	24.8	24.0	mg/Kg	23.7	23.0	95.6	95.5	80 - 120			0.166	20		5/9/2022
Cadmium	49.5	48.1	mg/Kg	52.5	50.6	106	105	80 - 120			0.687	20		5/9/2022
Calcium	198	192	mg/Kg	206	194	104	101	80 - 120			3.08	20		5/9/2022
Chromium	124	120	mg/Kg	124	120	99.8	99.8	80 - 120			0.0452	20		5/9/2022
Cobalt	49.5	48.1	mg/Kg	53.2	51.5	108	107	80 - 120			0.269	20		5/9/2022
Copper	124	120	mg/Kg	124	120	99.8	100	80 - 120			0.240	20		5/11/2022
Iron	124	120	mg/Kg	125	121	101	101	80 - 120			0.0900	20		5/9/2022
Lead	124	120	mg/Kg	127	123	102	102	80 - 120			0.288	20		5/9/2022
Magnesium	396	385	mg/Kg	431	416	109	108	80 - 120			0.644	20		5/9/2022
Manganese	49.5	48.1	mg/Kg	51.7	50.3	105	105	80 - 120			0.0595	20		5/9/2022
Nickel	248	240	mg/Kg	262	253	106	105	80 - 120			0.339	20		5/9/2022
Potassium	2100	2040	mg/Kg	2120	2000	101	98.1	80 - 120			2.47	20		5/9/2022

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Report Prepared Thursday, May 12, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Selenium	124	120	mg/Kg	119	115	95.8	95.8	80 - 120			0.0409	20		5/9/2022
Silver	12.4	12.0	mg/Kg	12.3	11.9	99.4	99.0	80 - 120			0.377	20		5/9/2022
Sodium	594	577	mg/Kg	562	526	94.6	91.2	80 - 120			3.59	20		5/11/2022
Sulfur	49.5	48.1	mg/Kg	56.6	54.0	114	112	80 - 120			1.76	20		5/11/2022
Thallium	124	120	mg/Kg	131	127	106	106	80 - 120			0.332	20		5/9/2022
Vanadium	49.5	48.1	mg/Kg	53.4	51.8	108	108	80 - 120			0.202	20		5/9/2022
Zinc	124	120	mg/Kg	125	121	101	101	80 - 120			0.335	20		5/9/2022

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 5/6/2022
Data File: 220509C
QC Number: 1
QC Batch ID: QC220506Soil

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Report Prepared *Thursday, May 12, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/L		5/6/2022	21:18
Barium	<0.500	mg/L		5/6/2022	21:18
Cadmium	<0.0250	mg/L		5/6/2022	21:18
Chromium	<0.500	mg/L		5/6/2022	21:18
Lead	<0.500	mg/L		5/6/2022	21:18
Selenium	<0.200	mg/L		5/6/2022	21:18
Silver	<0.500	mg/L		5/6/2022	21:18

Method Reference(s): EPA 6010C
EPA 3005
Preparation Date: 5/6/2022
Data File: 220506D
QC Batch ID: QC220506TCLP
QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	12.5	12.5	mg/L	12.7	12.7	101	102	80 - 120			0.272	20		5/6/2022
Barium	12.5	12.5	mg/L	13.0	13.0	104	104	80 - 120			0.313	20		5/6/2022
Cadmium	5.00	5.00	mg/L	5.38	5.40	108	108	80 - 120			0.195	20		5/6/2022
Chromium	12.5	12.5	mg/L	12.8	12.8	102	102	80 - 120			0.117	20		5/6/2022
Lead	12.5	12.5	mg/L	12.4	12.4	99.1	99.6	80 - 120			0.499	20		5/6/2022
Selenium	12.5	12.5	mg/L	13.1	13.2	105	106	80 - 120			0.506	20		5/6/2022
Silver	1.25	1.25	mg/L	1.28	1.28	102	102	80 - 120			0.164	20		5/6/2022

Method Reference(s): EPA 6010C
EPA 3005
Preparation Date: 5/6/2022
Data File: 220506D
QC Number: 1
QC Batch ID: QC220506TCLP

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Report Prepared *Monday, May 9, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: TCLP Fluid

TCLP Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00200	mg/L		5/11/2022 07:48

Method Reference(s): EPA 7470A
Preparation Date: 5/10/2022
Data File: Hg220511A
QC Batch ID: QC220510HgTCLP
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: TCLP Fluid

TCLP Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0200	0.0200	mg/L	0.0205	0.0203	103	101	80 - 120			1.45	20		5/11/2022

Method Reference(s): EPA 7470A
Preparation Date: 5/10/2022
Data File: Hg220511A
QC Number: 1
QC Batch ID: QC220510HgTCLP

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Report Prepared *Wednesday, May 11, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1221	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1232	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1242	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1248	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1254	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1260	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1262	<0.0276	mg/Kg		5/12/2022 12:53
PCB-1268	<0.0276	mg/Kg		5/12/2022 12:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**65.3**	12.7 - 101		5/12/2022 12:53

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 5/6/2022
QC Batch ID: QC220506PCBS
QC Number: BlkC 2

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

PCBs

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
PCB-1016/1260	0.141	mg/Kg	0.0227	16.1	10 - 102		5/12/2022

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 5/6/2022
QC Number: LCSC 2
QC Batch ID: QC220506PCBS

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Report Prepared *Thursday, May 12, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<2.00	ug/Kg		5/13/2022	14:44
1,1,2,2-Tetrachloroethane	<2.00	ug/Kg		5/13/2022	14:44
1,1,2-Trichloroethane	<2.00	ug/Kg		5/13/2022	14:44
1,1-Dichloroethane	<2.00	ug/Kg		5/13/2022	14:44
1,1-Dichloroethene	<2.00	ug/Kg		5/13/2022	14:44
1,2,3-Trichlorobenzene	<5.00	ug/Kg		5/13/2022	14:44
1,2,4-Trichlorobenzene	<5.00	ug/Kg		5/13/2022	14:44
1,2-Dibromo-3-Chloropropane	<10.0	ug/Kg		5/13/2022	14:44
1,2-Dibromoethane	<2.00	ug/Kg		5/13/2022	14:44
1,2-Dichlorobenzene	<2.00	ug/Kg		5/13/2022	14:44
1,2-Dichloroethane	<2.00	ug/Kg		5/13/2022	14:44
1,2-Dichloropropane	<2.00	ug/Kg		5/13/2022	14:44
1,3-Dichlorobenzene	<2.00	ug/Kg		5/13/2022	14:44
1,4-Dichlorobenzene	<2.00	ug/Kg		5/13/2022	14:44
1,4-Dioxane	<10.0	ug/Kg		5/13/2022	14:44
2-Butanone	<10.0	ug/Kg		5/13/2022	14:44
2-Hexanone	<5.00	ug/Kg		5/13/2022	14:44
4-Methyl-2-pentanone	<5.00	ug/Kg		5/13/2022	14:44
Acetone	<10.0	ug/Kg		5/13/2022	14:44
Benzene	<2.00	ug/Kg		5/13/2022	14:44
Bromochloromethane	<5.00	ug/Kg		5/13/2022	14:44
Bromodichloromethane	<2.00	ug/Kg		5/13/2022	14:44
Bromoform	<5.00	ug/Kg		5/13/2022	14:44
Bromomethane	<2.00	ug/Kg		5/13/2022	14:44
Carbon disulfide	<2.00	ug/Kg		5/13/2022	14:44
Carbon Tetrachloride	<2.00	ug/Kg		5/13/2022	14:44
Chlorobenzene	<2.00	ug/Kg		5/13/2022	14:44

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1-Biphenyl	<284	ug/Kg		5/9/2022	15:55
1,2,4,5-Tetrachlorobenzene	<284	ug/Kg		5/9/2022	15:55
1,2,4-Trichlorobenzene	<284	ug/Kg		5/9/2022	15:55
1,2-Dichlorobenzene	<284	ug/Kg		5/9/2022	15:55
1,3-Dichlorobenzene	<284	ug/Kg		5/9/2022	15:55
1,4-Dichlorobenzene	<284	ug/Kg		5/9/2022	15:55
2,2-Oxybis (1-chloropropane)	<284	ug/Kg		5/9/2022	15:55
2,3,4,6-Tetrachlorophenol	<284	ug/Kg		5/9/2022	15:55
2,4,5-Trichlorophenol	<284	ug/Kg		5/9/2022	15:55
2,4,6-Trichlorophenol	<284	ug/Kg		5/9/2022	15:55
2,4-Dichlorophenol	<284	ug/Kg		5/9/2022	15:55
2,4-Dimethylphenol	<284	ug/Kg		5/9/2022	15:55
2,4-Dinitrophenol	<1140	ug/Kg		5/9/2022	15:55
2,4-Dinitrotoluene	<284	ug/Kg		5/9/2022	15:55
2,6-Dinitrotoluene	<284	ug/Kg		5/9/2022	15:55
2-Chloronaphthalene	<284	ug/Kg		5/9/2022	15:55
2-Chlorophenol	<284	ug/Kg		5/9/2022	15:55
2-Methylnapthalene	<284	ug/Kg		5/9/2022	15:55
2-Methylphenol	<284	ug/Kg		5/9/2022	15:55
2-Nitroaniline	<284	ug/Kg		5/9/2022	15:55
2-Nitrophenol	<284	ug/Kg		5/9/2022	15:55
3&4-Methylphenol	<284	ug/Kg		5/9/2022	15:55
3,3'-Dichlorobenzidine	<284	ug/Kg		5/9/2022	15:55
3-Nitroaniline	<284	ug/Kg		5/9/2022	15:55
4,6-Dinitro-2-methylphenol	<568	ug/Kg		5/9/2022	15:55
4-Bromophenyl phenyl ether	<284	ug/Kg		5/9/2022	15:55
4-Chloro-3-methylphenol	<284	ug/Kg		5/9/2022	15:55

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
4-Chloroaniline	<284	ug/Kg		5/9/2022	15:55
4-Chlorophenyl phenyl ether	<284	ug/Kg		5/9/2022	15:55
4-Nitroaniline	<284	ug/Kg		5/9/2022	15:55
4-Nitrophenol	<284	ug/Kg		5/9/2022	15:55
Acenaphthene	<284	ug/Kg		5/9/2022	15:55
Acenaphthylene	<284	ug/Kg		5/9/2022	15:55
Acetophenone	<284	ug/Kg		5/9/2022	15:55
Anthracene	<284	ug/Kg		5/9/2022	15:55
Atrazine	<284	ug/Kg		5/9/2022	15:55
Benzaldehyde	<284	ug/Kg		5/9/2022	15:55
Benzo (a) anthracene	<284	ug/Kg		5/9/2022	15:55
Benzo (a) pyrene	<284	ug/Kg		5/9/2022	15:55
Benzo (b) fluoranthene	<284	ug/Kg		5/9/2022	15:55
Benzo (g,h,i) perylene	<284	ug/Kg		5/9/2022	15:55
Benzo (k) fluoranthene	<284	ug/Kg		5/9/2022	15:55
Bis (2-chloroethoxy) methane	<284	ug/Kg		5/9/2022	15:55
Bis (2-chloroethyl) ether	<284	ug/Kg		5/9/2022	15:55
Bis (2-ethylhexyl) phthalate	<284	ug/Kg		5/9/2022	15:55
Butylbenzylphthalate	<284	ug/Kg		5/9/2022	15:55
Caprolactam	<284	ug/Kg		5/9/2022	15:55
Carbazole	<284	ug/Kg		5/9/2022	15:55
Chrysene	<284	ug/Kg		5/9/2022	15:55
Dibenz (a,h) anthracene	<284	ug/Kg		5/9/2022	15:55
Dibenzofuran	<284	ug/Kg		5/9/2022	15:55
Diethyl phthalate	<284	ug/Kg		5/9/2022	15:55
Dimethyl phthalate	<284	ug/Kg		5/9/2022	15:55
Di-n-butyl phthalate	<284	ug/Kg		5/9/2022	15:55
Di-n-octylphthalate	<284	ug/Kg		5/9/2022	15:55

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
Fluoranthene	<284	ug/Kg		5/9/2022	15:55
Fluorene	<284	ug/Kg		5/9/2022	15:55
Hexachlorobenzene	<284	ug/Kg		5/9/2022	15:55
Hexachlorobutadiene	<284	ug/Kg		5/9/2022	15:55
Hexachlorocyclopentadiene	<1140	ug/Kg		5/9/2022	15:55
Hexachloroethane	<284	ug/Kg		5/9/2022	15:55
Indeno (1,2,3-cd) pyrene	<284	ug/Kg		5/9/2022	15:55
Isophorone	<284	ug/Kg		5/9/2022	15:55
Naphthalene	**340**	ug/Kg		5/9/2022	15:55
Nitrobenzene	<284	ug/Kg		5/9/2022	15:55
N-Nitroso-di-n-propylamine	<284	ug/Kg		5/9/2022	15:55
N-Nitrosodiphenylamine	<284	ug/Kg		5/9/2022	15:55
Pentachlorophenol	<568	ug/Kg		5/9/2022	15:55
Phenanthrene	<284	ug/Kg		5/9/2022	15:55
Phenol	<284	ug/Kg		5/9/2022	15:55
Pyrene	<284	ug/Kg		5/9/2022	15:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**45.6**	35.4 - 92.4		5/9/2022	15:55
2-Fluorobiphenyl	**51.2**	39.6 - 84.4		5/9/2022	15:55
2-Fluorophenol	**44.3**	35.5 - 78.9		5/9/2022	15:55
Nitrobenzene-d5	**46.5**	36.5 - 78.2		5/9/2022	15:55
Phenol-d5	**49.3**	37.1 - 78.3		5/9/2022	15:55
Terphenyl-d14	**57.0**	42.3 - 103		5/9/2022	15:55

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 5/6/2022
Data File: B61648.D
QC Batch ID: QC22050ABNS
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,2,4-Trichlorobenzene	2840	ug/Kg	1610	56.5	36.4 - 88		5/11/2022
1,4-Dichlorobenzene	2840	ug/Kg	1510	53.1	34.3 - 78.9		5/11/2022
2,4-Dinitrotoluene	2840	ug/Kg	1820	64.1	40.2 - 99.7		5/11/2022
2-Chlorophenol	4260	ug/Kg	2780	65.3	49.5 - 80.8		5/11/2022
4-Chloro-3-methylphenol	4260	ug/Kg	2880	67.6	52.2 - 87.8		5/11/2022
4-Nitrophenol	4260	ug/Kg	2940	68.9	23.3 - 102		5/11/2022
Acenaphthene	2840	ug/Kg	1700	59.8	43.5 - 87.2		5/11/2022
N-Nitroso-di-n-propylamine	2840	ug/Kg	1570	55.2	32.6 - 89.2		5/11/2022
Pentachlorophenol	4260	ug/Kg	3250	76.2	41.8 - 107		5/11/2022
Phenol	4260	ug/Kg	2750	64.6	48.8 - 79.3		5/11/2022
Pyrene	2840	ug/Kg	1950	68.7	47.1 - 104		5/11/2022

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 5/6/2022
Data File: B61715.D
QC Number: LCS 1
QC Batch ID: QC22050ABNS

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Report Prepared Monday, May 16, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroethane	<2.00	ug/Kg		5/13/2022	14:44
Chloroform	<2.00	ug/Kg		5/13/2022	14:44
Chloromethane	<2.00	ug/Kg		5/13/2022	14:44
cis-1,2-Dichloroethene	<2.00	ug/Kg		5/13/2022	14:44
cis-1,3-Dichloropropene	<2.00	ug/Kg		5/13/2022	14:44
Cyclohexane	<10.0	ug/Kg		5/13/2022	14:44
Dibromochloromethane	<2.00	ug/Kg		5/13/2022	14:44
Dichlorodifluoromethane	<2.00	ug/Kg		5/13/2022	14:44
Ethylbenzene	<2.00	ug/Kg		5/13/2022	14:44
Freon 113	<2.00	ug/Kg		5/13/2022	14:44
Isopropylbenzene	<2.00	ug/Kg		5/13/2022	14:44
m,p-Xylene	<2.00	ug/Kg		5/13/2022	14:44
Methyl acetate	<2.00	ug/Kg		5/13/2022	14:44
Methyl tert-butyl Ether	<2.00	ug/Kg		5/13/2022	14:44
Methylcyclohexane	<2.00	ug/Kg		5/13/2022	14:44
Methylene chloride	<5.00	ug/Kg		5/13/2022	14:44
o-Xylene	<2.00	ug/Kg		5/13/2022	14:44
Styrene	<5.00	ug/Kg		5/13/2022	14:44
Tetrachloroethene	<2.00	ug/Kg		5/13/2022	14:44
Toluene	<2.00	ug/Kg		5/13/2022	14:44
trans-1,2-Dichloroethene	<2.00	ug/Kg		5/13/2022	14:44
trans-1,3-Dichloropropene	<2.00	ug/Kg		5/13/2022	14:44
Trichloroethene	<2.00	ug/Kg		5/13/2022	14:44
Trichlorofluoromethane	<2.00	ug/Kg		5/13/2022	14:44
Vinyl chloride	<2.00	ug/Kg		5/13/2022	14:44

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<1000	ug/Kg		5/13/2022	13:59
1,1,2,2-Tetrachloroethane	<1000	ug/Kg		5/13/2022	13:59
1,1,2-Trichloroethane	<1000	ug/Kg		5/13/2022	13:59
1,1-Dichloroethane	<1000	ug/Kg		5/13/2022	13:59
1,1-Dichloroethene	<1000	ug/Kg		5/13/2022	13:59
1,2,3-Trichlorobenzene	<2500	ug/Kg		5/13/2022	13:59
1,2,4-Trichlorobenzene	<2500	ug/Kg		5/13/2022	13:59
1,2-Dibromo-3-Chloropropane	<5000	ug/Kg		5/13/2022	13:59
1,2-Dibromoethane	<1000	ug/Kg		5/13/2022	13:59
1,2-Dichlorobenzene	<1000	ug/Kg		5/13/2022	13:59
1,2-Dichloroethane	<1000	ug/Kg		5/13/2022	13:59
1,2-Dichloropropane	<1000	ug/Kg		5/13/2022	13:59
1,3-Dichlorobenzene	<1000	ug/Kg		5/13/2022	13:59
1,4-Dichlorobenzene	<1000	ug/Kg		5/13/2022	13:59
1,4-Dioxane	<5000	ug/Kg		5/13/2022	13:59
2-Butanone	<5000	ug/Kg		5/13/2022	13:59
2-Hexanone	<2500	ug/Kg		5/13/2022	13:59
4-Methyl-2-pentanone	<2500	ug/Kg		5/13/2022	13:59
Acetone	<5000	ug/Kg		5/13/2022	13:59
Benzene	<1000	ug/Kg		5/13/2022	13:59
Bromochloromethane	<2500	ug/Kg		5/13/2022	13:59
Bromodichloromethane	<1000	ug/Kg		5/13/2022	13:59
Bromoform	<2500	ug/Kg		5/13/2022	13:59
Bromomethane	<1000	ug/Kg		5/13/2022	13:59
Carbon disulfide	<1000	ug/Kg		5/13/2022	13:59
Carbon Tetrachloride	<1000	ug/Kg		5/13/2022	13:59
Chlorobenzene	<1000	ug/Kg		5/13/2022	13:59
Chloroethane	<1000	ug/Kg		5/13/2022	13:59

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**117**	74.7 - 140		5/13/2022 14:44
4-Bromofluorobenzene	**93.4**	68 - 130		5/13/2022 14:44
Pentafluorobenzene	**119**	70.3 - 140		5/13/2022 14:44
Toluene-D8	**118**	69 - 138		5/13/2022 14:44

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z09202.D

QC Batch ID: voahl220513

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroform	<1000	ug/Kg		5/13/2022	13:59
Chloromethane	<1000	ug/Kg		5/13/2022	13:59
cis-1,2-Dichloroethene	<1000	ug/Kg		5/13/2022	13:59
cis-1,3-Dichloropropene	<1000	ug/Kg		5/13/2022	13:59
Cyclohexane	<5000	ug/Kg		5/13/2022	13:59
Dibromochloromethane	<1000	ug/Kg		5/13/2022	13:59
Dichlorodifluoromethane	<1000	ug/Kg		5/13/2022	13:59
Ethylbenzene	<1000	ug/Kg		5/13/2022	13:59
Freon 113	<1000	ug/Kg		5/13/2022	13:59
Isopropylbenzene	<1000	ug/Kg		5/13/2022	13:59
m,p-Xylene	<1000	ug/Kg		5/13/2022	13:59
Methyl acetate	<1000	ug/Kg		5/13/2022	13:59
Methyl tert-butyl Ether	<1000	ug/Kg		5/13/2022	13:59
Methylcyclohexane	<1000	ug/Kg		5/13/2022	13:59
Methylene chloride	<2500	ug/Kg		5/13/2022	13:59
o-Xylene	<1000	ug/Kg		5/13/2022	13:59
Styrene	<2500	ug/Kg		5/13/2022	13:59
Tetrachloroethene	<1000	ug/Kg		5/13/2022	13:59
Toluene	<1000	ug/Kg		5/13/2022	13:59
trans-1,2-Dichloroethene	<1000	ug/Kg		5/13/2022	13:59
trans-1,3-Dichloropropene	<1000	ug/Kg		5/13/2022	13:59
Trichloroethene	<1000	ug/Kg		5/13/2022	13:59
Trichlorofluoromethane	<1000	ug/Kg		5/13/2022	13:59
Vinyl chloride	<1000	ug/Kg		5/13/2022	13:59

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Western LBA Scrubber

Lab Project ID: 222043

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**114**	74.7 - 140		5/13/2022 13:59
4-Bromofluorobenzene	**96.5**	68 - 130		5/13/2022 13:59
Pentafluorobenzene	**125**	70.3 - 140		5/13/2022 13:59
Toluene-D8	**121**	69 - 138		5/13/2022 13:59

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z09200.D

QC Batch ID: voahl220513

QC Number: Blk 2

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1,1-Trichloroethane	20.0	ug/Kg			70.9 - 135		
1,1,2,2-Tetrachloroethane	20.0	ug/Kg			31.6 - 154		
1,1,2-Trichloroethane	20.0	ug/Kg			62 - 132		
1,1-Dichloroethane	20.0	ug/Kg			73 - 128		
1,1-Dichloroethene	20.0	ug/Kg			61.7 - 119		
1,2-Dichlorobenzene	20.0	ug/Kg			61 - 118		
1,2-Dichloroethane	20.0	ug/Kg			73.4 - 123		
1,2-Dichloropropane	20.0	ug/Kg			71.3 - 123		
1,3-Dichlorobenzene	20.0	ug/Kg			68.7 - 112		
1,4-Dichlorobenzene	20.0	ug/Kg			66.9 - 113		
Benzene	20.0	ug/Kg			77.8 - 119		
Bromodichloromethane	20.0	ug/Kg			65.7 - 125		
Bromoform	20.0	ug/Kg			54.7 - 130		
Bromomethane	20.0	ug/Kg			44.6 - 167		
Carbon Tetrachloride	20.0	ug/Kg			61.8 - 138		
Chlorobenzene	20.0	ug/Kg			77.2 - 108		

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Report Prepared *Friday, May 13, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Chloroethane	20.0	ug/Kg			55.5 - 151		
Chloroform	20.0	ug/Kg			70.1 - 134		
Chloromethane	20.0	ug/Kg			42.4 - 168		
cis-1,3-Dichloropropene	20.0	ug/Kg			66.7 - 122		
Dibromochloromethane	20.0	ug/Kg			61.2 - 130		
Ethylbenzene	20.0	ug/Kg			71.6 - 112		
Methylene chloride	20.0	ug/Kg			38.2 - 155		
Tetrachloroethene	20.0	ug/Kg			61.4 - 137		
Toluene	20.0	ug/Kg			71.1 - 124		
trans-1,2-Dichloroethene	20.0	ug/Kg			67.3 - 127		
trans-1,3-Dichloropropene	20.0	ug/Kg			55 - 126		
Trichloroethene	20.0	ug/Kg			69.3 - 128		
Trichlorofluoromethane	20.0	ug/Kg			64 - 140		
Vinyl chloride	20.0	ug/Kg			51.2 - 160		

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Report Prepared Friday, May 13, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed

Method Reference(s): EPA 8260C
EPA 5035A - L
QC Number: LCS 1
QC Batch ID: voahl220513

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Dichloroethene	<20.0	ug/L		5/12/2022 19:29
1,2-Dichloroethane	<20.0	ug/L		5/12/2022 19:29
2-Butanone	<100	ug/L		5/12/2022 19:29
Benzene	<20.0	ug/L		5/12/2022 19:29
Carbon Tetrachloride	<20.0	ug/L		5/12/2022 19:29
Chlorobenzene	<20.0	ug/L		5/12/2022 19:29
Chloroform	<20.0	ug/L		5/12/2022 19:29
Tetrachloroethene	<20.0	ug/L		5/12/2022 19:29
Trichloroethene	<20.0	ug/L		5/12/2022 19:29
Vinyl chloride	<20.0	ug/L		5/12/2022 19:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	81.1 - 136		5/12/2022 19:29
4-Bromofluorobenzene	**87.8**	75.8 - 132		5/12/2022 19:29
Pentafluorobenzene	**119**	82 - 132		5/12/2022 19:29
Toluene-D8	**114**	64.6 - 137		5/12/2022 19:29

Method Reference(s): EPA 8260C
EPA 5030
Data File: z09181.D
QC Batch ID: voax220512
QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Western LBA Scrubber
Lab Project ID: 222043
Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1-Dichloroethene	20.0	ug/L	19.4	97.2	65.5 - 116		5/12/2022
1,2-Dichloroethane	20.0	ug/L	19.5	97.4	78.3 - 122		5/12/2022
Benzene	20.0	ug/L	21.4	107	81.6 - 114		5/12/2022
Carbon Tetrachloride	20.0	ug/L	18.6	92.9	76.4 - 129		5/12/2022
Chlorobenzene	20.0	ug/L	19.4	96.9	77.2 - 106		5/12/2022
Chloroform	20.0	ug/L	20.4	102	84.5 - 122		5/12/2022
Tetrachloroethene	20.0	ug/L	20.8	104	64.4 - 130		5/12/2022
Trichloroethene	20.0	ug/L	21.0	105	73.4 - 122		5/12/2022
Vinyl chloride	20.0	ug/L	19.9	99.6	50.9 - 164		5/12/2022

Method Reference(s): EPA 8260C
EPA 5030
Data File: z09180.D
QC Number: LCS 1
QC Batch ID: voax220512

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Report Prepared Monday, May 16, 2022

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"H" = Denotes a parameter analyzed outside of holding time.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	INVENTUM ENGINEERING	CLIENT:	SAME	22043
ADDRESS:	471 CARLISLE DR SUITE C	ADDRESS:		Quotation #:
CITY:	HERNDON	STATE: VA	ZIP: 20170	CITY: STATE: ZIP:
PHONE:	585-734-5255	PHONE:		Email: roxanne.birx@inventumeng.com
ATTN:	ROXANNE BIRX	ATTN:	JOHN BLACK	john.black@ " "

PROJECT REFERENCE: WESTERN LBA SCRUBBER

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	VOCs/SVOCs 8260/8270	FULL TCLP	PCBs 8082A	METALS 6010C	BTU/FLASHPT	REACTIVITY	AMMONIA 350.1	CY 9012B	TOTAL SOLIDS	CHLORIDE	CORROSIVITY	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/4/22	1120		X	WESTLBA-05042022	SD	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		01A

FULL TCLP: 8260/8270, METALS, PEST, HERB

*RESIDUALS FROM OLD LIGHT OIL SCRUBBER

A for TCLP extract.
Metals = Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, S, Tl, V, Zn per email CP 5/5/22

Turnaround Time		Report Supplements		
Availability contingent upon lab approval; additional fees may apply.				
Standard 5 day	☒	None Required	☐	None Required ☐
10 day	☐	Batch QC	☒	Basic EDD ☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD ☒
Rush 2 day	☐	Category B	☐	
Rush 1 day	☐			
Date Needed _____ please indicate date needed:		Other ☐ please indicate package needed:		Other EDD ☐ please indicate EDD needed :

ROXANNE BIRX	5/4/22	Total Cost:
Sampled By	Date/Time	
Relinquished By	5/4/22 Date/Time	
Received By	5/4/22 15:10 Date/Time	P.I.F.
Received @ Lab By	5/5/22 11:30 Date/Time	

2°C ice 5/5/22 08:17

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Chain of Custody Supplement

Client: Inventum Engineering **Completed by:** Glenn Pezzullo

Lab Project ID: 22043 **Date:** 5/5/22

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X	X 5035	
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X TCLP VOA		X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X metals
Comments	2°C iced		
Compliant Sample Quantity/Type	X		
Comments			

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May 13, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220506061

RE: Analysis of Samples
Project# 222043

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 5/6/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Tara Daniels
Laboratory Director

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 222043

Date: *13-May-22*

Lab WorkOrder: **220506061**

Sample containers were not supplied by Adirondack Environmental Services.

The client provided percent moisture data for dry weight calculations.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:

- ND : Not Detected at reporting limit
- J: Analyte detected below quantitation limit
- B: Analyte detected in Blank
- X : Exceeds maximum contamination limit
- H: Hold time exceeded
- N: Matrix Spike below acceptable limits
- N+: Matrix Spike is above acceptable limits
- C: CCV below acceptable Limits
- C+: CCV above acceptable Limits
- S: LCS Spike recovery is below acceptable limits
- S+: LCS Spike recovery is above acceptable limits
- Z: Duplication outside acceptable limits
- T : Tentatively Identified Compound-Estimated
- E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *13-May-22*

CLIENT: Paradigm Environmental
Project: Analysis of Samples
Project# 222043

LabWork Order: **220506061**
PO#:

Lab SampleID: 220506061-001 **Collection Date:** 5/4/2022
Client Sample ID: 222043-01 **Matrix:** SOLID

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SOLUBLE ANIONS/ ION CHROMATOGRAPHY - SW 9056A (Prep: SW9056 - 5/10/2022)						Analyst: **CC**
Chloride	**ND**	1400		µg/g-dry	50	5/12/2022 5:48:37 AM
AMMONIA AS N - SM 4500 NH3 G-2011 (Prep: SM4500-NH3 G - 5/11/2022)						Analyst: **CS**
Nitrogen, Ammonia- (as N)	**7810**	720		µg/g-dry	257.14	5/12/2022 12:03:52 PM
CYANIDE, TOTAL - SW 9012B (Prep: 9010C - 5/10/2022)						Analyst: **KB**
Cyanide	**296**	18.0		µg/g-dry	25	5/10/2022 2:50:24 PM
MOISTURE CONTENT-ASTM D2216 (NOT ELAP CERTIFIED)						Analyst: **CMH**
Percent Moisture	**28.6**	0.1		wt%	1	5/9/2022
HEAT VALUE - ASTM D240-09						Analyst: **AMN**
Heat Value	**11400**	500		btu/lb	1	5/9/2022
SW 7.3.3.2, NOT ELAP CERTIFIED (Prep: E335.4 - 5/11/2022)						Analyst: **KB**
Reactive Cyanide	**1.2**	1.0	S	µg/g	1	5/12/2022 4:52:27 PM
SW 7.3.4.2, NOT ELAP CERTIFIED (Prep: E335.4 - 5/11/2022)						Analyst: **CS**
Reactive Sulfide	**28**	10		µg/g	1	5/12/2022
REACTIVITY - SW 7.3.4.2, NOT ELAP CERTIFIED						Analyst: **CS**
Reactivity	**Non Reactive**	0			1	5/12/2022

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2205060061

CHAIN OF CUSTODY

ELAP ID:

Demo 220506061 Page 43 of 49

REPORT TO:			INVOICE TO:		
COMPANY:	Paradigm Environmental		COMPANY:	Same	
ADDRESS:			ADDRESS:		
CITY:	STATE:	ZIP:	CITY:	STATE:	ZIP:
PHONE:	FAX:		PHONE:	FAX:	

LAB PROJECT #: | CLIENT PROJEC

TURNAROUND TIME: (WORKING DAYS)

STD

PROJECT NAME/SITE NAME:

ATTN: Reporting | ATTN: Accounts Payable

COMMENTS: Please email results to reporting@paradigmenv.com

1 2 3 X 5

Date Due: 5/13/22

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Ammonia	BTEX	Chloride	Total Cyanide	Reactivity						REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/4/22	11:20		X	22043-01	Solid	1	X	X	X	X	X						Batch QC	
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments: Not ALS		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments: 4°C		

Client

Sampled By	Date/Time	
[signature]	5/6/22	08:30
Relinquished By	Date/Time	
[signature] Ryan Zacher	5/6/22	1:45
Received By	Date/Time	
[signature]	5/6/22	1700
Received @ Lab By	Date/Time	

Total Cost:

P.I.F.

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TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

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May 17, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220509017

RE: Analysis of Samples
Project# 222043

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 5/9/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Christopher Hess
QA Manager

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 222043

Date: *17-May-22*

Lab WorkOrder: **220509017**

Sample containers were not supplied by Adirondack Environmental Services.

The client performed the TCLP extraction procedure. The TCLP extract was provided for analysis.

This is an updated report to include the recovery for the compound flagged for the Semi-Volatile continuing calibration.

The reporting limit standard analyzed had the following recoveries:

Pentachlorophenol 97.6 %

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:

- ND : Not Detected at reporting limit
- J: Analyte detected below quantitation limit
- B: Analyte detected in Blank
- X : Exceeds maximum contamination limit
- H: Hold time exceeded
- N: Matrix Spike below acceptable limits
- N+: Matrix Spike is above acceptable limits
- C: CCV below acceptable Limits
- C+: CCV above acceptable Limits
- S: LCS Spike recovery is below acceptable limits
- S+: LCS Spike recovery is above acceptable limits
- Z: Duplication outside acceptable limits
- T : Tentatively Identified Compound-Estimated
- E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *17-May-22*

CLIENT:	Paradigm Environmental	**Client Sample ID:**	222043-01A
Work Order:	**220509017**	**Collection Date:**	5/4/2022
Reference:	Analysis of Samples / Project# 222043	**Lab Sample ID:**	220509017-001
PO#:		**Matrix:**	TCLP-EXTRACT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP HERBICIDES - EPA 8321B						Analyst: **KF**
(Prep: SW3535A - 5/11/2022)						
2,4,5-TP (Silvex)-TCLP	**ND**	0.050		mg/L	1	5/11/2022 3:53:30 PM
2,4-D-TCLP	**ND**	0.050		mg/L	1	5/11/2022 3:53:30 PM
Surr: Acifluorfen	**90.3**	52.5-128		%REC	1	5/11/2022 3:53:30 PM
Surr: DCAA	**76.5**	56.2-139		%REC	1	5/11/2022 3:53:30 PM
TCLP PESTICIDES - EPA 8081B						Analyst: **KF**
(Prep: SW3535A - 5/11/2022)						
Chlordane-TCLP	**ND**	0.010		mg/L	1	5/12/2022 1:22:10 PM
Endrin-TCLP	**ND**	0.0020		mg/L	1	5/12/2022 1:22:10 PM
gamma-BHC(Lindane)-TCLP	**ND**	0.0020		mg/L	1	5/12/2022 1:22:10 PM
Heptachlor epoxide-TCLP	**ND**	0.0020		mg/L	1	5/12/2022 1:22:10 PM
Heptachlor-TCLP	**ND**	0.0020		mg/L	1	5/12/2022 1:22:10 PM
Methoxychlor-TCLP	**ND**	0.010		mg/L	1	5/12/2022 1:22:10 PM
Toxaphene-TCLP	**ND**	0.020		mg/L	1	5/12/2022 1:22:10 PM
Surr: Decachlorobiphenyl-TCLP	**80.4**	51.5-141		%REC	1	5/12/2022 1:22:10 PM
TCLP SEMI-VOLATILES - EPA 8270D						Analyst: **MT**
(Prep: SW3535A - 5/10/2022)						
1,4-Dichlorobenzene -TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
2,4,5-Trichlorophenol-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
2,4,6-Trichlorophenol-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
2,4-Dinitrotoluene-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
Cresols, Total-TCLP	**1500**	200		µg/L	1	5/11/2022 4:29:00 PM
Hexachlorobenzene-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
Hexachlorobutadiene-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
Hexachloroethane-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
Nitrobenzene-TCLP	**ND**	50		µg/L	1	5/11/2022 4:29:00 PM
Pentachlorophenol-TCLP	**ND**	250	C	µg/L	1	5/11/2022 4:29:00 PM
Pyridine-TCLP	**320**	100		µg/L	1	5/11/2022 4:29:00 PM
Surr: 2,4,6-Tribromophenol	**82.8**	43.7-123		%REC	1	5/11/2022 4:29:00 PM
Surr: 2-Fluorobiphenyl	**73.6**	48.7-108		%REC	1	5/11/2022 4:29:00 PM
Surr: 2-Fluorophenol	**77.2**	23.5-101		%REC	1	5/11/2022 4:29:00 PM
Surr: 4-Terphenyl-d14	**70.0**	50.6-121		%REC	1	5/11/2022 4:29:00 PM
Surr: Nitrobenzene-d5	**67.6**	43.7-109		%REC	1	5/11/2022 4:29:00 PM
Surr: Phenol-d6	**73.1**	12.6-93.5		%REC	1	5/11/2022 4:29:00 PM

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2205017

1 of 1

CHAIN OF CUSTODY

ELAP ID:

Demo 220509017 Page 48 of 49

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJEC
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN: Accounts Payable	☐1 ☐2 ☐3 ☒5
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due: 5/13/22	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TCLP Herbicides	TCLP Pesticides	TCLP SVOA								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/4/22	11:20		X	222043-01A	TCLP extract	1	X	X	X								Batch QC	
2																			
3																		Spun at Paradigm 5/6/22	
4																			
5																			
6																			
7																			
8																			
9																			
10																			

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter		NELAC Compliance	
Container Type:	Comments: NOT Aer	Y ☐	N ☐
Preservation:	Comments:	Y ☐	N ☐
Holding Time:	Comments:	Y ☐	N ☐
Temperature:	Comments: 4oc	Y ☐	N ☐

Client

	Date/Time	
Sampled By:	5/9/22 08:30	Total Cost:
Relinquished By: Ryan Zacher	5/9/22 1:19	
Received By:	5/9/22 3:59	P.I.F.
Received @ Lab By:	Date/Time	

Adirondack Environmental Services Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

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(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

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(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Inventum Engineering, P.C.

For Lab Project ID

225099

Referencing

PV-10 Wood

Prepared

Monday, January 23, 2023

This project has been re-issued to include Pyridine, per client request.

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Emily Farmer

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01	**Date Sampled:**	10/25/2022 8:30
Matrix:	Solid	**Date Received**	10/25/2022

Heat Value

Analyte	Result	Units	Qualifier	Date Analyzed
BTU	**9000**	btu/lb		10/31/2022

Method Reference(s): ASTM D240-09
Subcontractor ELAP ID: 10709
ELAP does not offer this test for approval as part of their laboratory certification program.

Corrosivity as pH

Analyte	Result	Units	Qualifier	Date Analyzed
Corrosivity (as pH)	6.47 @ 22.2 C	S.U.		11/2/2022 17:22

Method Reference(s): EPA 9045D

Ignitability

Analyte	Result	Units	Qualifier	Date Analyzed
Ignitability	No Burn	mm / sec		11/2/2022

Method Reference(s): EPA 1030

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**98.7**	mg/Kg		11/3/2022 15:07

Method Reference(s): EPA 7471B
Preparation Date: 11/3/2022
Data File: Hg221103D

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**6.45**	mg/Kg		11/3/2022 08:18
Barium	< 4.76	mg/Kg		11/3/2022 08:18
Cadmium	**0.530**	mg/Kg		11/3/2022 08:18
Chromium	**1.42**	mg/Kg		11/3/2022 08:18
Cobalt	< 2.38	mg/Kg		11/3/2022 08:18
Copper	**2.78**	mg/Kg		11/3/2022 08:18

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01	**Date Sampled:** 10/25/2022 8:30	
Matrix:	Solid	**Date Received** 10/25/2022	

Lead	**14.3**	mg/Kg		11/3/2022	08:18
Manganese	**42.5**	mg/Kg		11/3/2022	08:18
Molybdenum	< 1.19	mg/Kg		11/3/2022	08:18
Nickel	< 1.90	mg/Kg		11/3/2022	08:18
Selenium	**3.03**	mg/Kg		11/3/2022	08:18
Silver	< 0.476	mg/Kg		11/3/2022	08:18
Sulfur	**37100**	mg/Kg	A	10/31/2022	08:11
Tin	<2.50	mg/Kg	F	11/2/2022	
Zinc	**108**	mg/Kg		11/7/2022	10:27

Sulfur result taken from 10/27/22 digestion.
Tin analyzed by 10709 on 11/2/2022.

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 11/2/2022
Data File: 221103A

Paint Filter Test

Analyte	Result	Units	Qualifier	Date Analyzed
Paint Filter Test	Pass	N/A		11/2/2022

Method Reference(s): EPA 9095B

Percent Moisture

Analyte	Result	Units	Qualifier	Date Analyzed
Percent Moisture	**23.8**	%		11/1/2022

Method Reference(s): SM 2540 B

ELAP does not offer this test for approval as part of their laboratory certification program.

Reactive Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Reactivity, Cyanide	<0.9	mg/Kg		11/1/2022

Method Reference(s): EPA 7.3.3.2
Subcontractor ELAP ID: 10709

ELAP does not offer this test for approval as part of their laboratory certification program.
This sample has been reported as received.

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01	**Date Sampled:**	10/25/2022 8:30
Matrix:	Solid	**Date Received**	10/25/2022

Reactive Sulfide

Analyte	Result	Units	Qualifier	Date Analyzed
Reactivity, Sulfide	**18.0**	mg/Kg		11/1/2022

Method Reference(s): EPA 7.3.4.2
Subcontractor ELAP ID: 10709
ELAP does not offer this test for approval as part of their laboratory certification program.
This sample has been reported as received.

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 2180000	ug/Kg		11/2/2022 22:05
1,2,4,5-Tetrachlorobenzene	< 2180000	ug/Kg		11/2/2022 22:05
1,2,4-Trichlorobenzene	< 2180000	ug/Kg		11/2/2022 22:05
1,2-Dichlorobenzene	< 2180000	ug/Kg		11/2/2022 22:05
1,3-Dichlorobenzene	< 2180000	ug/Kg		11/2/2022 22:05
1,4-Dichlorobenzene	< 2180000	ug/Kg		11/2/2022 22:05
2,2-Oxybis (1-chloropropane)	< 2180000	ug/Kg		11/2/2022 22:05
2,3,4,6-Tetrachlorophenol	< 2180000	ug/Kg		11/2/2022 22:05
2,4,5-Trichlorophenol	< 2180000	ug/Kg		11/2/2022 22:05
2,4,6-Trichlorophenol	< 2180000	ug/Kg		11/2/2022 22:05
2,4-Dichlorophenol	< 2180000	ug/Kg		11/2/2022 22:05
2,4-Dimethylphenol	< 2180000	ug/Kg		11/2/2022 22:05
2,4-Dinitrophenol	< 8730000	ug/Kg		11/2/2022 22:05
2,4-Dinitrotoluene	< 2180000	ug/Kg		11/2/2022 22:05
2,6-Dinitrotoluene	< 2180000	ug/Kg		11/2/2022 22:05
2-Chloronaphthalene	< 2180000	ug/Kg		11/2/2022 22:05
2-Chlorophenol	< 2180000	ug/Kg		11/2/2022 22:05
2-Methylnapthalene	**3180000**	ug/Kg		11/2/2022 22:05
2-Methylphenol	< 2180000	ug/Kg		11/2/2022 22:05
2-Nitroaniline	< 2180000	ug/Kg		11/2/2022 22:05
2-Nitrophenol	< 2180000	ug/Kg		11/2/2022 22:05

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier: PV10-WOOD-10252022, K143
Lab Sample ID: 225099-01 **Date Sampled:** 10/25/2022 8:30
Matrix: Solid **Date Received** 10/25/2022

3&4-Methylphenol	< 2180000	ug/Kg	11/2/2022 22:05
3,3'-Dichlorobenzidine	< 2180000	ug/Kg	11/2/2022 22:05
3-Nitroaniline	< 2180000	ug/Kg	11/2/2022 22:05
4,6-Dinitro-2-methylphenol	< 2920000	ug/Kg	11/2/2022 22:05
4-Bromophenyl phenyl ether	< 2180000	ug/Kg	11/2/2022 22:05
4-Chloro-3-methylphenol	< 2180000	ug/Kg	11/2/2022 22:05
4-Chloroaniline	< 2180000	ug/Kg	11/2/2022 22:05
4-Chlorophenyl phenyl ether	< 2180000	ug/Kg	11/2/2022 22:05
4-Nitroaniline	< 2180000	ug/Kg	11/2/2022 22:05
4-Nitrophenol	< 2180000	ug/Kg	11/2/2022 22:05
Acenaphthene	< 2180000	ug/Kg	11/2/2022 22:05
Acenaphthylene	< 2180000	ug/Kg	11/2/2022 22:05
Acetophenone	< 2180000	ug/Kg	11/2/2022 22:05
Anthracene	< 2180000	ug/Kg	11/2/2022 22:05
Atrazine	< 2180000	ug/Kg	11/2/2022 22:05
Benzaldehyde	< 2180000	ug/Kg	11/2/2022 22:05
Benzo (a) anthracene	< 2180000	ug/Kg	11/2/2022 22:05
Benzo (a) pyrene	< 2180000	ug/Kg	11/2/2022 22:05
Benzo (b) fluoranthene	< 2180000	ug/Kg	11/2/2022 22:05
Benzo (g,h,i) perylene	< 2180000	ug/Kg	11/2/2022 22:05
Benzo (k) fluoranthene	< 2180000	ug/Kg	11/2/2022 22:05
Bis (2-chloroethoxy) methane	< 2180000	ug/Kg	11/2/2022 22:05
Bis (2-chloroethyl) ether	< 2180000	ug/Kg	11/2/2022 22:05
Bis (2-ethylhexyl) phthalate	< 2180000	ug/Kg	11/2/2022 22:05
Butylbenzylphthalate	< 2180000	ug/Kg	11/2/2022 22:05
Caprolactam	< 2180000	ug/Kg	11/2/2022 22:05
Carbazole	< 2180000	ug/Kg	11/2/2022 22:05
Chrysene	< 2180000	ug/Kg	11/2/2022 22:05
Dibenz (a,h) anthracene	< 2180000	ug/Kg	11/2/2022 22:05
Dibenzofuran	< 2180000	ug/Kg	11/2/2022 22:05

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier: PV10-WOOD-10252022, K143

Lab Sample ID: 225099-01 **Date Sampled:** 10/25/2022 8:30

Matrix: Solid **Date Received** 10/25/2022

Diethyl phthalate	< 2180000	ug/Kg	11/2/2022 22:05
Dimethyl phthalate	< 2180000	ug/Kg	11/2/2022 22:05
Di-n-butyl phthalate	< 2180000	ug/Kg	11/2/2022 22:05
Di-n-octylphthalate	< 2180000	ug/Kg	11/2/2022 22:05
Fluoranthene	< 2180000	ug/Kg	11/2/2022 22:05
Fluorene	< 2180000	ug/Kg	11/2/2022 22:05
Hexachlorobenzene	< 2180000	ug/Kg	11/2/2022 22:05
Hexachlorobutadiene	< 2180000	ug/Kg	11/2/2022 22:05
Hexachlorocyclopentadiene	< 8730000	ug/Kg	11/2/2022 22:05
Hexachloroethane	< 2180000	ug/Kg	11/2/2022 22:05
Indeno (1,2,3-cd) pyrene	< 2180000	ug/Kg	11/2/2022 22:05
Isophorone	< 2180000	ug/Kg	11/2/2022 22:05
Naphthalene	**35400000**	ug/Kg	11/2/2022 22:05
Nitrobenzene	< 2180000	ug/Kg	11/2/2022 22:05
N-Nitroso-di-n-propylamine	< 2180000	ug/Kg	11/2/2022 22:05
N-Nitrosodiphenylamine	< 2180000	ug/Kg	11/2/2022 22:05
Pentachlorophenol	< 4360000	ug/Kg	11/2/2022 22:05
Phenanthrene	< 2180000	ug/Kg	11/2/2022 22:05
Phenol	< 2180000	ug/Kg	11/2/2022 22:05
Pyrene	< 2180000	ug/Kg	11/2/2022 22:05
Pyridine	< 2180000	ug/Kg	11/2/2022 22:05

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier: PV10-WOOD-10252022, K143
Lab Sample ID: 225099-01 **Date Sampled:** 10/25/2022 8:30
Matrix: Solid **Date Received** 10/25/2022

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	NC	35.4 - 92.4		11/2/2022 22:05
2-Fluorobiphenyl	NC	39.6 - 84.4		11/2/2022 22:05
2-Fluorophenol	NC	35.5 - 78.9		11/2/2022 22:05
Nitrobenzene-d5	NC	36.5 - 78.2		11/2/2022 22:05
Phenol-d5	NC	37.1 - 78.3		11/2/2022 22:05
Terphenyl-d14	NC	42.3 - 103		11/2/2022 22:05

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 10/31/2022
Data File: B64680.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 93500	ug/Kg		10/28/2022 18:20
1,1,2,2-Tetrachloroethane	< 93500	ug/Kg		10/28/2022 18:20
1,1,2-Trichloroethane	< 93500	ug/Kg		10/28/2022 18:20
1,1-Dichloroethane	< 93500	ug/Kg		10/28/2022 18:20
1,1-Dichloroethene	< 93500	ug/Kg		10/28/2022 18:20
1,2,3-Trichlorobenzene	< 234000	ug/Kg		10/28/2022 18:20
1,2,4-Trichlorobenzene	< 234000	ug/Kg		10/28/2022 18:20
1,2-Dibromo-3-Chloropropane	< 467000	ug/Kg		10/28/2022 18:20
1,2-Dibromoethane	< 93500	ug/Kg		10/28/2022 18:20
1,2-Dichlorobenzene	< 93500	ug/Kg		10/28/2022 18:20
1,2-Dichloroethane	< 93500	ug/Kg		10/28/2022 18:20
1,2-Dichloropropane	< 93500	ug/Kg		10/28/2022 18:20
1,3-Dichlorobenzene	< 93500	ug/Kg		10/28/2022 18:20
1,4-Dichlorobenzene	< 93500	ug/Kg		10/28/2022 18:20
1,4-Dioxane	< 467000	ug/Kg		10/28/2022 18:20
2-Butanone	< 467000	ug/Kg		10/28/2022 18:20
2-Hexanone	< 234000	ug/Kg		10/28/2022 18:20
4-Methyl-2-pentanone	< 234000	ug/Kg		10/28/2022 18:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier: PV10-WOOD-10252022, K143
Lab Sample ID: 225099-01 **Date Sampled:** 10/25/2022 8:30
Matrix: Solid **Date Received** 10/25/2022

Acetone	< 467000	ug/Kg	10/28/2022	18:20
Benzene	< 93500	ug/Kg	10/28/2022	18:20
Bromochloromethane	< 234000	ug/Kg	10/28/2022	18:20
Bromodichloromethane	< 93500	ug/Kg	10/28/2022	18:20
Bromoform	< 234000	ug/Kg	10/28/2022	18:20
Bromomethane	< 93500	ug/Kg	10/28/2022	18:20
Carbon disulfide	< 93500	ug/Kg	10/28/2022	18:20
Carbon Tetrachloride	< 93500	ug/Kg	10/28/2022	18:20
Chlorobenzene	< 93500	ug/Kg	10/28/2022	18:20
Chloroethane	< 93500	ug/Kg	10/28/2022	18:20
Chloroform	< 93500	ug/Kg	10/28/2022	18:20
Chloromethane	< 93500	ug/Kg	10/28/2022	18:20
cis-1,2-Dichloroethene	< 93500	ug/Kg	10/28/2022	18:20
cis-1,3-Dichloropropene	< 93500	ug/Kg	10/28/2022	18:20
Cyclohexane	< 467000	ug/Kg	10/28/2022	18:20
Dibromochloromethane	< 93500	ug/Kg	10/28/2022	18:20
Dichlorodifluoromethane	< 93500	ug/Kg	10/28/2022	18:20
Ethylbenzene	< 93500	ug/Kg	10/28/2022	18:20
Freon 113	< 93500	ug/Kg	10/28/2022	18:20
Isopropylbenzene	< 93500	ug/Kg	10/28/2022	18:20
m,p-Xylene	**210000**	ug/Kg	10/28/2022	18:20
Methyl acetate	< 93500	ug/Kg	10/28/2022	18:20
Methyl tert-butyl Ether	< 93500	ug/Kg	10/28/2022	18:20
Methylcyclohexane	< 93500	ug/Kg	10/28/2022	18:20
Methylene chloride	< 234000	ug/Kg	10/28/2022	18:20
o-Xylene	< 93500	ug/Kg	10/28/2022	18:20
Styrene	< 234000	ug/Kg	10/28/2022	18:20
Tetrachloroethene	< 93500	ug/Kg	10/28/2022	18:20
Toluene	< 93500	ug/Kg	10/28/2022	18:20
trans-1,2-Dichloroethene	< 93500	ug/Kg	10/28/2022	18:20

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier: PV10-WOOD-10252022, K143
Lab Sample ID: 225099-01 **Date Sampled:** 10/25/2022 8:30
Matrix: Solid **Date Received** 10/25/2022

trans-1,3-Dichloropropene	< 93500	ug/Kg			10/28/2022 18:20
Trichloroethene	< 93500	ug/Kg			10/28/2022 18:20
Trichlorofluoromethane	< 93500	ug/Kg			10/28/2022 18:20
Vinyl chloride	< 93500	ug/Kg			10/28/2022 18:20

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**98.4**	74.7 - 140		10/28/2022 18:20
4-Bromofluorobenzene	**100**	68 - 130		10/28/2022 18:20
Pentafluorobenzene	**102**	70.3 - 140		10/28/2022 18:20
Toluene-D8	**101**	69 - 138		10/28/2022 18:20

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: z13059.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01A	**Date Sampled:**	10/25/2022 8:30
Matrix:	TCLP Extract	**Date Received**	10/25/2022

TCLP Semi-Volatile Organics

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
1,4-Dichlorobenzene	< 40.0	ug/L	7500		10/28/2022 17:43
2,4,5-Trichlorophenol	< 40.0	ug/L	400000		10/28/2022 17:43
2,4,6-Trichlorophenol	< 40.0	ug/L	2000		10/28/2022 17:43
2,4-Dinitrotoluene	< 40.0	ug/L	130		10/28/2022 17:43
Cresols (as m,p,o-Cresol)	**679**	ug/L	200000		10/28/2022 17:43
Hexachlorobenzene	< 40.0	ug/L	130		10/28/2022 17:43
Hexachlorobutadiene	< 40.0	ug/L	500		10/28/2022 17:43
Hexachloroethane	< 40.0	ug/L	3000		10/28/2022 17:43
Nitrobenzene	< 40.0	ug/L	2000		10/28/2022 17:43
Pentachlorophenol	< 80.0	ug/L	100000		10/28/2022 17:43
Pyridine	**477**	ug/L	5000		10/28/2022 17:43

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	**83.2**	29.6 - 139		10/28/2022 17:43
2-Fluorobiphenyl	**68.2**	10 - 124		10/28/2022 17:43
2-Fluorophenol	**69.5**	10 - 122		10/28/2022 17:43
Nitrobenzene-d5	**97.6**	28.7 - 119		10/28/2022 17:43
Phenol-d5	**71.3**	10 - 115		10/28/2022 17:43
Terphenyl-d14	**88.8**	32.2 - 142		10/28/2022 17:43

Method Reference(s): EPA 8270D
EPA 1311 / 3510C
Preparation Date: 10/27/2022
Data File: B64583.D

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	**0.00901**	mg/L	0.2		10/31/2022 16:03

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 10/28/2022
Data File: Hg221031A

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01A	**Date Sampled:**	10/25/2022 8:30
Matrix:	TCLP Extract	**Date Received**	10/25/2022

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.500	mg/L	5		11/1/2022 15:13
Barium	< 0.500	mg/L	100		11/1/2022 15:13
Cadmium	< 0.0250	mg/L	1		11/1/2022 15:13
Chromium	< 0.500	mg/L	5		11/1/2022 15:13
Lead	< 0.500	mg/L	5		11/1/2022 15:13
Selenium	< 0.200	mg/L	1		11/1/2022 15:13
Silver	< 0.500	mg/L	5		11/1/2022 15:13

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 10/27/2022
Data File: 221101B

TCLP Volatile Organics

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
1,1-Dichloroethene	< 100	ug/L	700		10/27/2022 19:14
1,2-Dichloroethane	< 100	ug/L	500		10/27/2022 19:14
2-Butanone	< 500	ug/L	200000		10/27/2022 19:14
Benzene	**142**	ug/L	500		10/27/2022 19:14
Carbon Tetrachloride	< 100	ug/L	500		10/27/2022 19:14
Chlorobenzene	< 100	ug/L	100000		10/27/2022 19:14
Chloroform	< 100	ug/L	6000		10/27/2022 19:14
Tetrachloroethene	< 100	ug/L	700		10/27/2022 19:14
Trichloroethene	< 100	ug/L	500		10/27/2022 19:14
Vinyl chloride	< 100	ug/L	200		10/27/2022 19:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 225099

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Sample Identifier:	PV10-WOOD-10252022, K143		
Lab Sample ID:	225099-01A	**Date Sampled:**	10/25/2022 8:30
Matrix:	TCLP Extract	**Date Received**	10/25/2022

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**100**	81.1 - 136		10/27/2022 19:14
4-Bromofluorobenzene	**99.2**	75.8 - 132		10/27/2022 19:14
Pentafluorobenzene	**105**	82 - 132		10/27/2022 19:14
Toluene-D8	**106**	64.6 - 137		10/27/2022 19:14

Method Reference(s): EPA 8260C
EPA 1311 / 5030C

Data File: z13029.D

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00762	mg/Kg		11/3/2022 13:55

Method Reference(s): EPA 7471B
Preparation Date: 11/3/2022
Data File: Hg221103D
QC Batch ID: QC221103HgSoil
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0725	0.0778	mg/Kg	0.0717	0.0800	98.9	103	80 - 120			3.82	20		11/3/2022

Method Reference(s): EPA 7471B
Preparation Date: 11/3/2022
Data File: Hg221103D
QC Number: 1
QC Batch ID: QC221103HgSoil

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Report Prepared Monday, November 7, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00200	mg/L		10/31/2022 15:24

Method Reference(s): EPA 7470A
Preparation Date: 10/28/2022
Data File: Hg221031A
QC Batch ID: QC221028HgTCLP
QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0200	0.0200	mg/L	0.0210	0.0210	105	105	80 - 120			0.105	20		10/31/2022

Method Reference(s): EPA 7470A
Preparation Date: 10/28/2022
Data File: Hg221031A
QC Number: 1
QC Batch ID: QC221028HgTCLP

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Report Prepared Thursday, November 3, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Metals

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.467	mg/Kg		11/3/2022	08:04
Barium	<4.67	mg/Kg		11/3/2022	08:04
Cadmium	<0.234	mg/Kg		11/3/2022	08:04
Chromium	<0.467	mg/Kg		11/3/2022	08:04
Cobalt	<2.34	mg/Kg		11/3/2022	08:04
Copper	<0.935	mg/Kg		11/3/2022	08:04
Lead	<0.467	mg/Kg		11/3/2022	08:04
Manganese	<0.701	mg/Kg		11/3/2022	08:04
Molybdenum	<1.17	mg/Kg		11/3/2022	08:04
Nickel	<1.87	mg/Kg		11/3/2022	08:04
Selenium	<0.935	mg/Kg		11/3/2022	08:04
Silver	<0.467	mg/Kg		11/3/2022	08:04
Sulfur	<23.4	mg/Kg		10/31/2022	07:45
Zinc	<2.80	mg/Kg		11/7/2022	09:56

Sulfur result taken from 10/27/22 digestion

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 11/2/2022

Data File: 221103A

QC Batch ID: QC221102Soil

QC Number: Blk 1

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PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	118	123	mg/Kg	111	113	94.5	92.2	80 - 120			2.37	20		11/3/2022
Barium	118	123	mg/Kg	125	127	106	104	80 - 120			2.29	20		11/3/2022
Cadmium	47.2	49.0	mg/Kg	47.9	48.5	101	98.9	80 - 120			2.63	20		11/3/2022
Chromium	118	123	mg/Kg	118	120	99.9	97.6	80 - 120			2.33	20		11/3/2022
Cobalt	47.2	49.0	mg/Kg	47.6	48.3	101	98.6	80 - 120			2.43	20		11/3/2022
Copper	118	123	mg/Kg	117	122	99.5	99.5	80 - 120			0.0577	20		11/3/2022
Lead	118	123	mg/Kg	114	117	96.8	95.6	80 - 120			1.21	20		11/3/2022
Manganese	47.2	49.0	mg/Kg	48.9	50.6	104	103	80 - 120			0.520	20		11/3/2022
Molybdenum	118	123	mg/Kg	115	118	97.4	96.5	80 - 120			0.990	20		11/3/2022
Nickel	236	245	mg/Kg	228	233	96.5	95.1	80 - 120			1.50	20		11/3/2022
Selenium	118	123	mg/Kg	106	109	90.2	89.0	80 - 120			1.43	20		11/3/2022
Silver	11.8	12.3	mg/Kg	11.0	11.2	93.1	91.5	80 - 120			1.77	20		11/3/2022
Zinc	118	123	mg/Kg	114	114	96.4	92.7	80 - 120			3.89	20		11/7/2022

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Report Prepared Monday, November 7, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 11/2/2022

Data File: 221103A

QC Number: 1

QC Batch ID: QC221102Soil

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Report Prepared Monday, November 7, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/L		10/31/2022	18:33
Barium	<0.500	mg/L		10/31/2022	18:33
Cadmium	<0.0250	mg/L		10/31/2022	18:33
Chromium	<0.500	mg/L		10/31/2022	18:33
Lead	<0.500	mg/L		10/31/2022	18:33
Selenium	<0.200	mg/L		10/31/2022	18:33
Silver	<0.500	mg/L		10/31/2022	18:33

Method Reference(s): EPA 6010C
EPA 3005
Preparation Date: 10/27/2022
Data File: 221031C
QC Batch ID: QC221027TCLP
QC Number: Blk 1

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PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	12.5	12.5	mg/L	13.7	13.8	110	110	80 - 120			0.724	20		10/31/2022
Barium	12.5	12.5	mg/L	13.4	13.3	107	107	80 - 120			0.371	20		10/31/2022
Cadmium	5.00	5.00	mg/L	5.38	5.36	108	107	80 - 120			0.280	20		10/31/2022
Chromium	12.5	12.5	mg/L	12.8	12.7	102	102	80 - 120			0.678	20		10/31/2022
Lead	12.5	12.5	mg/L	13.1	13.1	105	105	80 - 120			0.0720	20		10/31/2022
Selenium	12.5	12.5	mg/L	13.2	13.4	106	107	80 - 120			1.13	20		10/31/2022
Silver	1.25	1.25	mg/L	1.28	1.27	103	102	80 - 120			0.682	20		10/31/2022

Method Reference(s): EPA 6010C
EPA 3005

Preparation Date: 10/27/2022

Data File: 221031C

QC Number: 1

QC Batch ID: QC221027TCLP

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Report Prepared Thursday, November 3, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1-Biphenyl	<278	ug/Kg		11/1/2022	13:00
1,2,4,5-Tetrachlorobenzene	<278	ug/Kg		11/1/2022	13:00
1,2,4-Trichlorobenzene	<278	ug/Kg		11/1/2022	13:00
1,2-Dichlorobenzene	<278	ug/Kg		11/1/2022	13:00
1,3-Dichlorobenzene	<278	ug/Kg		11/1/2022	13:00
1,4-Dichlorobenzene	<278	ug/Kg		11/1/2022	13:00
2,2-Oxybis (1-chloropropane)	<278	ug/Kg		11/1/2022	13:00
2,3,4,6-Tetrachlorophenol	<278	ug/Kg		11/1/2022	13:00
2,4,5-Trichlorophenol	<278	ug/Kg		11/1/2022	13:00
2,4,6-Trichlorophenol	<278	ug/Kg		11/1/2022	13:00
2,4-Dichlorophenol	<278	ug/Kg		11/1/2022	13:00
2,4-Dimethylphenol	<278	ug/Kg		11/1/2022	13:00
2,4-Dinitrophenol	<1110	ug/Kg		11/1/2022	13:00
2,4-Dinitrotoluene	<278	ug/Kg		11/1/2022	13:00
2,6-Dinitrotoluene	<278	ug/Kg		11/1/2022	13:00
2-Chloronaphthalene	<278	ug/Kg		11/1/2022	13:00
2-Chlorophenol	<278	ug/Kg		11/1/2022	13:00
2-Methylnapthalene	<278	ug/Kg		11/1/2022	13:00
2-Methylphenol	<278	ug/Kg		11/1/2022	13:00
2-Nitroaniline	<278	ug/Kg		11/1/2022	13:00
2-Nitrophenol	<278	ug/Kg		11/1/2022	13:00
3&4-Methylphenol	<278	ug/Kg		11/1/2022	13:00
3,3'-Dichlorobenzidine	<278	ug/Kg		11/1/2022	13:00
3-Nitroaniline	<278	ug/Kg		11/1/2022	13:00
4,6-Dinitro-2-methylphenol	<556	ug/Kg		11/1/2022	13:00
4-Bromophenyl phenyl ether	<278	ug/Kg		11/1/2022	13:00
4-Chloro-3-methylphenol	<278	ug/Kg		11/1/2022	13:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**
Project Reference: PV-10 Wood
Lab Project ID: 225099
Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
4-Chloroaniline	<278	ug/Kg		11/1/2022	13:00
4-Chlorophenyl phenyl ether	<278	ug/Kg		11/1/2022	13:00
4-Nitroaniline	<278	ug/Kg		11/1/2022	13:00
4-Nitrophenol	<278	ug/Kg		11/1/2022	13:00
Acenaphthene	<278	ug/Kg		11/1/2022	13:00
Acenaphthylene	<278	ug/Kg		11/1/2022	13:00
Acetophenone	<278	ug/Kg		11/1/2022	13:00
Anthracene	<278	ug/Kg		11/1/2022	13:00
Atrazine	<278	ug/Kg		11/1/2022	13:00
Benzaldehyde	<278	ug/Kg		11/1/2022	13:00
Benzo (a) anthracene	<278	ug/Kg		11/1/2022	13:00
Benzo (a) pyrene	<278	ug/Kg		11/1/2022	13:00
Benzo (b) fluoranthene	<278	ug/Kg		11/1/2022	13:00
Benzo (g,h,i) perylene	<278	ug/Kg		11/1/2022	13:00
Benzo (k) fluoranthene	<278	ug/Kg		11/1/2022	13:00
Bis (2-chloroethoxy) methane	<278	ug/Kg		11/1/2022	13:00
Bis (2-chloroethyl) ether	<278	ug/Kg		11/1/2022	13:00
Bis (2-ethylhexyl) phthalate	<278	ug/Kg		11/1/2022	13:00
Butylbenzylphthalate	<278	ug/Kg		11/1/2022	13:00
Caprolactam	<278	ug/Kg		11/1/2022	13:00
Carbazole	<278	ug/Kg		11/1/2022	13:00
Chrysene	<278	ug/Kg		11/1/2022	13:00
Dibenz (a,h) anthracene	<278	ug/Kg		11/1/2022	13:00
Dibenzofuran	<278	ug/Kg		11/1/2022	13:00
Diethyl phthalate	<278	ug/Kg		11/1/2022	13:00
Dimethyl phthalate	<278	ug/Kg		11/1/2022	13:00
Di-n-butyl phthalate	<278	ug/Kg		11/1/2022	13:00
Di-n-octylphthalate	<278	ug/Kg		11/1/2022	13:00

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
Fluoranthene	<278	ug/Kg		11/1/2022	13:00
Fluorene	<278	ug/Kg		11/1/2022	13:00
Hexachlorobenzene	<278	ug/Kg		11/1/2022	13:00
Hexachlorobutadiene	<278	ug/Kg		11/1/2022	13:00
Hexachlorocyclopentadiene	<1110	ug/Kg		11/1/2022	13:00
Hexachloroethane	<278	ug/Kg		11/1/2022	13:00
Indeno (1,2,3-cd) pyrene	<278	ug/Kg		11/1/2022	13:00
Isophorone	<278	ug/Kg		11/1/2022	13:00
Naphthalene	<278	ug/Kg		11/1/2022	13:00
Nitrobenzene	<278	ug/Kg		11/1/2022	13:00
N-Nitroso-di-n-propylamine	<278	ug/Kg		11/1/2022	13:00
N-Nitrosodiphenylamine	<278	ug/Kg		11/1/2022	13:00
Pentachlorophenol	<556	ug/Kg		11/1/2022	13:00
Phenanthrene	<278	ug/Kg		11/1/2022	13:00
Phenol	<278	ug/Kg		11/1/2022	13:00
Pyrene	<278	ug/Kg		11/1/2022	13:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**63.8**	35.4 - 92.4		11/1/2022	13:00
2-Fluorobiphenyl	**64.3**	39.6 - 84.4		11/1/2022	13:00
2-Fluorophenol	**59.7**	35.5 - 78.9		11/1/2022	13:00
Nitrobenzene-d5	**63.7**	36.5 - 78.2		11/1/2022	13:00
Phenol-d5	**65.1**	37.1 - 78.3		11/1/2022	13:00
Terphenyl-d14	**70.1**	42.3 - 103		11/1/2022	13:00

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 10/31/2022
Data File: B64626.D
QC Batch ID: QC221031ABNS
QC Number: Blk 1

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PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,2,4-Trichlorobenzene	2700	ug/Kg	1800	66.5	36.4 - 88		11/1/2022
1,4-Dichlorobenzene	2700	ug/Kg	1640	60.6	34.3 - 78.9		11/1/2022
2,3,4,6-Tetrachlorophenol	4050	ug/Kg	3000	73.9	46.4 - 92.2		11/1/2022
2,4,6-Trichlorophenol	4050	ug/Kg	3070	75.8	52.9 - 95.9		11/1/2022
2,4-Dichlorophenol	4050	ug/Kg	3020	74.5	51.6 - 88.4		11/1/2022
2,4-Dimethylphenol	4050	ug/Kg	3300	81.3	31.6 - 87.8		11/1/2022
2,4-Dinitrophenol	4050	ug/Kg	1620	40.0	8.16 - 97		11/1/2022
2,4-Dinitrotoluene	2700	ug/Kg	1910	70.6	40.2 - 99.7		11/1/2022
2-Chlorophenol	4050	ug/Kg	2820	69.6	49.5 - 80.8		11/1/2022
2-Nitrophenol	4050	ug/Kg	2870	70.8	48.3 - 82.6		11/1/2022
4,6-Dinitro-2-methylphenol	4050	ug/Kg	2680	66.2	27.6 - 96.5		11/1/2022
4-Chloro-3-methylphenol	4050	ug/Kg	3060	75.6	52.2 - 87.8		11/1/2022
4-Nitrophenol	4050	ug/Kg	3120	77.0	23.3 - 102		11/1/2022
Acenaphthene	2700	ug/Kg	1840	68.0	43.5 - 87.2		11/1/2022
N-Nitroso-di-n-propylamine	2700	ug/Kg	1930	71.2	32.6 - 89.2		11/1/2022
Pentachlorophenol	4050	ug/Kg	3230	79.7	41.8 - 107		11/1/2022

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Phenol	4050	ug/Kg	2910	71.9	48.8 - 79.3		11/1/2022
Pyrene	2700	ug/Kg	1980	73.2	47.1 - 104		11/1/2022

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 10/31/2022
Data File: B64627.D
QC Number: LCS 1
QC Batch ID: QC221031ABNS

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Report Prepared Monday, November 7, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Semi-Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,4-Dichlorobenzene	<40.0	ug/L		10/28/2022 13:51
2,4,5-Trichlorophenol	<40.0	ug/L		10/28/2022 13:51
2,4,6-Trichlorophenol	<40.0	ug/L		10/28/2022 13:51
2,4-Dinitrotoluene	<40.0	ug/L		10/28/2022 13:51
Cresols (as m,p,o-Cresol)	<80.0	ug/L		10/28/2022 13:51
Hexachlorobenzene	<40.0	ug/L		10/28/2022 13:51
Hexachlorobutadiene	<40.0	ug/L		10/28/2022 13:51
Hexachloroethane	<40.0	ug/L		10/28/2022 13:51
Nitrobenzene	<40.0	ug/L		10/28/2022 13:51
Pentachlorophenol	<80.0	ug/L		10/28/2022 13:51
Pyridine	<40.0	ug/L		10/28/2022 13:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	**87.7**	29.6 - 139		10/28/2022 13:51
2-Fluorobiphenyl	**51.5**	10 - 124		10/28/2022 13:51
2-Fluorophenol	**71.1**	10 - 122		10/28/2022 13:51
Nitrobenzene-d5	**82.3**	28.7 - 119		10/28/2022 13:51
Phenol-d5	**72.6**	10 - 115		10/28/2022 13:51
Terphenyl-d14	**91.8**	32.2 - 142		10/28/2022 13:51

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 10/27/2022
Data File: B64575.D
QC Batch ID: QC221027ABNT
QC Number: Blk 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Semi-Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,4-Dichlorobenzene	200	ug/L	145	72.4	27.5 - 93.4		10/28/2022
2,4,6-Trichlorophenol	300	ug/L	300	100	50.5 - 126		10/28/2022
2,4-Dinitrotoluene	200	ug/L	184	91.8	55.2 - 112		10/28/2022
Pentachlorophenol	300	ug/L	333	111	26.5 - 160		10/28/2022

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 10/27/2022
Data File: B64576.D
QC Number: LCS 1
QC Batch ID: QC221027ABNT

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, November 3, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**
Project Reference: PV-10 Wood
Lab Project ID: 225099
Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<2.00	ug/Kg		10/28/2022	18:58
1,1,2,2-Tetrachloroethane	<2.00	ug/Kg		10/28/2022	18:58
1,1,2-Trichloroethane	<2.00	ug/Kg		10/28/2022	18:58
1,1-Dichloroethane	<2.00	ug/Kg		10/28/2022	18:58
1,1-Dichloroethene	<2.00	ug/Kg		10/28/2022	18:58
1,2,3-Trichlorobenzene	<5.00	ug/Kg		10/28/2022	18:58
1,2,4-Trichlorobenzene	<5.00	ug/Kg		10/28/2022	18:58
1,2-Dibromo-3-Chloropropane	<10.0	ug/Kg		10/28/2022	18:58
1,2-Dibromoethane	<2.00	ug/Kg		10/28/2022	18:58
1,2-Dichlorobenzene	<2.00	ug/Kg		10/28/2022	18:58
1,2-Dichloroethane	<2.00	ug/Kg		10/28/2022	18:58
1,2-Dichloropropane	<2.00	ug/Kg		10/28/2022	18:58
1,3-Dichlorobenzene	<2.00	ug/Kg		10/28/2022	18:58
1,4-Dichlorobenzene	<2.00	ug/Kg		10/28/2022	18:58
1,4-Dioxane	<10.0	ug/Kg		10/28/2022	18:58
2-Butanone	<10.0	ug/Kg		10/28/2022	18:58
2-Hexanone	<5.00	ug/Kg		10/28/2022	18:58
4-Methyl-2-pentanone	<5.00	ug/Kg		10/28/2022	18:58
Acetone	<10.0	ug/Kg		10/28/2022	18:58
Benzene	<2.00	ug/Kg		10/28/2022	18:58
Bromochloromethane	<5.00	ug/Kg		10/28/2022	18:58
Bromodichloromethane	<2.00	ug/Kg		10/28/2022	18:58
Bromoform	<5.00	ug/Kg		10/28/2022	18:58
Bromomethane	<2.00	ug/Kg		10/28/2022	18:58
Carbon disulfide	<2.00	ug/Kg		10/28/2022	18:58
Carbon Tetrachloride	<2.00	ug/Kg		10/28/2022	18:58
Chlorobenzene	<2.00	ug/Kg		10/28/2022	18:58

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Chloroethane	<2.00	ug/Kg		10/28/2022 18:58
Chloroform	<2.00	ug/Kg		10/28/2022 18:58
Chloromethane	<2.00	ug/Kg		10/28/2022 18:58
cis-1,2-Dichloroethene	<2.00	ug/Kg		10/28/2022 18:58
cis-1,3-Dichloropropene	<2.00	ug/Kg		10/28/2022 18:58
Cyclohexane	<10.0	ug/Kg		10/28/2022 18:58
Dibromochloromethane	<2.00	ug/Kg		10/28/2022 18:58
Dichlorodifluoromethane	<2.00	ug/Kg		10/28/2022 18:58
Ethylbenzene	<2.00	ug/Kg		10/28/2022 18:58
Freon 113	<2.00	ug/Kg		10/28/2022 18:58
Isopropylbenzene	<2.00	ug/Kg		10/28/2022 18:58
m,p-Xylene	<2.00	ug/Kg		10/28/2022 18:58
Methyl acetate	<2.00	ug/Kg		10/28/2022 18:58
Methyl tert-butyl Ether	<2.00	ug/Kg		10/28/2022 18:58
Methylcyclohexane	<2.00	ug/Kg		10/28/2022 18:58
Methylene chloride	<5.00	ug/Kg		10/28/2022 18:58
o-Xylene	<2.00	ug/Kg		10/28/2022 18:58
Styrene	<5.00	ug/Kg		10/28/2022 18:58
Tetrachloroethene	<2.00	ug/Kg		10/28/2022 18:58
Toluene	<2.00	ug/Kg		10/28/2022 18:58
trans-1,2-Dichloroethene	<2.00	ug/Kg		10/28/2022 18:58
trans-1,3-Dichloropropene	<2.00	ug/Kg		10/28/2022 18:58
Trichloroethene	<2.00	ug/Kg		10/28/2022 18:58
Trichlorofluoromethane	<2.00	ug/Kg		10/28/2022 18:58
Vinyl chloride	<2.00	ug/Kg		10/28/2022 18:58

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.2**	74.7 - 140		10/28/2022 18:58
4-Bromofluorobenzene	**98.6**	68 - 130		10/28/2022 18:58
Pentafluorobenzene	**101**	70.3 - 140		10/28/2022 18:58
Toluene-D8	**104**	69 - 138		10/28/2022 18:58

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z13061.D

QC Batch ID: voainv221028

QC Number: Blk 1

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<1000	ug/Kg		10/28/2022	19:18
1,1,2,2-Tetrachloroethane	<1000	ug/Kg		10/28/2022	19:18
1,1,2-Trichloroethane	<1000	ug/Kg		10/28/2022	19:18
1,1-Dichloroethane	<1000	ug/Kg		10/28/2022	19:18
1,1-Dichloroethene	<1000	ug/Kg		10/28/2022	19:18
1,2,3-Trichlorobenzene	<2500	ug/Kg		10/28/2022	19:18
1,2,4-Trichlorobenzene	<2500	ug/Kg		10/28/2022	19:18
1,2-Dibromo-3-Chloropropane	<5000	ug/Kg		10/28/2022	19:18
1,2-Dibromoethane	<1000	ug/Kg		10/28/2022	19:18
1,2-Dichlorobenzene	<1000	ug/Kg		10/28/2022	19:18
1,2-Dichloroethane	<1000	ug/Kg		10/28/2022	19:18
1,2-Dichloropropane	<1000	ug/Kg		10/28/2022	19:18
1,3-Dichlorobenzene	<1000	ug/Kg		10/28/2022	19:18
1,4-Dichlorobenzene	<1000	ug/Kg		10/28/2022	19:18
1,4-Dioxane	<5000	ug/Kg		10/28/2022	19:18
2-Butanone	<5000	ug/Kg		10/28/2022	19:18
2-Hexanone	<2500	ug/Kg		10/28/2022	19:18
4-Methyl-2-pentanone	<2500	ug/Kg		10/28/2022	19:18
Acetone	<5000	ug/Kg		10/28/2022	19:18
Benzene	<1000	ug/Kg		10/28/2022	19:18
Bromochloromethane	<2500	ug/Kg		10/28/2022	19:18
Bromodichloromethane	<1000	ug/Kg		10/28/2022	19:18
Bromoform	<2500	ug/Kg		10/28/2022	19:18
Bromomethane	<1000	ug/Kg		10/28/2022	19:18
Carbon disulfide	<1000	ug/Kg		10/28/2022	19:18
Carbon Tetrachloride	<1000	ug/Kg		10/28/2022	19:18
Chlorobenzene	<1000	ug/Kg		10/28/2022	19:18
Chloroethane	<1000	ug/Kg		10/28/2022	19:18

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroform	<1000	ug/Kg		10/28/2022	19:18
Chloromethane	<1000	ug/Kg		10/28/2022	19:18
cis-1,2-Dichloroethene	<1000	ug/Kg		10/28/2022	19:18
cis-1,3-Dichloropropene	<1000	ug/Kg		10/28/2022	19:18
Cyclohexane	<5000	ug/Kg		10/28/2022	19:18
Dibromochloromethane	<1000	ug/Kg		10/28/2022	19:18
Dichlorodifluoromethane	<1000	ug/Kg		10/28/2022	19:18
Ethylbenzene	<1000	ug/Kg		10/28/2022	19:18
Freon 113	<1000	ug/Kg		10/28/2022	19:18
Isopropylbenzene	<1000	ug/Kg		10/28/2022	19:18
m,p-Xylene	<1000	ug/Kg		10/28/2022	19:18
Methyl acetate	<1000	ug/Kg		10/28/2022	19:18
Methyl tert-butyl Ether	<1000	ug/Kg		10/28/2022	19:18
Methylcyclohexane	<1000	ug/Kg		10/28/2022	19:18
Methylene chloride	<2500	ug/Kg		10/28/2022	19:18
o-Xylene	<1000	ug/Kg		10/28/2022	19:18
Styrene	<2500	ug/Kg		10/28/2022	19:18
Tetrachloroethene	<1000	ug/Kg		10/28/2022	19:18
Toluene	<1000	ug/Kg		10/28/2022	19:18
trans-1,2-Dichloroethene	<1000	ug/Kg		10/28/2022	19:18
trans-1,3-Dichloropropene	<1000	ug/Kg		10/28/2022	19:18
Trichloroethene	<1000	ug/Kg		10/28/2022	19:18
Trichlorofluoromethane	<1000	ug/Kg		10/28/2022	19:18
Vinyl chloride	<1000	ug/Kg		10/28/2022	19:18

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**98.9**	74.7 - 140		10/28/2022 19:18
4-Bromofluorobenzene	**95.2**	68 - 130		10/28/2022 19:18
Pentafluorobenzene	**98.8**	70.3 - 140		10/28/2022 19:18
Toluene-D8	**100**	69 - 138		10/28/2022 19:18

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z13062.D

QC Batch ID: voainv221028

QC Number: Blk 2

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1,1-Trichloroethane	20.0	ug/Kg	17.8	88.8	70.9 - 135		10/28/2022
1,1,2,2-Tetrachloroethane	20.0	ug/Kg	20.2	101	31.6 - 154		10/28/2022
1,1,2-Trichloroethane	20.0	ug/Kg	17.9	89.3	62 - 132		10/28/2022
1,1-Dichloroethane	20.0	ug/Kg	18.4	92.2	73 - 128		10/28/2022
1,1-Dichloroethene	20.0	ug/Kg	17.6	88.0	61.7 - 119		10/28/2022
1,2-Dichlorobenzene	20.0	ug/Kg	19.9	99.7	61 - 118		10/28/2022
1,2-Dichloroethane	20.0	ug/Kg	18.7	93.4	73.4 - 123		10/28/2022
1,2-Dichloropropane	20.0	ug/Kg	18.4	91.9	71.3 - 123		10/28/2022
1,3-Dichlorobenzene	20.0	ug/Kg	19.4	96.8	68.7 - 112		10/28/2022
1,4-Dichlorobenzene	20.0	ug/Kg	19.5	97.5	66.9 - 113		10/28/2022
Benzene	20.0	ug/Kg	19.1	95.4	77.8 - 119		10/28/2022
Bromodichloromethane	20.0	ug/Kg	18.8	94.0	65.7 - 125		10/28/2022
Bromoform	20.0	ug/Kg	17.8	88.8	54.7 - 130		10/28/2022
Bromomethane	20.0	ug/Kg	18.9	94.5	44.6 - 167		10/28/2022
Carbon Tetrachloride	20.0	ug/Kg	18.4	91.8	61.8 - 138		10/28/2022
Chlorobenzene	20.0	ug/Kg	20.1	101	77.2 - 108		10/28/2022

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Report Prepared *Thursday, November 3, 2022*

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Chloroethane	20.0	ug/Kg	18.5	92.6	55.5 - 151		10/28/2022
Chloroform	20.0	ug/Kg	18.6	93.0	70.1 - 134		10/28/2022
Chloromethane	20.0	ug/Kg	16.3	81.3	42.4 - 168		10/28/2022
cis-1,3-Dichloropropene	20.0	ug/Kg	17.8	88.9	66.7 - 122		10/28/2022
Dibromochloromethane	20.0	ug/Kg	17.9	89.5	61.2 - 130		10/28/2022
Ethylbenzene	20.0	ug/Kg	19.0	95.1	71.6 - 112		10/28/2022
Methylene chloride	20.0	ug/Kg	19.2	96.0	38.2 - 155		10/28/2022
Tetrachloroethene	20.0	ug/Kg	17.7	88.7	61.4 - 137		10/28/2022
Toluene	20.0	ug/Kg	18.5	92.3	71.1 - 124		10/28/2022
trans-1,2-Dichloroethene	20.0	ug/Kg	18.6	92.9	67.3 - 127		10/28/2022
trans-1,3-Dichloropropene	20.0	ug/Kg	17.8	89.1	55 - 126		10/28/2022
Trichloroethene	20.0	ug/Kg	18.9	94.5	69.3 - 128		10/28/2022
Trichlorofluoromethane	20.0	ug/Kg	17.3	86.3	64 - 140		10/28/2022
Vinyl chloride	20.0	ug/Kg	18.1	90.5	51.2 - 160		10/28/2022

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Report Prepared *Thursday, November 3, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: Solid

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z13041.D

QC Number: LCS 1

QC Batch ID: voainv221028

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Report Prepared *Thursday, November 3, 2022*

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Dichloroethene	<20.0	ug/L		10/27/2022 13:46
1,2-Dichloroethane	<20.0	ug/L		10/27/2022 13:46
2-Butanone	<100	ug/L		10/27/2022 13:46
Benzene	<20.0	ug/L		10/27/2022 13:46
Carbon Tetrachloride	<20.0	ug/L		10/27/2022 13:46
Chlorobenzene	<20.0	ug/L		10/27/2022 13:46
Chloroform	<20.0	ug/L		10/27/2022 13:46
Tetrachloroethene	<20.0	ug/L		10/27/2022 13:46
Trichloroethene	<20.0	ug/L		10/27/2022 13:46
Vinyl chloride	<20.0	ug/L		10/27/2022 13:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**98.5**	81.1 - 136		10/27/2022 13:46
4-Bromofluorobenzene	**98.0**	75.8 - 132		10/27/2022 13:46
Pentafluorobenzene	**102**	82 - 132		10/27/2022 13:46
Toluene-D8	**99.7**	64.6 - 137		10/27/2022 13:46

Method Reference(s): EPA 8260C
EPA 5030

Data File: z13012.D

QC Batch ID: voax221027

QC Number: Blk 1

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PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Wood

Lab Project ID: 225099

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1-Dichloroethene	20.0	ug/L	18.7	93.7	65.5 - 116		10/27/2022
1,2-Dichloroethane	20.0	ug/L	19.2	96.0	78.3 - 122		10/27/2022
Benzene	20.0	ug/L	19.9	99.3	81.6 - 114		10/27/2022
Carbon Tetrachloride	20.0	ug/L	19.8	98.9	76.4 - 129		10/27/2022
Chlorobenzene	20.0	ug/L	20.6	103	77.2 - 106		10/27/2022
Chloroform	20.0	ug/L	19.3	96.7	84.5 - 122		10/27/2022
Tetrachloroethene	20.0	ug/L	18.6	92.8	64.4 - 130		10/27/2022
Trichloroethene	20.0	ug/L	20.6	103	73.4 - 122		10/27/2022
Vinyl chloride	20.0	ug/L	19.5	97.5	50.9 - 164		10/27/2022

Method Reference(s): EPA 8260C
EPA 5030

Data File: z13011.D

QC Number: LCS 1

QC Batch ID: voax221027

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Report Prepared *Thursday, November 3, 2022*

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"H" = Denotes a parameter analyzed outside of holding time.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, INC

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: INVENTUM ENGINEERING	CLIENT: SAME	LAB PROJECT ID: 225099
ADDRESS: 441 CARLISLE DR SUITE C	ADDRESS:	Quotation #:
CITY: HERNDON STATE: VA ZIP: 20170	CITY: STATE: ZIP:	Email: john.black@inventumeng.com roxanne.birx@ " "
PHONE: 585-734-5255	PHONE:	
ATTN: ROXANNE BIRX	ATTN: JOHN BLACK	

PROJECT REFERENCE: PV-10 WOOD

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSES

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TOTAL SULFUR	HAZ CAT ★	%MOISTURE	BTU	TCL VOCs	TCL SVOCs	METALS ★	~~TCLP~~	PAINT FILTER	REMARKS	PARADIGM LAB SAMPLE NUMBER
10/25/22	830		X	PV10-WOOD-10252022	SD	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	A for TCLP extract ★ HAZCAT - CORROSIVITY, IGNITEABILITY, REACTIVITY ★ 15 METALS: Ag, As, Ba, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Pb, Se, Sn, Zn ★ SAMPLE IS K143 ★ TCLP SVOCs, VOCs, METALS	-01A

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☒	None Required	☐	None Required	☐
10 day	☐	Batch QC	☒	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Date Needed _____ please indicate date needed:		Other please indicate package needed:	☐	Other EDD please indicate EDD needed :	☐

ROXANNE BIRX — Sampled By — 10/25/22 830 — Date/Time

Relinquished By — 10/25/22 1020 — Date/Time

Received By — 10/25/22 13:45 — Date/Time

Received @ Lab By — 10/25/22 1631 — Date/Time

Total Cost:

P.I.F.

5°C iced @ 1637 10/25/22

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Inventum **Completed by:** EN

Lab Project ID: 225099 **Date:** 10/25/22

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	☒	☐	☐
Comments	pb → mg SUBOUT		
Transferred to method-compliant container	☒	☐	☒
Headspace (<1 mL)	☐	☐	☒
Comments			
Preservation	☐	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒	☐	☐
Comments	5°C iced		
Compliant Sample Quantity/Type	☒	☐	☐
Comments			

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

ELAP ID: 10709

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD OTHER
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN:	Accounts Payable	☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due:	11/3/22

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	BTU	Reactivity	SC								REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	10/25/22	0830		X	PV10-WOOD-10252022	SD	1	X	X	X								225099-01					
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature: 4°2	Y ☐	N ☐
Comments:		

Client

Sampled By: Emily Hyde	Date/Time: 10/27/22 0830	Total Cost:
Relinquished By: Ryan Zacher	Date/Time: 10/27/22 1240	
Received By: EK	Date/Time: 10/27/22 1600	P.I.F.
Received @ Lab By	Date/Time	

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Inventum Engineering, P.C.

For Lab Project ID

232087

Referencing

PV-10 Hg

Prepared

Monday, May 22, 2023

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Emily Farmer

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

LAB PROJECT NARRATIVE

CLIENT: Inventum Engineering, P.C.
PROJECT REFERENCE: PV-10 Hg
LAB PROJECT NUMBER: 232087
DATE: May 19, 2023

A single soil sample was received by the Paradigm laboratory on May 18, 2023, requesting mercury analysis by EPA Methods 74071B and 7470A. Due to the fact the sample is soil, the laboratory is only able to use 7471B to analyze this sample. EPA Method 7470A is written for analysis of waters and other aqueous based samples. Although 7470 does mention it can be used for analyzing certain solids, New York State does not offer certification of this method for solid materials as part of its Environmental Laboratory Approval Program.

Steven DeVito
Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 232087

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Hg

Sample Identifier:	PV10-Hg-05162023		
Lab Sample ID:	232087-01	**Date Sampled:**	5/16/2023 9:00
Matrix:	Solid	**Date Received**	5/18/2023

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**290**	mg/Kg		5/19/2023 16:07

Method Reference(s): EPA 7471B
Preparation Date: 5/19/2023
Data File: Hg230519A

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Inventum Engineering, P.C.**
Project Reference: PV-10 Hg
Lab Project ID: 232087
Matrix: Solid

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00784	mg/Kg		5/19/2023 15:35

Method Reference(s): EPA 7471B
Preparation Date: 5/19/2023
Data File: Hg230519A
QC Batch ID: QC230519Hgsoil
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: PV-10 Hg

Lab Project ID: 232087

Matrix: Solid

Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0743	0.0794	mg/Kg	0.0732	0.0812	98.5	102	80 - 120			3.84	20		5/19/2023

Method Reference(s): EPA 7471B
Preparation Date: 5/19/2023
Data File: Hg230519A
QC Number: 1
QC Batch ID: QC230519Hgsoil

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, May 22, 2023

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

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"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
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LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

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Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1072

CHAIN OF CUSTODY

PARADIGM
ENVIRONMENTAL SERVICES

REPORT TO:	INVOICE TO:	
COMPANY: INVENTUM ENG	COMPANY: SAME	LAB PROJECT ID: 232087
address: 441 CARLISLE Drive C	ADDRESS:	
CITY: HERNDON STATE: VA ZIP:	CITY: STATE: ZIP:	Quotation #:
PHONE: 716-553-5739 FAX:	PHONE: FAX:	Email:
ATTN: Peter.Zaffram@inventumeng.com	ATTN: Roxanne.Birk@inventumeng.com	

PROJECT REFERENCE: PV-10 Hg

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	7471B Hg	7470A Hg	REMARKS	PARADIGM LAB SAMPLE NUMBER
05/16/23	0900		X	PV10-Hg-05162023	SO	2	X	X	Please Run Both Methods for Hg. Thank You.	01
					Soil per visual GPS 5/18/23					

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required		None Required	
10 day		Batch QC	X	Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	X
Rush 2 day		Category B			
Rush 1 day					
Other (please indicate date needed: ____)		Other (please indicate package needed: ____)		Other EDD (please indicate EDD needed: ____)	

PETER ZAFFRAM 05/17/2023
Sampled By — Date/Time

Roxanne Birk 5/17/2023 1200
Relinquished By — Date/Time

Brian Zink 5/17/2023 1300
Received By — Date/Time

Received @ Lab By 5/18/23 1634
Date/Time

4°C iced 5/18/23 16:37

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Inventum **Completed by:** Glenn Pezzulo

Lab Project ID: 232087 **Date:** 5/18/23

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		
Comments	4°C iced		
Compliant Sample Quantity/Type	X		
Comments			

PV10 Waste Manifests

TX:

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	001315509 **WAS**

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION & TECHNOLOGY / JOHN YENS
140 LEE ST
BUFFALO, NY 14210
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)
RIVERVIEW INNOVATION & TECHNOLOGY / JOHN Y
3875 RIVER RD
TONAWANDA, NY 14150-6591
GEN: 127228

6. Transporter 1 Company Name: HERITAGE TRANSPORT LLC — U.S. EPA ID Number: IND058484114

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
HERITAGE THERMAL SERVICES, INC.
1250 SAINT GEORGE ST UNIT 1
EAST LIVERPOOL, OH 43920-3461
Facility's Phone: (800)545-7655
U.S. EPA ID Number: OHD980613541

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ,NA3077,HAZARDOUS WASTE, SOLID, N.O.S., 9,PGIII, (NAPTHALENE, MERCURY),(1 LB. MERCURY) ERG#171	1	CM	22	T	K143		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.001 WB Q1655676 T#16565941 LDR
WGT IN SECT 11 IS AN ESTIMATE
T163241
TRUCK# 397 CONTAINER# Box#: HE54 4849 ERI:CHEMTREC I183173891G

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC — Signature: on behalf of RITC — Month 6 Day 14 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: PAUL STRICKER — Signature — Month 6 Day 14 Year 23

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: JOE BURKE — Signature — Month 06 Day 15 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD088413877
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 007272476 GBF

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: PAGE ETC INC
U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	cm	~~10~~ 13 EST	Ton	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KJ on behalf of RITE
Month 5 Day 19 Year 23

INT'L
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Carmen OConner
Signature
Month 5 Day 19 Year 23
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY
18. Discrepancy
18a. Discrepancy Indication Space ☑ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Corrected to rec'd of.
Per K. Colligan 5/11/23 BW
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Nicholas Giles
Signature
Month 5 Day 10 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272477 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC

U.S. EPA ID Number
NYD986969947

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number
ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	14 EST	Tons	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)

PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KS on behalf of RITC
Month: 05 Day: 01 Year: 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Port of entry/exit:
Transporter signature (for exports only):
Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Carmen O'Connor
Signature:
Month: 5 Day: 1 Year: 23

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Annette Wilson
Signature: Annette Wilson
Month: 5 Day: 2 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272478 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC

U.S. EPA ID Number
NYD986969947

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number
ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	cm	14 EST	Ton	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PVIO

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	05	01	23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Jeff Smith		5	1	23
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name	Signature	Month	Day	Year
Annette Wilson	Annette Wilson	5	2	23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

TRK# 760822 / Trailer 180163 / CAN SCR4020

CWMI

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD088413877	1	(800)424-9300	007272479 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC

U.S. EPA ID Number
NYD986969947

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number
ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	cm	14 EST	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Culligan on behalf of RITS
Signature: K on behalf of RITS
Month 05 Day 01 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tim Wall
Signature:
Month 05 Day 01 Year 23

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tammy Thrash
Signature: Tammy Thrash
Month 05 Day 13 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272480 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: PAGE ETC INC — U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	12 EST	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Culligan on behalf of RITC — Signature: KC on behalf of RITC — Month 05 Day 15 Year 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Carmen O'Connor — Signature — Month 5 Day 15 Year 23

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Nicholas Giles — Signature — Month 5 Day 16 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

TRK # 760879 ILL # 180163 CAN #

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272481 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC
U.S. EPA ID Number
NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number
ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	cm	12 ES	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PVIO

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KC on behalf of RITC
Month 5 Day 15 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name:
Signature:
Month 5 Day 15 Year 23
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Annette Wilson
Signature: Annette Wilson
Month 5 Day 17 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD088413877
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 007272482 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: PAGE ETC INC
U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	12 EST	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KC on behalf of RITC
Month: 05 Day: 22 Year: 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Conner OConner
Signature:
Month: 5 Day: 22 Year: 23

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Annette Wilson
Signature: Annette Wilson
Month: 5 Day: 23 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272483 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC

U.S. EPA ID Number
NYD986969947

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number
ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	~~12~~ 10 ~~EST~~	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PVID

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: on behalf of RITC
Month 5 Day 30 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tim
Signature:
Month 5 Day 30 Year 23

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☑ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Corrected to record not BW
Per K. Colligan 6/1/23
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Nicholas Giles
Signature:
Month 5 Day 31 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

TKL # 160817 / CAN # AC07 / TKL 180163 CVMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272484 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC
U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	~~+2~~ 8 ~~EST~~	T	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)

PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: on behalf of RITC
Month Day Year: 06 05 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Transporter signature (for exports only):
Port of entry/exit:
Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jim Wall
Signature:
Month Day Year: 06 05 23

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☑ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Corrected to record wt.
Per K. Colligan 6/9/23 BW

18b. Alternate Facility (or Generator)
Manifest Reference Number:
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
11132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Annette Wilson
Signature: Annette Wilson
Month Day Year: 6 7 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272470 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
~~3875 RIVER RD~~ 140 Lee Street, Suite 200
~~TONAWANDA~~ Buffalo ~~NY 14151~~ NY 14210
Generator's Phone: (716)574-6036

Generator's Site Address (if different than mailing address)
Riverview Innovation and Technology Campus
3875 River Road, Tonawanda NY 14150

6. Transporter 1 Company Name
PAGE ETC INC
U.S. EPA ID Number
NYD986989947

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
U.S. EPA ID Number
ALD000622464
Facility's Phone: (205)652-9721

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	~~15~~ ESF	T	K143		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KC on behalf of RITC
Month 04 Day 10 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Carmen OConnor
Signature:
Month 04 Day 10 Year 23
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Annette Wilson
Signature: Annette Wilson
Month 4 Day 12 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD088413877	1	(800)424-9300	007272471 GBF

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
~~3875 RIVER RD~~ 140 Lee Street, Suite 200
~~TONAWANDA~~ Buffalo NY ~~14151~~ 14210
Generator's Phone: (718)574-6936

Generator's Site Address (if different than mailing address)
Riverview Innovation and Technology Campus
3875 River Rd, Tonawanda NY 14150

6. Transporter 1 Company Name
PAGE ETC INC
U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	cm	~~15~~ 9 ~~EST~~	T	K143		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC — Signature: on behalf of RITC — Month 04 Day 10 Year 23

INTL
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Brian Leyburn — Signature — Month 4 Day 10 Year 23
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Annette Wilson — Signature: Annette Wilson — Month 4 Day 12 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800) 424-9300	007272473 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716) 574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
PAGE ETC INC
U.S. EPA ID Number: NYD986869947

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205) 652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL408967	1	CM	~~10~~ 9 ~~GST~~	TONS	K143		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Calligan on behalf of RITC
Signature: KS on behalf of RITC
Month 4 Day 24 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Carmen OConnor
Signature:
Month 4 Day 24 Year 23

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Simone Williams
Signature: Simone Williams
Month 4 Day 25 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD088413877
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 007272474 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: PAGE ETC INC
U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	~~10~~ 14 ~~EST~~	Tons	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117)
PV10

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: KC on behalf of RITC
Month: 4 Day: 24 Year: 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Timothy Wall
Signature:
Month: 4 Day: 24 Year: 23
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☑ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Corrected to received (BW)
Per K.Colligan 4/27/23
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Simone Williams
Signature: Simone Williams
Month: 4 Day: 26 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

TRL 160879 Box# 3014 TRL # 180136 CWMI

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD088413877	1	(800)424-9300	007272475 GBF

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION AND TECH
3875 RIVER RD
TONAWANDA NY 14151
Generator's Phone: (716)574-6936

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: PAGE ETC INC — U.S. EPA ID Number: NYD986969947

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721

U.S. EPA ID Number: ALD000622464

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE,SOLID,N.O.S.,9,III, (K143) AL406967	1	CM	~~10~~ 12 ~~EST~~	Ton	K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ERG - 171
ERI PROVIDER: CHEMTREC (CONTRACT CCN24117) Box 3014 PVIO

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC — Signature: KC on behalf of RITC — Month 5 Day 9 Year 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tim Lust — Signature: [signature] — Month 5 Day 9 Year 23

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Corrected to received qty per K. Colligan 5/11/23
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Annette Wilson — Signature: Annette Wilson — Month 5 Day 10 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

3/21/23 LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM (PHASE IV) EME-AL406967

Generator Name: RIVERVIEW INNOVATION AND TECH Manifest Doc. No.: _____

Profile Number: AL406967 DEBRIS State Manifest No: _____

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Nonwastewater X Wastewater _
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent treatment standards are listed on the following page. If F039, multi-source leachate applies, those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	K143		X	A
2				
3				
4				

To identify F039 or D001-D043, underlying hazardous constituent(s), use the "F039/Underlying Hazardous Constituent Form" provided (CWM-2004) and check here: _
If no UHCs are present in the waste upon its initial generation check here: X
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (CWM-2005-D) and check here: _
Disposal facility monitors for all UHCs check here _
If waste will be managed in a system regulated under the CWA, or a Class 1 injection well under the SDWA check here _

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, B5, B6, C, D or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, B5, B6, or D you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR 268.40.
X For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.6 RESTRICTED DEBRIS TREATED TO ALTERNATE PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.45 without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
__ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I have personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature [signature] on behalf of RITC Title Project Manager Date 04/10/23

SOLVENT

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS [2]

F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard [1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard [1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of constituents or less than 10 x the standards listed.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a)(1) High TOC subcategory.

B. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a)(1) - Greater than or equal to 10% total organic carbon.

Appendix F: Chillers/Heat Exchangers

Chillers/Heat Exchangers Photographic Log

Client Name: RITC	Date Photo was Taken: 4/5/2021	Project: RITC
Photo No. 1		
Direction Photo Taken: View is south.		
Description: The heat exchangers, “chillers,” located in the Light Oil Area.		

Client Name: RITC	Date Photo was Taken: 4/12/2022	Project: RITC
Photo No. 2		
Direction Photo Taken: View is southwest.		
Description: The chillers were drained of residual oil.		

Client Name: RITC	Date Photo was Taken: 5/3/2022	Project: RITC
Photo No. 3 **Direction Photo Taken:** View is south. **Description:** The chillers have been removed from the Light Oil Area.		

Client Name: RITC	Date Photo was Taken: 4/5/2022	Project: RITC
Photo No. 4 **Direction Photo Taken:** View is north. **Description:** The chillers are dismantled and resized to be recycled.		

Client Name: RITC	**Date Photo was Taken:** 5/5/2022	**Project:** RITC
Photo No. 5		
Direction Photo Taken: View is north.		
Description: The chillers are dismantled and resized to be recycled.		
Client Name: RITC	**Date Photo was Taken:** 5/5/2022	**Project:** RITC
Photo No. 6		
Direction Photo Taken: View is north.		
Description: A heat exchanger interior as it is dismantled.		

Chillers/Heat Exchangers Analytical Results – Table 5A

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
VOCs SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<22200	U
1,1,2,2-Tetrachloroethane		ug/kg	<22200	U
1,1,2-Trichloroethane		ug/kg	<22200	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		ug/kg	<22200	U
1,1-Dichloroethane		ug/kg	<22200	U
1,1-Dichloroethene		ug/kg	<22200	U
1,2,3-Trichlorobenzene		ug/kg	<55600	U
1,2,4-Trichlorobenzene		ug/kg	<55600	U
1,2-Dibromo-3-Chloropropane		ug/kg	<111000	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<22200	U
1,2-Dichlorobenzene		ug/kg	<22200	U
1,2-Dichloroethane		ug/kg	<22200	U
1,2-Dichloropropane		ug/kg	<22200	U
1,3-Dichlorobenzene		ug/kg	<22200	U
1,4-Dichlorobenzene		ug/kg	<22200	U
1,4-Dioxane (P-Dioxane)		ug/kg	<111000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<111000	U
2-Hexanone		ug/kg	<55600	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<55600	U
Acetone		ug/kg	<111000	U
Benzene		ug/kg	**65100**	
Bromochloromethane		ug/kg	<55600	U
Bromodichloromethane		ug/kg	<22200	U
Bromoform		ug/kg	<55600	U
Bromomethane		ug/kg	<22200	U
Carbon Disulfide		ug/kg	<22200	U
Carbon Tetrachloride		ug/kg	<22200	U
Chlorobenzene		ug/kg	<22200	U
Chloroethane		ug/kg	<22200	U
Chloroform		ug/kg	<22200	U
Chloromethane		ug/kg	<22200	U
Cyclohexane		ug/kg	<111000	U
Dibromochloromethane		ug/kg	<22200	U
Dichlorodifluoromethane		ug/kg	<22200	U
Methylene Chloride (Dichloromethane)		ug/kg	<55600	U
Ethylbenzene		ug/kg	**27100**	
Isopropylbenzene (Cumene)		ug/kg	<22200	U

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
Methyl Acetate		ug/kg	<22200	U
Tert-Butyl Methyl Ether		ug/kg	<22200	U
Methylcyclohexane		ug/kg	<22200	U
Styrene		ug/kg	**350000**	
Tetrachloroethylene (PCE)		ug/kg	<22200	U
Toluene		ug/kg	**255000**	
Trichloroethylene (TCE)		ug/kg	<22200	U
Trichlorofluoromethane		ug/kg	<22200	U
Vinyl Chloride		ug/kg	<22200	U
Cis-1,2-Dichloroethylene		ug/kg	<22200	U
Cis-1,3-Dichloropropene		ug/kg	<22200	U
m,p-Xylene		ug/kg	**937000**	
O-Xylene (1,2-Dimethylbenzene)		ug/kg	**271000**	
Trans-1,2-Dichloroethene		ug/kg	<22200	U
Trans-1,3-Dichloropropene		ug/kg	<22200	U
SVOCs SW8270D				
1,1-Biphenyl		ug/kg	<4550000	U
1,2,4,5-Tetrachlorobenzene		ug/kg	<4550000	U
2,3,4,6-Tetrachlorophenol		ug/kg	<4550000	U
2,4,5-Trichlorophenol		ug/kg	<9090000	U
2,4,6-Trichlorophenol		ug/kg	<4550000	U
2,4-Dichlorophenol		ug/kg	<4550000	U
2,4-Dimethylphenol		ug/kg	<4550000	U
2,4-Dinitrophenol		ug/kg	<18200000	U
2,4-Dinitrotoluene		ug/kg	<4550000	U
2,6-Dinitrotoluene		ug/kg	<4550000	U
2-Chloronaphthalene		ug/kg	<4550000	U
2-Chlorophenol		ug/kg	<4550000	U
2-Methylnaphthalene		ug/kg	**7330000**	
2-Methylphenol (O-Cresol)		ug/kg	<4550000	U
2-Nitroaniline		ug/kg	<4550000	U
2-Nitrophenol		ug/kg	<4550000	U
3,3'-Dichlorobenzidine		ug/kg	<4550000	U
Cresols, M & P		ug/kg	<4550000	U
3-Nitroaniline		ug/kg	<4550000	U
4,6-Dinitro-2-Methylphenol		ug/kg	<9090000	U
4-Bromophenyl Phenyl Ether		ug/kg	<4550000	U

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
4-Chloro-3-Methylphenol		ug/kg	<4550000	U
4-Chloroaniline		ug/kg	<4550000	U
4-Chlorophenyl Phenyl Ether		ug/kg	<4550000	U
4-Nitroaniline		ug/kg	<4550000	U
4-Nitrophenol		ug/kg	<4550000	U
Acenaphthene		ug/kg	<4550000	U
Acenaphthylene		ug/kg	<4550000	U
Acetophenone		ug/kg	<4550000	U
Anthracene		ug/kg	<4550000	U
Atrazine		ug/kg	<4550000	U
Benzo(A)Anthracene		ug/kg	<4550000	U
Benzaldehyde		ug/kg	<4550000	U
Benzo(A)Pyrene		ug/kg	<4550000	U
Benzo(B)Fluoranthene		ug/kg	<4550000	U
Benzo(G,H,I)Perylene		ug/kg	<4550000	U
Benzo(K)Fluoranthene		ug/kg	<4550000	U
Biphenyl (Diphenyl)		ug/kg	<4550000	U
Bis(2-Chloroisopropyl) Ether		ug/kg	<4550000	U
Bis(2-Chloroethoxy) Methane		ug/kg	<4550000	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<4550000	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	<4550000	U
Benzyl Butyl Phthalate		ug/kg	<4550000	U
Caprolactam		ug/kg	<4550000	U
Carbazole		ug/kg	<4550000	U
Chrysene		ug/kg	<4550000	U
Di-N-Butyl Phthalate		ug/kg	<4550000	U
Di-N-Octylphthalate		ug/kg	<4550000	U
Dibenz(A,H)Anthracene		ug/kg	<4550000	U
Dibenzofuran		ug/kg	<4550000	U
Diethyl Phthalate		ug/kg	<4550000	U
Dimethyl Phthalate		ug/kg	<4550000	U
Fluoranthene		ug/kg	<4550000	U
Fluorene		ug/kg	<4550000	U
Hexachlorobenzene		ug/kg	<4550000	U
Hexachlorobutadiene		ug/kg	<4550000	U
Hexachlorocyclopentadiene		ug/kg	<18200000	U
Hexachloroethane		ug/kg	<4550000	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	<4550000	U

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
Isophorone		ug/kg	<4550000	U
N-Nitrosodi-N-Propylamine		ug/kg	<4550000	U
N-Nitrosodiphenylamine		ug/kg	<4550000	U
Naphthalene		ug/kg	**72700000**	
Nitrobenzene		ug/kg	<4550000	U
Pentachlorophenol		ug/kg	<9090000	U
Phenanthrene		ug/kg	<4550000	U
Phenol		ug/kg	<4550000	U
Pyrene		ug/kg	<4550000	U
TAL Metals SW6010				
Aluminum		mg/kg	<4.90	U
Antimony		mg/kg	<2.94	U
Arsenic		mg/kg	**0.878**	
Barium		mg/kg	<4.90	U
Beryllium		mg/kg	<0.245	U
Cadmium		mg/kg	<0.245	U
Calcium		mg/kg	<123	U
Chromium, Total		mg/kg	<0.490	U
Cobalt		mg/kg	<2.45	U
Copper		mg/kg	<0.980	U
Iron		mg/kg	<9.80	U
Lead		mg/kg	<0.490	U
Magnesium		mg/kg	<123	U
Manganese		mg/kg	<0.735	U
Nickel		mg/kg	<1.96	U
Potassium		mg/kg	<123	U
Selenium		mg/kg	**1.43**	
Silver		mg/kg	<0.490	U
Sodium		mg/kg	<123	U
Thallium		mg/kg	<1.23	U
Vanadium		mg/kg	<1.23	U
Zinc		mg/kg	<2.94	U
Total Mercury SW7471				
Mercury		mg/kg	<0.00765	U

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
PCBs 8082A				
PCB-1016 (Aroclor 1016)		mg/kg	<0.909	U
PCB-1221 (Aroclor 1221)		mg/kg	<0.909	U
PCB-1232 (Aroclor 1232)		mg/kg	<0.909	U
PCB-1242 (Aroclor 1242)		mg/kg	<0.909	U
PCB-1248 (Aroclor 1248)		mg/kg	<0.909	U
PCB-1254 (Aroclor 1254)		mg/kg	<0.909	U
PCB-1260 (Aroclor 1260)		mg/kg	<0.909	U
PCB-1254 (Aroclor 1262)		mg/kg	<0.909	U
PCB-1260 (Aroclor 1268)		mg/kg	<0.909	U
Ammonia E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	<20.0	U
Cyanide 9012				
Cyanide		mg/kg	<0.495	U
SW9045D				
pH		ph units	**5.00**	
TCLP VOCs - SW8260C				
1,2-Dichloroethane	500	ug/l	<20000	U
Chlorobenzene	100000	ug/l	<20000	U
Tetrachloroethylene (PCE)	700	ug/l	<20000	U
Carbon Tetrachloride	500	ug/l	<20000	U
Chloroform	6000	ug/l	<20000	U
Benzene	500	ug/l	**46400**	
Vinyl Chloride	200	ug/l	<20000	U
1,1-Dichloroethene	700	ug/l	<20000	U
Methyl Ethyl Ketone (2-Butanone)	200000	ug/l	<100000	U
Trichloroethylene (TCE)	500	ug/l	<20000	U
TCLP SVOCs - SW8270D				
1,4-Dichlorobenzene	7500	ug/l	<100	U
2,4,5-Trichlorophenol	400000	ug/l	<100	U
2,4,6-Trichlorophenol	2000	ug/l	<100	U
2,4-Dinitrotoluene	130	ug/l	<100	U
Cresols, (m, p, and o)	200000	ug/l	**1900**	

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes			SAMPLE ID:	LOA-CHILL-04142022
			COLLECTION DATE:	4/14/2022
			LAB REPORT:	221687
			WASTE CODE(S):	D018, D010
			DESCRIPTION:	Oil, dark brown, low viscosity
	EPA TCLP	UNITS		
Hexachlorobenzene	130	ug/l	<100	U
Hexachlorobutadiene	500	ug/l	<100	U
Hexachloroethane	3000	ug/l	<100	U
Nitrobenzene	2000	ug/l	<100	U
Pentachlorophenol	100000	ug/l	<500	U
Pyridine	5000	ug/l	<200	U
TCLP Mercury - SW7470				
Mercury	0.2	mg/L	<0.00800	U
TCLP Metals - SW6010				
Arsenic	5	mg/L	<0.500	U
Barium	100	mg/L	<5.00	U
Cadmium	1	mg/L	<0.250	U
Chromium, Total	5	mg/L	<0.500	U
Lead	5	mg/L	<0.500	U
Selenium	1	mg/L	**1.05**	
Silver	5	mg/L	<5.00	U
TCLP Pesticides - 8081B				
Chlordane	0.03	mg/L	<0.010	U
Endrin	0.02	mg/L	<0.0020	U
Gamma Bhc (Lindane)	0.4	mg/L	<0.0020	U
Heptachlor	0.008	mg/L	<0.0020	U
Heptachlor Epoxide	0.008	mg/L	<0.0020	U
Methoxychlor	10	mg/L	<0.010	U
Toxaphene	0.5	mg/L	<0.020	U
TCLP Herbicides - SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<0.050	U
Silvex (2,4,5-TP)	1	mg/L	<0.050	U

Table 5A
Process Equipment Construction Completion Report
Heat Exchanger/Chillers Oil
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	LOA-CHILL-04142022	
		COLLECTION DATE:	4/14/2022	
		LAB REPORT:	221687	
		WASTE CODE(S):	D018, D010	
		DESCRIPTION:	Oil, dark brown, low viscosity	
	EPA TCLP	UNITS		
SW7.3.3.2				
Reactive Cyanide		mg/kg	<0.9	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	**18**	
SW1010				
Flash Point		deg C	**flash (>70)**	
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**19100**	
Notes:				
NS: Not Sampled				
NA: Sample collected, but not analyzed due to matrix interference				
"<": Analyzed for but detected at or above the quantitation limit				
J: Analyte detected below quantitation limit				
Bold: Analyte was detected				
Bold with red highlight: Analyte exceeds TCLP standards or is characteristically hazardous for corrosivity, flammability, or r				

Chiller & Light Oil Area Pipe Rack Oil Analytical Results – Table 5B

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low Viscosity	
		UNITS		
SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<370000	U
1,1,2,2-Tetrachloroethane		ug/kg	<370000	U
1,1,2-Trichloroethane		ug/kg	<370000	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		ug/kg	<370000	U
1,1-Dichloroethane		ug/kg	<370000	U
1,1-Dichloroethene		ug/kg	<370000	U
1,2,3-Trichlorobenzene		ug/kg	<926000	U
1,2,4-Trichlorobenzene		ug/kg	<926000	U
1,2-Dibromo-3-Chloropropane		ug/kg	<1850000	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<370000	U
1,2-Dichlorobenzene		ug/kg	<370000	U
1,2-Dichloroethane		ug/kg	<370000	U
1,2-Dichloropropane		ug/kg	<370000	U
1,3-Dichlorobenzene		ug/kg	<370000	U
1,4-Dichlorobenzene		ug/kg	<370000	U
1,4-Dioxane (P-Dioxane)		ug/kg	<1850000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<1850000	U
2-Hexanone		ug/kg	<926000	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<926000	U
Acetone		ug/kg	<1850000	U
Benzene		ug/kg	**315000000**	
Bromochloromethane		ug/kg	<926000	U
Bromodichloromethane		ug/kg	<370000	U
Bromoform		ug/kg	<926000	U
Bromomethane		ug/kg	<370000	U
Carbon Disulfide		ug/kg	<370000	U
Carbon Tetrachloride		ug/kg	<370000	U
Chlorobenzene		ug/kg	<370000	U
Chloroethane		ug/kg	<370000	U
Chloroform		ug/kg	<370000	U
Chloromethane		ug/kg	<370000	U
Cyclohexane		ug/kg	<1850000	U
Dibromochloromethane		ug/kg	<370000	U
Dichlorodifluoromethane		ug/kg	<370000	U
Methylene Chloride (Dichloromethane)		ug/kg	<926000	U
Ethylbenzene		ug/kg	**1780000**	

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
Isopropylbenzene (Cumene)		ug/kg	<370000	U
Methyl Acetate		ug/kg	<370000	U
Tert-Butyl Methyl Ether		ug/kg	<370000	U
Methylcyclohexane		ug/kg	<370000	U
Styrene		ug/kg	**14700000**	
Tetrachloroethylene (PCE)		ug/kg	<370000	U
Toluene		ug/kg	**88800000**	
Trichloroethylene (TCE)		ug/kg	<370000	U
Trichlorofluoromethane		ug/kg	<370000	U
Vinyl Chloride		ug/kg	<370000	U
Cis-1,2-Dichloroethylene		ug/kg	<370000	U
Cis-1,3-Dichloropropene		ug/kg	<370000	U
m,p-Xylene		ug/kg	**25300000**	
O-Xylene (1,2-Dimethylbenzene)		ug/kg	**6730000**	
Trans-1,2-Dichloroethene		ug/kg	<370000	U
Trans-1,3-Dichloropropene		ug/kg	<370000	U
SW8270D				
1,2,4,5-Tetrachlorobenzene		ug/g	<4200	U
2,3,4,6-Tetrachlorophenol		ug/g	<4200	U
2,4,5-Trichlorophenol		ug/g	<4200	U
2,4,6-Trichlorophenol		ug/g	<4200	U
2,4-Dichlorophenol		ug/g	<4200	U
2,4-Dimethylphenol		ug/g	<4200	U
2,4-Dinitrophenol		ug/g	<21000	U
2,4-Dinitrotoluene		ug/g	<4200	U
2,6-Dinitrotoluene		ug/g	<4200	U
2-Chloronaphthalene		ug/g	<4200	U
2-Chlorophenol		ug/g	<4200	U
2-Methylnaphthalene		ug/g	<4200	U
2-Methylphenol (O-Cresol)		ug/g	<4200	U
2-Nitroaniline		ug/g	<21000	U
2-Nitrophenol		ug/g	<4200	U
3,3'-Dichlorobenzidine		ug/g	<4200	U
Cresols, M & P		ug/g	<4200	U
3-Nitroaniline		ug/g	<21000	U
4,6-Dinitro-2-Methylphenol		ug/g	<21000	U
4-Bromophenyl Phenyl Ether		ug/g	<4200	U

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
4-Chloro-3-Methylphenol		ug/g	<4200	U
4-Chloroaniline		ug/g	<4200	U
4-Chlorophenyl Phenyl Ether		ug/g	<4200	U
4-Nitroaniline		ug/g	<21000	U
4-Nitrophenol		ug/g	<21000	U
Acenaphthene		ug/g	<4200	U
Acenaphthylene		ug/g	<4200	U
Acetophenone		ug/g	<4200	U
Anthracene		ug/g	<4200	U
Atrazine		ug/g	<4200	U
Benzo(A)Anthracene		ug/g	<4200	U
Benzaldehyde		ug/g	<4200	U
Benzo(A)Pyrene		ug/g	<4200	U
Benzo(B)Fluoranthene		ug/g	<4200	U
Benzo(G,H,I)Perylene		ug/g	<4200	U
Benzo(K)Fluoranthene		ug/g	<4200	U
Biphenyl (Diphenyl)		ug/g	<4200	U
Bis(2-Chloroisopropyl) Ether		ug/g	<4200	U
Bis(2-Chloroethoxy) Methane		ug/g	<4200	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/g	<4200	U
Bis(2-Ethylhexyl) Phthalate		ug/g	<4200	U
Benzyl Butyl Phthalate		ug/g	<4200	U
Caprolactam		ug/g	<4200	U
Carbazole		ug/g	<4200	U
Chrysene		ug/g	<4200	U
Di-N-Butyl Phthalate		ug/g	<4200	U
Di-N-Octylphthalate		ug/g	<4200	U
Dibenz(A,H)Anthracene		ug/g	<4200	U
Dibenzofuran		ug/g	<4200	U
Diethyl Phthalate		ug/g	<4200	U
Dimethyl Phthalate		ug/g	<4200	U
Fluoranthene		ug/g	<4200	U
Fluorene		ug/g	<4200	U
Hexachlorobenzene		ug/g	<4200	U
Hexachlorobutadiene		ug/g	<4200	U
Hexachlorocyclopentadiene		ug/g	<4200	U
Hexachloroethane		ug/g	<4200	U
Indeno(1,2,3-C,D)Pyrene		ug/g	<4200	U

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
Isophorone		ug/g	<4200	U
N-Nitrosodi-N-Propylamine		ug/g	<4200	U
N-Nitrosodiphenylamine		ug/g	<4200	U
Naphthalene		ug/g	**47000**	
Nitrobenzene		ug/g	<4200	U
Pentachlorophenol		ug/g	<21000	U
Phenanthrene		ug/g	<4200	U
Phenol		ug/g	<4200	U
Pyrene		ug/g	<4200	U
SW6010				
Aluminum		mg/kg	<4.85	U
Antimony		mg/kg	<2.91	U
Arsenic		mg/kg	<0.485	U
Barium		mg/kg	<4.85	U
Beryllium		mg/kg	<0.243	U
Cadmium		mg/kg	<0.243	U
Calcium		mg/kg	<121	U
Chromium, Total		mg/kg	<0.485	U
Cobalt		mg/kg	<2.43	U
Copper		mg/kg	<0.971	U
Iron		mg/kg	<9.71	U
Lead		mg/kg	<0.485	U
Magnesium		mg/kg	<121	U
Manganese		mg/kg	<0.728	U
Nickel		mg/kg	<1.94	U
Potassium		mg/kg	<121	U
Selenium		mg/kg	**1.49**	
Silver		mg/kg	<0.485	U
Sodium		mg/kg	<121	U
Thallium		mg/kg	<1.21	U
Vanadium		mg/kg	<1.21	U
Zinc		mg/kg	<2.91	U
SW7471				
Mercury		mg/kg	**0.171**	

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
8082A				
PCB-1016 (Aroclor 1016)		mg/kg	<0.870	U
PCB-1221 (Aroclor 1221)		mg/kg	<0.870	U
PCB-1232 (Aroclor 1232)		mg/kg	<0.870	U
PCB-1242 (Aroclor 1242)		mg/kg	<0.870	U
PCB-1248 (Aroclor 1248)		mg/kg	<0.870	U
PCB-1254 (Aroclor 1254)		mg/kg	<0.870	U
PCB-1260 (Aroclor 1260)		mg/kg	<0.870	U
PCB-1254 (Aroclor 1262)		mg/kg	<0.870	U
PCB-1260 (Aroclor 1268)		mg/kg	<0.870	U
E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	**62100**	
SW9012B				
Cyanide		mg/kg	<0.490	U
SW9045D				
pH		ph units	**10.0**	
TCLP - SW8260C				
1,2-Dichloroethane	500	ug/l	<20000	U
Chlorobenzene	100,000	ug/l	<20000	U
Tetrachloroethylene (PCE)	700	ug/l	<20000	U
Carbon Tetrachloride	500	ug/l	<20000	U
Chloroform	6,000	ug/l	<20000	U
Benzene	500	ug/l	**1870000**	
Vinyl Chloride	200	ug/l	<20000	U
1,1-Dichloroethene	700	ug/l	<20000	U
Methyl Ethyl Ketone (2-Butanone)	200,000	ug/l	<100000	U
Trichloroethylene (TCE)	500	ug/l	<20000	U
TCLP - SW8270D				
1,4-Dichlorobenzene	7,500	ug/l	<500	U
2,4,5-Trichlorophenol	400,000	ug/l	<500	U
2,4,6-Trichlorophenol	2,000	ug/l	<500	U
2,4-Dinitrotoluene	130	ug/l	<500	U
Cresols, (m, p, and o)	200,000	ug/l	<2000	U

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:		Build 10S - 04192022	
	COLLECTION DATE:		4/19/2022	
	LAB REPORT:		221761	
	WASTE CODES:		D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
Hexachlorobenzene	130	ug/l	<500	U
Hexachlorobutadiene	500	ug/l	<500	U
Hexachloroethane	3,000	ug/l	<500	U
Nitrobenzene	2,000	ug/l	<500	U
Pentachlorophenol	100,000	ug/l	<2500	U
Pyridine	5,000	ug/l	**6600**	
TCLP- SW7470				
Mercury	200	mg/L	<0.00200	U
TCLP - SW6010				
Arsenic	5	mg/L	<0.500	U
Barium	100	mg/L	<0.500	U
Cadmium	1	mg/L	<0.0250	U
Chromium, Total	5	mg/L	<0.500	U
Lead	5	mg/L	<0.500	U
Selenium	1	mg/L	<0.200	U
Silver	5	mg/L	<0.500	U
TCLP - 8081B				
Chlordane	0.03	mg/L	<0.0050	U
Endrin	0.02	mg/L	<0.0010	U
Gamma Bhc (Lindane)	0.4	mg/L	<0.0010	U
Heptachlor	0.008	mg/L	<0.0010	U
Heptachlor Epoxide	0.008	mg/L	<0.0010	U
Methoxychlor	10	mg/L	<0.0050	U
Toxaphene	0.5	mg/L	<0.010	U
TCLP- SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<0.050	U
Silvex (2,4,5-TP)	1	mg/L	<0.050	U
SW7.3.3.2				
Reactive Cyanide		mg/kg	<900	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	**16**	

Table 5B
Process Equipment Construction Completion Report
Oil From Building 10S and Surrounding Area
Riverivew Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes		SAMPLE ID:	Build 10S - 04192022	
		COLLECTION DATE:	4/19/2022	
		LAB REPORT:	221761	
		WASTE CODES:	D001, D018, D037	
	EPA TCLP	DESCRIPTION:	Oil Drained from Building 10S Area, Dark Brown, Low	
SW1010				
Flash Point		deg C	**16.0**	
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**18200**	
Notes:				
NS: Not Sampled				
NA: Sample collected, but not analyzed due to matrix interference				
"<": Analyzed for but detected at or above the quantitation limit				
J: Analyte detected below quantitation limit				
Bold: Analyte was detected				
Bold with red highlight: Analyte exceeds TCLP standards or is characteristically hazardous for corrosivity, flammability, or reactivity.				

Chillers/Heat Exchangers Laboratory Report



PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Inventum Engineering, P.C.

For Lab Project ID

221687

Referencing

LOA Chillers

Prepared

Thursday, May 5, 2022

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Portions of the enclosed report reflects analysis that has been subcontracted and are presented in their original form.

Emily Yaumen

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier:	LOA-CHILL-04142022		
Lab Sample ID:	221687-01	**Date Sampled:** 4/14/2022	11:45
Matrix:	Oil	**Date Received** 4/15/2022	

Corrosivity as pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH (Strip)	**5.00**	S.U.		4/22/2022 12:30

Due to incompatible matrix or extreme pH which may damage the probe, the result has been measured using pH strip. These results should be considered estimated and only used for screening purposes.

Method Reference(s): EPA 9045D

Flash Point

Analyte	Result	Units	Qualifier	Date Analyzed
Flash Point, Celsius	>70.0	C		4/22/2022

Method Reference(s): EPA 1010A

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.00765	mg/Kg		4/20/2022 12:35

Method Reference(s): EPA 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 4.90	mg/Kg		4/20/2022 20:39
Antimony	< 2.94	mg/Kg		4/20/2022 20:39
Arsenic	**0.878**	mg/Kg		4/21/2022 15:35
Barium	< 4.90	mg/Kg		4/20/2022 20:39
Beryllium	< 0.245	mg/Kg		4/20/2022 20:39
Cadmium	< 0.245	mg/Kg		4/20/2022 20:39
Calcium	< 123	mg/Kg		4/20/2022 20:39
Chromium	< 0.490	mg/Kg		4/20/2022 20:39
Cobalt	< 2.45	mg/Kg		4/20/2022 20:39
Copper	< 0.980	mg/Kg		4/21/2022 15:35
Iron	< 9.80	mg/Kg		4/20/2022 20:39

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

Lead	< 0.490	mg/Kg		4/20/2022 20:39
Magnesium	< 123	mg/Kg		4/20/2022 20:39
Manganese	< 0.735	mg/Kg		4/20/2022 20:39
Nickel	< 1.96	mg/Kg		4/20/2022 20:39
Potassium	< 123	mg/Kg		4/20/2022 20:39
Selenium	**1.43**	mg/Kg		4/20/2022 20:39
Silver	< 0.490	mg/Kg		4/20/2022 20:39
Sodium	< 123	mg/Kg		4/20/2022 20:39
Thallium	< 1.23	mg/Kg		4/22/2022 14:14
Vanadium	< 1.23	mg/Kg		4/20/2022 20:39
Zinc	< 2.94	mg/Kg		4/20/2022 20:39

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/19/2022
Data File: 220420B

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1221	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1232	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1242	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1248	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1254	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1260	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1262	< 0.909	mg/Kg		4/25/2022 15:15
PCB-1268	< 0.909	mg/Kg		4/25/2022 15:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**84.9**	70 - 130		4/25/2022 15:15

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 4550000	ug/Kg		4/30/2022 03:06
1,2,4,5-Tetrachlorobenzene	< 4550000	ug/Kg		4/30/2022 03:06
1,2,4-Trichlorobenzene	< 4550000	ug/Kg		4/30/2022 03:06
1,2-Dichlorobenzene	< 4550000	ug/Kg		4/30/2022 03:06
1,3-Dichlorobenzene	< 4550000	ug/Kg		4/30/2022 03:06
1,4-Dichlorobenzene	< 4550000	ug/Kg		4/30/2022 03:06
2,2-Oxybis (1-chloropropane)	< 4550000	ug/Kg		4/30/2022 03:06
2,3,4,6-Tetrachlorophenol	< 4550000	ug/Kg		4/30/2022 03:06
2,4,5-Trichlorophenol	< 9090000	ug/Kg		4/30/2022 03:06
2,4,6-Trichlorophenol	< 4550000	ug/Kg		4/30/2022 03:06
2,4-Dichlorophenol	< 4550000	ug/Kg		4/30/2022 03:06
2,4-Dimethylphenol	< 4550000	ug/Kg		4/30/2022 03:06
2,4-Dinitrophenol	< 18200000	ug/Kg		4/30/2022 03:06
2,4-Dinitrotoluene	< 4550000	ug/Kg		4/30/2022 03:06
2,6-Dinitrotoluene	< 4550000	ug/Kg		4/30/2022 03:06
2-Chloronaphthalene	< 4550000	ug/Kg		4/30/2022 03:06
2-Chlorophenol	< 4550000	ug/Kg		4/30/2022 03:06
2-Methylnapthalene	**7330000**	ug/Kg		4/30/2022 03:06
2-Methylphenol	< 4550000	ug/Kg		4/30/2022 03:06
2-Nitroaniline	< 4550000	ug/Kg		4/30/2022 03:06
2-Nitrophenol	< 4550000	ug/Kg		4/30/2022 03:06
3&4-Methylphenol	< 4550000	ug/Kg		4/30/2022 03:06
3,3'-Dichlorobenzidine	< 4550000	ug/Kg		4/30/2022 03:06
3-Nitroaniline	< 4550000	ug/Kg		4/30/2022 03:06
4,6-Dinitro-2-methylphenol	< 9090000	ug/Kg		4/30/2022 03:06
4-Bromophenyl phenyl ether	< 4550000	ug/Kg		4/30/2022 03:06
4-Chloro-3-methylphenol	< 4550000	ug/Kg		4/30/2022 03:06
4-Chloroaniline	< 4550000	ug/Kg		4/30/2022 03:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

4-Chlorophenyl phenyl ether	< 4550000	ug/Kg	4/30/2022 03:06
4-Nitroaniline	< 4550000	ug/Kg	4/30/2022 03:06
4-Nitrophenol	< 4550000	ug/Kg	4/30/2022 03:06
Acenaphthene	< 4550000	ug/Kg	4/30/2022 03:06
Acenaphthylene	< 4550000	ug/Kg	4/30/2022 03:06
Acetophenone	< 4550000	ug/Kg	4/30/2022 03:06
Anthracene	< 4550000	ug/Kg	4/30/2022 03:06
Atrazine	< 4550000	ug/Kg	4/30/2022 03:06
Benzaldehyde	< 4550000	ug/Kg	4/30/2022 03:06
Benzo (a) anthracene	< 4550000	ug/Kg	4/30/2022 03:06
Benzo (a) pyrene	< 4550000	ug/Kg	4/30/2022 03:06
Benzo (b) fluoranthene	< 4550000	ug/Kg	4/30/2022 03:06
Benzo (g,h,i) perylene	< 4550000	ug/Kg	4/30/2022 03:06
Benzo (k) fluoranthene	< 4550000	ug/Kg	4/30/2022 03:06
Bis (2-chloroethoxy) methane	< 4550000	ug/Kg	4/30/2022 03:06
Bis (2-chloroethyl) ether	< 4550000	ug/Kg	4/30/2022 03:06
Bis (2-ethylhexyl) phthalate	< 4550000	ug/Kg	4/30/2022 03:06
Butylbenzylphthalate	< 4550000	ug/Kg	4/30/2022 03:06
Caprolactam	< 4550000	ug/Kg	4/30/2022 03:06
Carbazole	< 4550000	ug/Kg	4/30/2022 03:06
Chrysene	< 4550000	ug/Kg	4/30/2022 03:06
Dibenz (a,h) anthracene	< 4550000	ug/Kg	4/30/2022 03:06
Dibenzofuran	< 4550000	ug/Kg	4/30/2022 03:06
Diethyl phthalate	< 4550000	ug/Kg	4/30/2022 03:06
Dimethyl phthalate	< 4550000	ug/Kg	4/30/2022 03:06
Di-n-butyl phthalate	< 4550000	ug/Kg	4/30/2022 03:06
Di-n-octylphthalate	< 4550000	ug/Kg	4/30/2022 03:06
Fluoranthene	< 4550000	ug/Kg	4/30/2022 03:06
Fluorene	< 4550000	ug/Kg	4/30/2022 03:06
Hexachlorobenzene	< 4550000	ug/Kg	4/30/2022 03:06

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

Hexachlorobutadiene	< 4550000	ug/Kg	4/30/2022	03:06
Hexachlorocyclopentadiene	< 18200000	ug/Kg	4/30/2022	03:06
Hexachloroethane	< 4550000	ug/Kg	4/30/2022	03:06
Indeno (1,2,3-cd) pyrene	< 4550000	ug/Kg	4/30/2022	03:06
Isophorone	< 4550000	ug/Kg	4/30/2022	03:06
Naphthalene	**72700000**	ug/Kg	4/30/2022	03:06
Nitrobenzene	< 4550000	ug/Kg	4/30/2022	03:06
N-Nitroso-di-n-propylamine	< 4550000	ug/Kg	4/30/2022	03:06
N-Nitrosodiphenylamine	< 4550000	ug/Kg	4/30/2022	03:06
Pentachlorophenol	< 9090000	ug/Kg	4/30/2022	03:06
Phenanthrene	< 4550000	ug/Kg	4/30/2022	03:06
Phenol	< 4550000	ug/Kg	4/30/2022	03:06
Pyrene	< 4550000	ug/Kg	4/30/2022	03:06

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	70 - 130		4/30/2022	03:06
2-Fluorobiphenyl	NC	70 - 130		4/30/2022	03:06
2-Fluorophenol	NC	70 - 130		4/30/2022	03:06
Nitrobenzene-d5	NC	70 - 130		4/30/2022	03:06
Phenol-d5	NC	70 - 130		4/30/2022	03:06
Terphenyl-d14	NC	70 - 130		4/30/2022	03:06

Method Reference(s): EPA 8270D
EPA 3580A
Preparation Date: 4/22/2022
Data File: B61494.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	< 22200	ug/Kg		4/21/2022	21:56
1,1,2,2-Tetrachloroethane	< 22200	ug/Kg		4/21/2022	21:56
1,1,2-Trichloroethane	< 22200	ug/Kg		4/21/2022	21:56
1,1-Dichloroethane	< 22200	ug/Kg		4/21/2022	21:56
1,1-Dichloroethene	< 22200	ug/Kg		4/21/2022	21:56

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

1,2,3-Trichlorobenzene	< 55600	ug/Kg	4/21/2022 21:56
1,2,4-Trichlorobenzene	< 55600	ug/Kg	4/21/2022 21:56
1,2-Dibromo-3-Chloropropane	< 111000	ug/Kg	4/21/2022 21:56
1,2-Dibromoethane	< 22200	ug/Kg	4/21/2022 21:56
1,2-Dichlorobenzene	< 22200	ug/Kg	4/21/2022 21:56
1,2-Dichloroethane	< 22200	ug/Kg	4/21/2022 21:56
1,2-Dichloropropane	< 22200	ug/Kg	4/21/2022 21:56
1,3-Dichlorobenzene	< 22200	ug/Kg	4/21/2022 21:56
1,4-Dichlorobenzene	< 22200	ug/Kg	4/21/2022 21:56
1,4-Dioxane	< 111000	ug/Kg	4/21/2022 21:56
2-Butanone	< 111000	ug/Kg	4/21/2022 21:56
2-Hexanone	< 55600	ug/Kg	4/21/2022 21:56
4-Methyl-2-pentanone	< 55600	ug/Kg	4/21/2022 21:56
Acetone	< 111000	ug/Kg	4/21/2022 21:56
Benzene	**65100**	ug/Kg	4/21/2022 21:56
Bromochloromethane	< 55600	ug/Kg	4/21/2022 21:56
Bromodichloromethane	< 22200	ug/Kg	4/21/2022 21:56
Bromoform	< 55600	ug/Kg	4/21/2022 21:56
Bromomethane	< 22200	ug/Kg	4/21/2022 21:56
Carbon disulfide	< 22200	ug/Kg	4/21/2022 21:56
Carbon Tetrachloride	< 22200	ug/Kg	4/21/2022 21:56
Chlorobenzene	< 22200	ug/Kg	4/21/2022 21:56
Chloroethane	< 22200	ug/Kg	4/21/2022 21:56
Chloroform	< 22200	ug/Kg	4/21/2022 21:56
Chloromethane	< 22200	ug/Kg	4/21/2022 21:56
cis-1,2-Dichloroethene	< 22200	ug/Kg	4/21/2022 21:56
cis-1,3-Dichloropropene	< 22200	ug/Kg	4/21/2022 21:56
Cyclohexane	< 111000	ug/Kg	4/21/2022 21:56
Dibromochloromethane	< 22200	ug/Kg	4/21/2022 21:56
Dichlorodifluoromethane	< 22200	ug/Kg	4/21/2022 21:56

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022
Lab Sample ID: 221687-01 **Date Sampled:** 4/14/2022 11:45
Matrix: Oil **Date Received** 4/15/2022

Ethylbenzene	**27100**	ug/Kg		4/21/2022 21:56
Freon 113	< 22200	ug/Kg		4/21/2022 21:56
Isopropylbenzene	< 22200	ug/Kg		4/21/2022 21:56
m,p-Xylene	**937000**	ug/Kg		4/21/2022 21:56
Methyl acetate	< 22200	ug/Kg		4/21/2022 21:56
Methyl tert-butyl Ether	< 22200	ug/Kg		4/21/2022 21:56
Methylcyclohexane	< 22200	ug/Kg		4/21/2022 21:56
Methylene chloride	< 55600	ug/Kg		4/21/2022 21:56
o-Xylene	**271000**	ug/Kg		4/21/2022 21:56
Styrene	**350000**	ug/Kg		4/21/2022 21:56
Tetrachloroethene	< 22200	ug/Kg		4/21/2022 21:56
Toluene	**255000**	ug/Kg		4/21/2022 21:56
trans-1,2-Dichloroethene	< 22200	ug/Kg		4/21/2022 21:56
trans-1,3-Dichloropropene	< 22200	ug/Kg		4/21/2022 21:56
Trichloroethene	< 22200	ug/Kg		4/21/2022 21:56
Trichlorofluoromethane	< 22200	ug/Kg		4/21/2022 21:56
Vinyl chloride	< 22200	ug/Kg		4/21/2022 21:56

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**94.4**	74.7 - 140		4/21/2022 21:56
4-Bromofluorobenzene	**99.3**	68 - 130		4/21/2022 21:56
Pentafluorobenzene	**103**	70.3 - 140		4/21/2022 21:56
Toluene-D8	**94.2**	69 - 138		4/21/2022 21:56

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: z08660.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.495	mg/Kg		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022

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PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier:	LOA-CHILL-04142022		
Lab Sample ID:	221687-01A	**Date Sampled:** 4/14/2022	11:45
Matrix:	TCLP Extract	**Date Received** 4/15/2022	

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	< 0.00800	mg/L	0.2		4/20/2022 12:22

Method Reference(s): EPA 7470A
EPA 1311 / 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.500	mg/L	5		4/21/2022 15:40
Barium	< 5.00	mg/L	100		4/20/2022 20:44
Cadmium	< 0.250	mg/L	1		4/20/2022 20:44
Chromium	< 0.500	mg/L	5		4/20/2022 20:44
Lead	< 0.500	mg/L	5		4/20/2022 20:44
Selenium	**1.05**	mg/L	1		4/20/2022 20:44
Silver	< 5.00	mg/L	5		4/20/2022 20:44

Method Reference(s): EPA 6010C
EPA 1311 / 3050B
Preparation Date: 4/19/2022
Data File: 220421D

TCLP Volatile Organics

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
1,1-Dichloroethene	< 20000	ug/L	700		4/21/2022 22:15
1,2-Dichloroethane	< 20000	ug/L	500		4/21/2022 22:15
2-Butanone	< 100000	ug/L	200000		4/21/2022 22:15
Benzene	**46400**	ug/L	500		4/21/2022 22:15
Carbon Tetrachloride	< 20000	ug/L	500		4/21/2022 22:15
Chlorobenzene	< 20000	ug/L	100000		4/21/2022 22:15
Chloroform	< 20000	ug/L	6000		4/21/2022 22:15
Tetrachloroethene	< 20000	ug/L	700		4/21/2022 22:15

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221687

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Sample Identifier: LOA-CHILL-04142022

Lab Sample ID: 221687-01A **Date Sampled:** 4/14/2022 11:45

Matrix: TCLP Extract **Date Received** 4/15/2022

Trichloroethene	< 20000	ug/L	500		4/21/2022 22:15
Vinyl chloride	< 20000	ug/L	200		4/21/2022 22:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**101**	81.1 - 136		4/21/2022 22:15
4-Bromofluorobenzene	**105**	75.8 - 132		4/21/2022 22:15
Pentafluorobenzene	**100**	82 - 132		4/21/2022 22:15
Toluene-D8	**98.4**	64.6 - 137		4/21/2022 22:15

Method Reference(s): EPA 8260C
EPA 1311 / 5030C

Data File: z08661.D

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00777	mg/Kg		4/20/2022 12:04

Method Reference(s): EPA 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A
QC Batch ID: QC220420HgSoil
QC Number: Blk 1

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Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0784	0.0734	mg/Kg	0.0808	0.0797	103	109	80 - 120			5.29	20		4/20/2022

Method Reference(s): EPA 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A
QC Number: 1
QC Batch ID: QC220420HgSoil

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Report Prepared *Friday, April 22, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

TCLP Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00777	mg/L		4/20/2022 12:04

Method Reference(s): EPA 7470A
EPA 1311 / 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A
QC Batch ID: QC220420HgSoil
QC Number: Blk 1

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Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0784	0.0734	mg/Kg	0.0808	0.0797	103	109	80 - 120			5.29	20		4/20/2022

Method Reference(s): EPA 7470A
EPA 1311 / 7471B
Preparation Date: 4/20/2022
Data File: Hg220420A
QC Number: 1
QC Batch ID: QC220420HgSoil

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Report Prepared *Friday, April 22, 2022*

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Aluminum	<4.90	mg/Kg		4/20/2022	19:13
Antimony	<2.94	mg/Kg		4/20/2022	19:13
Arsenic	<0.490	mg/Kg		4/20/2022	19:13
Barium	<4.90	mg/Kg		4/20/2022	19:13
Beryllium	<0.245	mg/Kg		4/20/2022	19:13
Cadmium	<0.245	mg/Kg		4/20/2022	19:13
Calcium	<123	mg/Kg		4/21/2022	15:16
Chromium	<0.490	mg/Kg		4/20/2022	19:13
Cobalt	<2.45	mg/Kg		4/20/2022	19:13
Copper	<0.980	mg/Kg		4/20/2022	19:13
Iron	<9.80	mg/Kg		4/21/2022	15:16
Lead	<0.490	mg/Kg		4/20/2022	19:13
Magnesium	<123	mg/Kg		4/20/2022	19:13
Manganese	<0.735	mg/Kg		4/20/2022	19:13
Nickel	<1.96	mg/Kg		4/20/2022	19:13
Potassium	<123	mg/Kg		4/20/2022	19:13
Selenium	<0.980	mg/Kg		4/20/2022	19:13
Silver	<0.490	mg/Kg		4/20/2022	19:13
Sodium	<123	mg/Kg		4/20/2022	19:13
Thallium	<1.23	mg/Kg		4/22/2022	13:52
Vanadium	<1.23	mg/Kg		4/20/2022	19:13
Zinc	<2.94	mg/Kg		4/20/2022	19:13

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/19/2022
Data File: 220420B
QC Batch ID: QC220419Soil
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Aluminum	115	118	mg/Kg	114	119	99.5	101	80 - 120			1.07	20		4/20/2022
Antimony	115	118	mg/Kg	121	126	106	107	80 - 120			1.15	20		4/20/2022
Arsenic	115	118	mg/Kg	113	117	98.4	99.2	80 - 120			0.852	20		4/20/2022
Barium	115	118	mg/Kg	125	130	109	110	80 - 120			0.940	20		4/20/2022
Beryllium	22.9	23.6	mg/Kg	22.6	23.4	98.7	99.4	80 - 120			0.735	20		4/20/2022
Cadmium	45.9	47.2	mg/Kg	49.9	51.9	109	110	80 - 120			1.13	20		4/20/2022
Calcium	183	189	mg/Kg	178	182	97.0	96.5	80 - 120			0.491	20		4/21/2022
Chromium	115	118	mg/Kg	123	128	107	108	80 - 120			1.11	20		4/20/2022
Cobalt	45.9	47.2	mg/Kg	49.4	51.2	108	109	80 - 120			0.848	20		4/20/2022
Copper	115	118	mg/Kg	114	118	99.7	100	80 - 120			0.469	20		4/20/2022
Iron	115	118	mg/Kg	114	114	99.3	96.7	80 - 120			2.61	20		4/21/2022
Lead	115	118	mg/Kg	116	120	101	102	80 - 120			0.557	20		4/20/2022
Magnesium	367	377	mg/Kg	401	415	109	110	80 - 120			0.840	20		4/20/2022
Manganese	45.9	47.2	mg/Kg	48.3	49.7	105	105	80 - 120			0.194	20		4/20/2022
Nickel	229	236	mg/Kg	243	252	106	107	80 - 120			0.892	20		4/20/2022
Potassium	1950	2000	mg/Kg	1940	2000	99.5	99.8	80 - 120			0.331	20		4/20/2022

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Report Prepared Monday, April 25, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Selenium	115	118	mg/Kg	110	115	96.3	97.3	80 - 120			1.04	20		4/20/2022
Silver	11.5	11.8	mg/Kg	11.2	11.6	97.5	98.8	80 - 120			1.33	20		4/20/2022
Sodium	550	566	mg/Kg	527	542	95.8	95.8	80 - 120			0.0646	20		4/20/2022
Thallium	115	118	mg/Kg	115	123	100	105	80 - 120			4.18	20		4/22/2022
Vanadium	45.9	47.2	mg/Kg	49.1	51.1	107	108	80 - 120			1.03	20		4/20/2022
Zinc	115	118	mg/Kg	117	122	102	103	80 - 120			0.997	20		4/20/2022

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/19/2022
Data File: 220420B
QC Number: 1
QC Batch ID: QC220419Soil

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Report Prepared *Monday, April 25, 2022*

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.490	mg/L		4/20/2022	19:13
Barium	<4.90	mg/L		4/20/2022	19:13
Cadmium	<0.245	mg/L		4/20/2022	19:13
Chromium	<0.490	mg/L		4/20/2022	19:13
Lead	<0.490	mg/L		4/20/2022	19:13
Selenium	<0.980	mg/L		4/20/2022	19:13
Silver	<0.490	mg/L		4/20/2022	19:13

Method Reference(s): EPA 6010C
EPA 1311 / 3050B
Preparation Date: 4/19/2022
Data File: 220420B
QC Batch ID: QC220419Soil
QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	115	118	mg/Kg	113	117	98.4	99.2	80 - 120			0.852	20		4/20/2022
Barium	115	118	mg/Kg	125	130	109	110	80 - 120			0.940	20		4/20/2022
Cadmium	45.9	47.2	mg/Kg	49.9	51.9	109	110	80 - 120			1.13	20		4/20/2022
Chromium	115	118	mg/Kg	123	128	107	108	80 - 120			1.11	20		4/20/2022
Lead	115	118	mg/Kg	116	120	101	102	80 - 120			0.557	20		4/20/2022
Selenium	115	118	mg/Kg	110	115	96.3	97.3	80 - 120			1.04	20		4/20/2022
Silver	11.5	11.8	mg/Kg	11.2	11.6	97.5	98.8	80 - 120			1.33	20		4/20/2022

Method Reference(s): EPA 6010C
EPA 1311 / 3050B
Preparation Date: 4/19/2022
Data File: 220420B
QC Number: 1
QC Batch ID: QC220419Soil

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Report Prepared *Monday, April 25, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: LOA Chillers
Lab Project ID: 221687
Matrix: Oil

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	<0.833	mg/Kg		4/25/2022 18:11
PCB-1221	<0.833	mg/Kg		4/25/2022 18:11
PCB-1232	<0.833	mg/Kg		4/25/2022 18:11
PCB-1242	<0.833	mg/Kg		4/25/2022 18:11
PCB-1248	<0.833	mg/Kg		4/25/2022 18:11
PCB-1254	<0.833	mg/Kg		4/25/2022 18:11
PCB-1260	<0.833	mg/Kg		4/25/2022 18:11
PCB-1262	<0.833	mg/Kg		4/25/2022 18:11
PCB-1268	<0.833	mg/Kg		4/25/2022 18:11

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**90.1**	70 - 130		4/25/2022 18:11

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022
QC Batch ID: QC220422PCBO
QC Number: BlkC 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

PCBs

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
PCB-1016/1260	3.85	mg/Kg	3.20	83.1	70 - 130		4/25/2022

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022
QC Number: LCSC 1
QC Batch ID: QC220422PCBO

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Tuesday, April 26, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1-Biphenyl	<250000	ug/Kg		4/25/2022	14:04
1,2,4,5-Tetrachlorobenzene	<250000	ug/Kg		4/25/2022	14:04
1,2,4-Trichlorobenzene	<250000	ug/Kg		4/25/2022	14:04
1,2-Dichlorobenzene	<250000	ug/Kg		4/25/2022	14:04
1,3-Dichlorobenzene	<250000	ug/Kg		4/25/2022	14:04
1,4-Dichlorobenzene	<250000	ug/Kg		4/25/2022	14:04
2,2-Oxybis (1-chloropropane)	<250000	ug/Kg		4/25/2022	14:04
2,3,4,6-Tetrachlorophenol	<250000	ug/Kg		4/25/2022	14:04
2,4,5-Trichlorophenol	<250000	ug/Kg		4/25/2022	14:04
2,4,6-Trichlorophenol	<250000	ug/Kg		4/25/2022	14:04
2,4-Dichlorophenol	<250000	ug/Kg		4/25/2022	14:04
2,4-Dimethylphenol	<250000	ug/Kg		4/25/2022	14:04
2,4-Dinitrophenol	<1000000	ug/Kg		4/25/2022	14:04
2,4-Dinitrotoluene	<250000	ug/Kg		4/25/2022	14:04
2,6-Dinitrotoluene	<250000	ug/Kg		4/25/2022	14:04
2-Chloronaphthalene	<250000	ug/Kg		4/25/2022	14:04
2-Chlorophenol	<250000	ug/Kg		4/25/2022	14:04
2-Methylnapthalene	<250000	ug/Kg		4/25/2022	14:04
2-Methylphenol	<250000	ug/Kg		4/25/2022	14:04
2-Nitroaniline	<250000	ug/Kg		4/25/2022	14:04
2-Nitrophenol	<250000	ug/Kg		4/25/2022	14:04
3&4-Methylphenol	<250000	ug/Kg		4/25/2022	14:04
3,3'-Dichlorobenzidine	<250000	ug/Kg		4/25/2022	14:04
3-Nitroaniline	<250000	ug/Kg		4/25/2022	14:04
4,6-Dinitro-2-methylphenol	<500000	ug/Kg		4/25/2022	14:04
4-Bromophenyl phenyl ether	<250000	ug/Kg		4/25/2022	14:04
4-Chloro-3-methylphenol	<250000	ug/Kg		4/25/2022	14:04

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
4-Chloroaniline	<250000	ug/Kg		4/25/2022	14:04
4-Chlorophenyl phenyl ether	<250000	ug/Kg		4/25/2022	14:04
4-Nitroaniline	<250000	ug/Kg		4/25/2022	14:04
4-Nitrophenol	<250000	ug/Kg		4/25/2022	14:04
Acenaphthene	<250000	ug/Kg		4/25/2022	14:04
Acenaphthylene	<250000	ug/Kg		4/25/2022	14:04
Acetophenone	<250000	ug/Kg		4/25/2022	14:04
Anthracene	<250000	ug/Kg		4/25/2022	14:04
Atrazine	<250000	ug/Kg		4/25/2022	14:04
Benzaldehyde	<250000	ug/Kg		4/25/2022	14:04
Benzo (a) anthracene	<250000	ug/Kg		4/25/2022	14:04
Benzo (a) pyrene	<250000	ug/Kg		4/25/2022	14:04
Benzo (b) fluoranthene	<250000	ug/Kg		4/25/2022	14:04
Benzo (g,h,i) perylene	<250000	ug/Kg		4/25/2022	14:04
Benzo (k) fluoranthene	<250000	ug/Kg		4/25/2022	14:04
Bis (2-chloroethoxy) methane	<250000	ug/Kg		4/25/2022	14:04
Bis (2-chloroethyl) ether	<250000	ug/Kg		4/25/2022	14:04
Bis (2-ethylhexyl) phthalate	<250000	ug/Kg		4/25/2022	14:04
Butylbenzylphthalate	<250000	ug/Kg		4/25/2022	14:04
Caprolactam	<250000	ug/Kg		4/25/2022	14:04
Carbazole	<250000	ug/Kg		4/25/2022	14:04
Chrysene	<250000	ug/Kg		4/25/2022	14:04
Dibenz (a,h) anthracene	<250000	ug/Kg		4/25/2022	14:04
Dibenzofuran	<250000	ug/Kg		4/25/2022	14:04
Diethyl phthalate	<250000	ug/Kg		4/25/2022	14:04
Dimethyl phthalate	<250000	ug/Kg		4/25/2022	14:04
Di-n-butyl phthalate	<250000	ug/Kg		4/25/2022	14:04
Di-n-octylphthalate	<250000	ug/Kg		4/25/2022	14:04

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: LOA Chillers
Lab Project ID: 221687
Matrix: Oil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
Fluoranthene	<250000	ug/Kg		4/25/2022	14:04
Fluorene	<250000	ug/Kg		4/25/2022	14:04
Hexachlorobenzene	<250000	ug/Kg		4/25/2022	14:04
Hexachlorobutadiene	<250000	ug/Kg		4/25/2022	14:04
Hexachlorocyclopentadiene	<1000000	ug/Kg		4/25/2022	14:04
Hexachloroethane	<250000	ug/Kg		4/25/2022	14:04
Indeno (1,2,3-cd) pyrene	<250000	ug/Kg		4/25/2022	14:04
Isophorone	<250000	ug/Kg		4/25/2022	14:04
Naphthalene	<250000	ug/Kg		4/25/2022	14:04
Nitrobenzene	<250000	ug/Kg		4/25/2022	14:04
N-Nitroso-di-n-propylamine	<250000	ug/Kg		4/25/2022	14:04
N-Nitrosodiphenylamine	<250000	ug/Kg		4/25/2022	14:04
Pentachlorophenol	<500000	ug/Kg		4/25/2022	14:04
Phenanthrene	<250000	ug/Kg		4/25/2022	14:04
Phenol	<250000	ug/Kg		4/25/2022	14:04
Pyrene	<250000	ug/Kg		4/25/2022	14:04

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**79.8**	70 - 130		4/25/2022	14:04
2-Fluorobiphenyl	**72.5**	70 - 130		4/25/2022	14:04
2-Fluorophenol	**78.8**	70 - 130		4/25/2022	14:04
Nitrobenzene-d5	**74.6**	70 - 130		4/25/2022	14:04
Phenol-d5	**77.9**	70 - 130		4/25/2022	14:04
Terphenyl-d14	**72.3**	70 - 130		4/25/2022	14:04

Method Reference(s): EPA 8270D
EPA 3580A
Preparation Date: 4/22/2022
Data File: B61358.D
QC Batch ID: QC220422ABNO
QC Number: Blk 1

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<2.00	ug/Kg		4/21/2022	16:17
1,1,2,2-Tetrachloroethane	<2.00	ug/Kg		4/21/2022	16:17
1,1,2-Trichloroethane	<2.00	ug/Kg		4/21/2022	16:17
1,1-Dichloroethane	<2.00	ug/Kg		4/21/2022	16:17
1,1-Dichloroethene	<2.00	ug/Kg		4/21/2022	16:17
1,2,3-Trichlorobenzene	<5.00	ug/Kg		4/21/2022	16:17
1,2,4-Trichlorobenzene	<5.00	ug/Kg		4/21/2022	16:17
1,2-Dibromo-3-Chloropropane	<10.0	ug/Kg		4/21/2022	16:17
1,2-Dibromoethane	<2.00	ug/Kg		4/21/2022	16:17
1,2-Dichlorobenzene	<2.00	ug/Kg		4/21/2022	16:17
1,2-Dichloroethane	<2.00	ug/Kg		4/21/2022	16:17
1,2-Dichloropropane	<2.00	ug/Kg		4/21/2022	16:17
1,3-Dichlorobenzene	<2.00	ug/Kg		4/21/2022	16:17
1,4-Dichlorobenzene	<2.00	ug/Kg		4/21/2022	16:17
1,4-Dioxane	<10.0	ug/Kg		4/21/2022	16:17
2-Butanone	<10.0	ug/Kg		4/21/2022	16:17
2-Hexanone	<5.00	ug/Kg		4/21/2022	16:17
4-Methyl-2-pentanone	<5.00	ug/Kg		4/21/2022	16:17
Acetone	<10.0	ug/Kg		4/21/2022	16:17
Benzene	<2.00	ug/Kg		4/21/2022	16:17
Bromochloromethane	<5.00	ug/Kg		4/21/2022	16:17
Bromodichloromethane	<2.00	ug/Kg		4/21/2022	16:17
Bromoform	<5.00	ug/Kg		4/21/2022	16:17
Bromomethane	<2.00	ug/Kg		4/21/2022	16:17
Carbon disulfide	<2.00	ug/Kg		4/21/2022	16:17
Carbon Tetrachloride	<2.00	ug/Kg		4/21/2022	16:17
Chlorobenzene	<2.00	ug/Kg		4/21/2022	16:17

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroethane	<2.00	ug/Kg		4/21/2022	16:17
Chloroform	<2.00	ug/Kg		4/21/2022	16:17
Chloromethane	<2.00	ug/Kg		4/21/2022	16:17
cis-1,2-Dichloroethene	<2.00	ug/Kg		4/21/2022	16:17
cis-1,3-Dichloropropene	<2.00	ug/Kg		4/21/2022	16:17
Cyclohexane	<10.0	ug/Kg		4/21/2022	16:17
Dibromochloromethane	<2.00	ug/Kg		4/21/2022	16:17
Dichlorodifluoromethane	<2.00	ug/Kg		4/21/2022	16:17
Ethylbenzene	<2.00	ug/Kg		4/21/2022	16:17
Freon 113	<2.00	ug/Kg		4/21/2022	16:17
Isopropylbenzene	<2.00	ug/Kg		4/21/2022	16:17
m,p-Xylene	<2.00	ug/Kg		4/21/2022	16:17
Methyl acetate	<2.00	ug/Kg		4/21/2022	16:17
Methyl tert-butyl Ether	<2.00	ug/Kg		4/21/2022	16:17
Methylcyclohexane	<2.00	ug/Kg		4/21/2022	16:17
Methylene chloride	<5.00	ug/Kg		4/21/2022	16:17
o-Xylene	<2.00	ug/Kg		4/21/2022	16:17
Styrene	<5.00	ug/Kg		4/21/2022	16:17
Tetrachloroethene	<2.00	ug/Kg		4/21/2022	16:17
Toluene	<2.00	ug/Kg		4/21/2022	16:17
trans-1,2-Dichloroethene	<2.00	ug/Kg		4/21/2022	16:17
trans-1,3-Dichloropropene	<2.00	ug/Kg		4/21/2022	16:17
Trichloroethene	<2.00	ug/Kg		4/21/2022	16:17
Trichlorofluoromethane	<2.00	ug/Kg		4/21/2022	16:17
Vinyl chloride	<2.00	ug/Kg		4/21/2022	16:17

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**112**	74.7 - 140		4/21/2022 16:17
4-Bromofluorobenzene	**103**	68 - 130		4/21/2022 16:17
Pentafluorobenzene	**99.3**	70.3 - 140		4/21/2022 16:17
Toluene-D8	**105**	69 - 138		4/21/2022 16:17

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z08643.D

QC Batch ID: voahl220421

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<1000	ug/Kg		4/21/2022	21:17
1,1,2,2-Tetrachloroethane	<1000	ug/Kg		4/21/2022	21:17
1,1,2-Trichloroethane	<1000	ug/Kg		4/21/2022	21:17
1,1-Dichloroethane	<1000	ug/Kg		4/21/2022	21:17
1,1-Dichloroethene	<1000	ug/Kg		4/21/2022	21:17
1,2,3-Trichlorobenzene	<2500	ug/Kg		4/21/2022	21:17
1,2,4-Trichlorobenzene	<2500	ug/Kg		4/21/2022	21:17
1,2-Dibromo-3-Chloropropane	<5000	ug/Kg		4/21/2022	21:17
1,2-Dibromoethane	<1000	ug/Kg		4/21/2022	21:17
1,2-Dichlorobenzene	<1000	ug/Kg		4/21/2022	21:17
1,2-Dichloroethane	<1000	ug/Kg		4/21/2022	21:17
1,2-Dichloropropane	<1000	ug/Kg		4/21/2022	21:17
1,3-Dichlorobenzene	<1000	ug/Kg		4/21/2022	21:17
1,4-Dichlorobenzene	<1000	ug/Kg		4/21/2022	21:17
1,4-Dioxane	<5000	ug/Kg		4/21/2022	21:17
2-Butanone	<5000	ug/Kg		4/21/2022	21:17
2-Hexanone	<2500	ug/Kg		4/21/2022	21:17
4-Methyl-2-pentanone	<2500	ug/Kg		4/21/2022	21:17
Acetone	<5000	ug/Kg		4/21/2022	21:17
Benzene	<1000	ug/Kg		4/21/2022	21:17
Bromochloromethane	<2500	ug/Kg		4/21/2022	21:17
Bromodichloromethane	<1000	ug/Kg		4/21/2022	21:17
Bromoform	<2500	ug/Kg		4/21/2022	21:17
Bromomethane	<1000	ug/Kg		4/21/2022	21:17
Carbon disulfide	<1000	ug/Kg		4/21/2022	21:17
Carbon Tetrachloride	<1000	ug/Kg		4/21/2022	21:17
Chlorobenzene	<1000	ug/Kg		4/21/2022	21:17
Chloroethane	<1000	ug/Kg		4/21/2022	21:17

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroform	<1000	ug/Kg		4/21/2022	21:17
Chloromethane	<1000	ug/Kg		4/21/2022	21:17
cis-1,2-Dichloroethene	<1000	ug/Kg		4/21/2022	21:17
cis-1,3-Dichloropropene	<1000	ug/Kg		4/21/2022	21:17
Cyclohexane	<5000	ug/Kg		4/21/2022	21:17
Dibromochloromethane	<1000	ug/Kg		4/21/2022	21:17
Dichlorodifluoromethane	<1000	ug/Kg		4/21/2022	21:17
Ethylbenzene	<1000	ug/Kg		4/21/2022	21:17
Freon 113	<1000	ug/Kg		4/21/2022	21:17
Isopropylbenzene	<1000	ug/Kg		4/21/2022	21:17
m,p-Xylene	<1000	ug/Kg		4/21/2022	21:17
Methyl acetate	<1000	ug/Kg		4/21/2022	21:17
Methyl tert-butyl Ether	<1000	ug/Kg		4/21/2022	21:17
Methylcyclohexane	<1000	ug/Kg		4/21/2022	21:17
Methylene chloride	<2500	ug/Kg		4/21/2022	21:17
o-Xylene	<1000	ug/Kg		4/21/2022	21:17
Styrene	<2500	ug/Kg		4/21/2022	21:17
Tetrachloroethene	<1000	ug/Kg		4/21/2022	21:17
Toluene	<1000	ug/Kg		4/21/2022	21:17
trans-1,2-Dichloroethene	<1000	ug/Kg		4/21/2022	21:17
trans-1,3-Dichloropropene	<1000	ug/Kg		4/21/2022	21:17
Trichloroethene	<1000	ug/Kg		4/21/2022	21:17
Trichlorofluoromethane	<1000	ug/Kg		4/21/2022	21:17
Vinyl chloride	<1000	ug/Kg		4/21/2022	21:17

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**103**	74.7 - 140		4/21/2022 21:17
4-Bromofluorobenzene	**100**	68 - 130		4/21/2022 21:17
Pentafluorobenzene	**101**	70.3 - 140		4/21/2022 21:17
Toluene-D8	**98.5**	69 - 138		4/21/2022 21:17

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z08658.D

QC Batch ID: voahl220421

QC Number: Blk 2

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: LOA Chillers
Lab Project ID: 221687
Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1,1-Trichloroethane	20.0	ug/Kg	18.0	89.9	70.9 - 135		4/21/2022
1,1,2,2-Tetrachloroethane	20.0	ug/Kg	18.1	90.3	31.6 - 154		4/21/2022
1,1,2-Trichloroethane	20.0	ug/Kg	16.2	80.9	62 - 132		4/21/2022
1,1-Dichloroethane	20.0	ug/Kg	16.9	84.4	73 - 128		4/21/2022
1,1-Dichloroethene	20.0	ug/Kg	17.2	86.1	61.7 - 119		4/21/2022
1,2-Dichlorobenzene	20.0	ug/Kg	18.4	92.2	61 - 118		4/21/2022
1,2-Dichloroethane	20.0	ug/Kg	17.6	88.1	73.4 - 123		4/21/2022
1,2-Dichloropropane	20.0	ug/Kg	17.4	86.8	71.3 - 123		4/21/2022
1,3-Dichlorobenzene	20.0	ug/Kg	18.5	92.7	68.7 - 112		4/21/2022
1,4-Dichlorobenzene	20.0	ug/Kg	18.1	90.7	66.9 - 113		4/21/2022
Benzene	20.0	ug/Kg	17.7	88.6	77.8 - 119		4/21/2022
Bromodichloromethane	20.0	ug/Kg	17.3	86.7	65.7 - 125		4/21/2022
Bromoform	20.0	ug/Kg	17.0	84.8	54.7 - 130		4/21/2022
Bromomethane	20.0	ug/Kg	16.5	82.4	44.6 - 167		4/21/2022
Carbon Tetrachloride	20.0	ug/Kg	17.5	87.6	61.8 - 138		4/21/2022
Chlorobenzene	20.0	ug/Kg	19.0	95.2	77.2 - 108		4/21/2022

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: LOA Chillers
Lab Project ID: 221687
Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Chloroethane	20.0	ug/Kg	16.2	80.8	55.5 - 151		4/21/2022
Chloroform	20.0	ug/Kg	17.1	85.7	70.1 - 134		4/21/2022
Chloromethane	20.0	ug/Kg	15.1	75.4	42.4 - 168		4/21/2022
cis-1,3-Dichloropropene	20.0	ug/Kg	16.3	81.7	66.7 - 122		4/21/2022
Dibromochloromethane	20.0	ug/Kg	16.1	80.5	61.2 - 130		4/21/2022
Ethylbenzene	20.0	ug/Kg	18.0	89.9	71.6 - 112		4/21/2022
Methylene chloride	20.0	ug/Kg	16.6	83.2	38.2 - 155		4/21/2022
Tetrachloroethene	20.0	ug/Kg	16.8	84.1	61.4 - 137		4/21/2022
Toluene	20.0	ug/Kg	17.1	85.7	71.1 - 124		4/21/2022
trans-1,2-Dichloroethene	20.0	ug/Kg	17.4	87.0	67.3 - 127		4/21/2022
trans-1,3-Dichloropropene	20.0	ug/Kg	16.7	83.5	55 - 126		4/21/2022
Trichloroethene	20.0	ug/Kg	18.0	89.8	69.3 - 128		4/21/2022
Trichlorofluoromethane	20.0	ug/Kg	17.0	85.2	64 - 140		4/21/2022
Vinyl chloride	20.0	ug/Kg	15.4	77.2	51.2 - 160		4/21/2022

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Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: z08642.D
QC Number: LCS 1
QC Batch ID: voahl220421

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared *Friday, April 22, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Dichloroethene	<20.0	ug/L		4/21/2022 21:17
1,2-Dichloroethane	<20.0	ug/L		4/21/2022 21:17
2-Butanone	<100	ug/L		4/21/2022 21:17
Benzene	<20.0	ug/L		4/21/2022 21:17
Carbon Tetrachloride	<20.0	ug/L		4/21/2022 21:17
Chlorobenzene	<20.0	ug/L		4/21/2022 21:17
Chloroform	<20.0	ug/L		4/21/2022 21:17
Tetrachloroethene	<20.0	ug/L		4/21/2022 21:17
Trichloroethene	<20.0	ug/L		4/21/2022 21:17
Vinyl chloride	<20.0	ug/L		4/21/2022 21:17

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**103**	81.1 - 136		4/21/2022 21:17
4-Bromofluorobenzene	**100**	75.8 - 132		4/21/2022 21:17
Pentafluorobenzene	**101**	82 - 132		4/21/2022 21:17
Toluene-D8	**98.5**	64.6 - 137		4/21/2022 21:17

Method Reference(s): EPA 8260C
EPA 5030

Data File: z08658.D

QC Batch ID: voax220421

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Dichloroethene	<1000	ug/L		4/21/2022 21:17
1,2-Dichloroethane	<1000	ug/L		4/21/2022 21:17
2-Butanone	<5000	ug/L		4/21/2022 21:17
Benzene	<1000	ug/L		4/21/2022 21:17
Carbon Tetrachloride	<1000	ug/L		4/21/2022 21:17
Chlorobenzene	<1000	ug/L		4/21/2022 21:17
Chloroform	<1000	ug/L		4/21/2022 21:17
Tetrachloroethene	<1000	ug/L		4/21/2022 21:17
Trichloroethene	<1000	ug/L		4/21/2022 21:17
Vinyl chloride	<1000	ug/L		4/21/2022 21:17

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**103**	81.1 - 136		4/21/2022 21:17
4-Bromofluorobenzene	**100**	75.8 - 132		4/21/2022 21:17
Pentafluorobenzene	**101**	82 - 132		4/21/2022 21:17
Toluene-D8	**98.5**	64.6 - 137		4/21/2022 21:17

Method Reference(s): EPA 8260C
EPA 5030

Data File: z08658.D

QC Batch ID: voax220421

QC Number: Blk 2

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1-Dichloroethene	20.0	ug/L	17.6	88.1	65.5 - 116		4/21/2022
1,2-Dichloroethane	20.0	ug/L	19.1	95.7	78.3 - 122		4/21/2022
Benzene	20.0	ug/L	18.7	93.3	81.6 - 114		4/21/2022
Carbon Tetrachloride	20.0	ug/L	18.1	90.3	76.4 - 129		4/21/2022
Chlorobenzene	20.0	ug/L	20.1	100	77.2 - 106		4/21/2022
Chloroform	20.0	ug/L	18.1	90.7	84.5 - 122		4/21/2022
Tetrachloroethene	20.0	ug/L	18.8	94.1	64.4 - 130		4/21/2022
Trichloroethene	20.0	ug/L	19.1	95.3	73.4 - 122		4/21/2022
Vinyl chloride	20.0	ug/L	16.1	80.4	50.9 - 164		4/21/2022

Method Reference(s): EPA 8260C
EPA 5030
Data File: z08645.D
QC Number: LCS 1
QC Batch ID: voax220421

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared *Friday, April 22, 2022*

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	<0.500	mg/Kg		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022
QC Batch ID: QC220427WTCN
QC Number: Blk 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Inventum Engineering, P.C.**

Project Reference: LOA Chillers

Lab Project ID: 221687

Matrix: Oil

Total Cyanide

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Cyanide, Total	4.95	mg/Kg	4.85	97.9	85 - 115		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022
QC Number: 1
QC Batch ID: QC220427WTCN

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, April 27, 2022

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified “reported as received”. Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an “A” suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

“<” = Analyzed for but not detected at or above the quantitation limit.
“E” = Result has been estimated, calibration limit exceeded.
“H” = Denotes a parameter analyzed outside of holding time.
“Z” = See case narrative.
“D” = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
“M” = Matrix spike recoveries outside QC limits. Matrix bias indicated.
“B” = Method blank contained trace levels of analyte. Refer to included method blank report.
“J” = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
“P” = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
CLIENT:	INVENTUM ENGINEERING	CLIENT:	SAME
ADDRESS:	441 CARLISLE DR SUITE C	ADDRESS:	
CITY: HERNDON	STATE: VA ZIP: 20170	CITY:	STATE: ZIP:
PHONE:	585-734-5255	PHONE:	
ATTN:	ROXANNE BIRX	ATTN:	JOHN BLACK

LAB PROJECT ID: 221687

Quotation #:

Email: roxanne.birx@inventumeng.com; john.black@ " "

PROJECT REFERENCE: LOA CHILLERS

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOCs	SVOCs	FULL TCLP	PCBs	BTU	METALS, TAL	TOTAL Hg, Cy	TOTAL AMMONIA	CORROSIVITY	REACTIVITY	FLAMMABILITY	REMARKS	PARADIGM LAB SAMPLE NUMBER
4/14/2022	1145		X	LOA-CHILL-04142022	OL	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		01A
																		AA TCLP extract on 4/15/22	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☒	None Required	☐	None Required	☐
10 day	☐	Batch QC	☒	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Date Needed _____ please indicate date needed:		Other please indicate package needed:	☐	Other EDD please indicate EDD needed :	☐

ROXANNE BIRX — Sampled By — 4/14/22 Date/Time

Relinquished By — 4/14/22 Date/Time

Received By — 4/14/22 16:00 Date/Time

Received @ Lab By — 4/15/22 1604 Date/Time

3 °C iced 4/15/22 15:22

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Inventum **Completed by:** MO'Neil

Lab Project ID: 221687 **Date:** 4/15/22

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	✓		
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)		TCUP VOA	✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	3°C i ce		
Compliant Sample Quantity/Type	✓		
Comments			

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(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

April 20, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220418003

Project# : LOA Chillers

RE: Analysis of Samples
Project# 221687

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 4/18/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Tara Daniels
Laboratory Director

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 221687

Date: *20-Apr-22*

Lab WorkOrder: **220418003**

Sample containers were not supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:

- ND : Not Detected at reporting limit
- J: Analyte detected below quantitation limit
- B: Analyte detected in Blank
- X : Exceeds maximum contamination limit
- H: Hold time exceeded
- N: Matrix Spike below acceptable limits
- N+: Matrix Spike is above acceptable limits
- C: CCV below acceptable Limits
- C+: CCV above acceptable Limits
- S: LCS Spike recovery is below acceptable limits
- S+: LCS Spike recovery is above acceptable limits
- Z: Duplication outside acceptable limits
- T : Tentatively Identified Compound-Estimated
- E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *20-Apr-22*

CLIENT: Paradigm Environmental
Project: Analysis of Samples
Project# 221687

LabWork Order: **220418003**
PO#:
Project# : LOA Chillers

Lab SampleID: 220418003-001
Client Sample ID: 221687-01

Collection Date: 4/14/2022
Matrix: OIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
AMMONIA AS N - SM 4500 NH3 G-2011						Analyst: **CS**
(Prep: SM4500-NH3 G - 4/19/2022)						
Nitrogen, Ammonia- (as N)	**ND**	20.0		µg/g	10	4/20/2022 10:51:31 AM
HEAT VALUE - ASTM D240-09						Analyst: **AMN**
Heat Value	**19100**	500		btu/lb	1	4/20/2022
SW 7.3.3.2, NOT ELAP CERTIFIED						Analyst: **KB**
(Prep: E335.4 - 4/19/2022)						
Reactive Cyanide	**ND**	0.9		µg/g	1	4/19/2022 2:29:04 PM
SW 7.3.4.2, NOT ELAP CERTIFIED						Analyst: **CS**
(Prep: E335.4 - 4/19/2022)						
Reactive Sulfide	**18**	10	S+	µg/g	1	4/19/2022
REACTIVITY - SW 7.3.4.2, NOT ELAP CERTIFIED						Analyst: **CS**
Reactivity	**Non Reactive**	0			1	4/19/2022

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

2204180003

CHAIN OF CUSTODY

ELAP ID:

Demo 2204180003 Page 46 of 58

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJEC
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN:	Accounts Payable
LOA chillers		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due: 4/25/22	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	BTU	Ammonia	reactivity							REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	4/14/22	1145		X	221687-01	oil	2	X	X	X							Batch QC					
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments: Not ABS		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments: 4°c		

Client

	Sampled By	Date/Time
	Molly Reid	4/15/22 0830
Relinquished By		Date/Time
	Ryan Zacher	4/18/22 10:55
Received By		Date/Time
		4/18/22 2:28
Received @ Lab By		Date/Time

Total Cost:

P.I.F.

Adirondack Environmental Services Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
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May 02, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220426013

ProjectName: LOA Chillers

RE: Analysis of Samples
Project# 221687

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 4/26/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Christopher Hess
QA Manager

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 221687

Date: *02-May-22*

Lab WorkOrder: **220426013**

Sample containers were not supplied by Adirondack Environmental Services.

The client performed the TCLP extraction procedure. The TCLP extract was provided for analysis.

The reporting limit standard analyzed for Pyridine had a recovery of 96.9 %.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:

- ND : Not Detected at reporting limit
- J: Analyte detected below quantitation limit
- B: Analyte detected in Blank
- X : Exceeds maximum contamination limit
- H: Hold time exceeded
- N: Matrix Spike below acceptable limits
- N+: Matrix Spike is above acceptable limits
- C: CCV below acceptable Limits
- C+: CCV above acceptable Limits
- S: LCS Spike recovery is below acceptable limits
- S+: LCS Spike recovery is above acceptable limits
- Z: Duplication outside acceptable limits
- T : Tentatively Identified Compound-Estimated
- E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *02-May-22*

CLIENT: Paradigm Environmental
Project: Analysis of Samples
Project# 221687

LabWork Order: **220426013**
PO#:
ProjectName: LOA Chillers

Lab SampleID: 220426013-001
Client Sample ID: 221687-01A

Collection Date: 4/24/2022
Matrix: TCLP-EXTRACT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP HERBICIDES - EPA 8321B (**Prep: SW3535A - 4/26/2022**)						Analyst: **KF**
2,4,5-TP (Silvex)-TCLP	**ND**	0.050		mg/L	1	4/27/2022 6:01:32 PM
2,4-D-TCLP	**ND**	0.050		mg/L	1	4/27/2022 6:01:32 PM
Surr: Acifluorfen	**67.3**	52.5-128		%REC	1	4/27/2022 6:01:32 PM
Surr: DCAA	**72.7**	56.2-139		%REC	1	4/27/2022 6:01:32 PM
TCLP PESTICIDES - EPA 8081B (**Prep: SW3535A - 4/27/2022**)						Analyst: **KF**
Chlordane-TCLP	**ND**	0.010		mg/L	1	4/27/2022 6:09:36 PM
Endrin-TCLP	**ND**	0.0020		mg/L	1	4/27/2022 6:09:36 PM
gamma-BHC(Lindane)-TCLP	**ND**	0.0020		mg/L	1	4/27/2022 6:09:36 PM
Heptachlor epoxide-TCLP	**ND**	0.0020		mg/L	1	4/27/2022 6:09:36 PM
Heptachlor-TCLP	**ND**	0.0020		mg/L	1	4/27/2022 6:09:36 PM
Methoxychlor-TCLP	**ND**	0.010		mg/L	1	4/27/2022 6:09:36 PM
Toxaphene-TCLP	**ND**	0.020		mg/L	1	4/27/2022 6:09:36 PM
Surr: Decachlorobiphenyl-TCLP	**86.6**	51.5-141		%REC	1	4/27/2022 6:09:36 PM
TCLP SEMI-VOLATILES - EPA 8270D (**Prep: SW3535A - 4/26/2022**)						Analyst: **MT**
1,4-Dichlorobenzene -TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
2,4,5-Trichlorophenol-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
2,4,6-Trichlorophenol-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
2,4-Dinitrotoluene-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
Cresols, Total-TCLP	**1900**	400		µg/L	2	4/29/2022 2:41:00 PM
Hexachlorobenzene-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
Hexachlorobutadiene-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
Hexachloroethane-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
Nitrobenzene-TCLP	**ND**	100		µg/L	2	4/29/2022 2:41:00 PM
Pentachlorophenol-TCLP	**ND**	500		µg/L	2	4/29/2022 2:41:00 PM
Pyridine-TCLP	**ND**	200	C	µg/L	2	4/29/2022 2:41:00 PM
Surr: 2,4,6-Tribromophenol	**92.6**	43.7-123		%REC	2	4/29/2022 2:41:00 PM
Surr: 2-Fluorobiphenyl	**80.8**	48.7-108		%REC	2	4/29/2022 2:41:00 PM
Surr: 2-Fluorophenol	**80.2**	23.5-101		%REC	2	4/29/2022 2:41:00 PM
Surr: 4-Terphenyl-d14	**94.0**	50.6-121		%REC	2	4/29/2022 2:41:00 PM
Surr: Nitrobenzene-d5	**85.0**	43.7-109		%REC	2	4/29/2022 2:41:00 PM
Surr: Phenol-d6	**82.2**	12.6-93.5		%REC	2	4/29/2022 2:41:00 PM

Adirondack Environmental Services, Inc

Date: *02-May-22*

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92963

mblk

SeqNo: **3298856** PrepDate:**4/26/2022** TestNo: **SW1311/8270** RunNo: **206524**
Samp ID: **mb-92963** PrepRef:**(SW3535A)** Units: **µg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -TCLP	ND	50									
2,4,5-Trichlorophenol-TCLP	ND	50									
2,4,6-Trichlorophenol-TCLP	ND	50									
2,4-Dinitrotoluene-TCLP	ND	50									
Hexachlorobenzene-TCLP	ND	50									
Hexachlorobutadiene-TCLP	ND	50									
Hexachloroethane-TCLP	ND	50									
Nitrobenzene-TCLP	ND	50									
Pentachlorophenol-TCLP	ND	250									
Pyridine-TCLP	ND	100									
Cresols, Total-TCLP	ND	200									
Surr: 2,4,6-Tribromophenol	435.2	50	500	0	87	43.7	123	0	0		
Surr: 2-Fluorobiphenyl	218.4	50	250	0	87.4	48.7	108	0	0		
Surr: 2-Fluorophenol	392.2	50	500	0	78.4	23.5	101	0	0		
Surr: 4-Terphenyl-d14	226	0	250	0	90.4	50.6	121	0	0		
Surr: Nitrobenzene-d5	201.5	0	250	0	80.6	43.7	109	0	0		
Surr: Phenol-d6	436.2	0	500	0	87.2	12.6	93.5	0	0		

lcs

SeqNo: **3298857** PrepDate:**4/26/2022** TestNo: **SW1311/8270** RunNo: **206524**
Samp ID: **lcs-92963** PrepRef:**(SW3535A)** Units: **µg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -TCLP	155.4	50	250	0	62.2	36.3	94	0	0		
2,4,5-Trichlorophenol-TCLP	223.8	50	250	0	89.5	50.6	117	0	0		
2,4,6-Trichlorophenol-TCLP	195.3	50	250	0	78.1	53	121	0	0		
2,4-Dinitrotoluene-TCLP	208.8	50	250	0	83.5	50.1	121	0	0		
Hexachlorobenzene-TCLP	136.8	50	250	0	54.7	54.2	125	0	0		
Hexachlorobutadiene-TCLP	197.9	50	250	0	79.1	34.3	96	0	0		
Hexachloroethane-TCLP	149.6	50	250	0	59.9	33	97	0	0		
Nitrobenzene-TCLP	189.4	50	250	0	75.7	49	115	0	0		
Pentachlorophenol-TCLP	ND	250	250	0	73.6	43.3	132	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92963

lcs

SeqNo: **3298857** PrepDate:**4/26/2022** TestNo: **SW1311/8270** RunNo: **206524**
Samp ID: **lcs-92963** PrepRef:**(SW3535A)** Units: **µg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyridine-TCLP	118	100	250	0	47.2	16.3	84	0	0		
Cresols, Total-TCLP	565.4	200	750	0	75.4	44	121	0	0		
Surr: 2,4,6-Tribromophenol	462.4	50	500	0	92.5	43.7	123	0	0		
Surr: 2-Fluorobiphenyl	205.3	50	250	0	82.1	48.7	108	0	0		
Surr: 2-Fluorophenol	380	50	500	0	76	23.5	101	0	0		
Surr: 4-Terphenyl-d14	219.4	0	250	0	87.7	50.6	121	0	0		
Surr: Nitrobenzene-d5	205.8	0	250	0	82.3	43.7	109	0	0		
Surr: Phenol-d6	408.4	0	500	0	81.7	12.6	93.5	0	0		

ms

SeqNo: **3299456** PrepDate:**4/26/2022** TestNo: **SW1311/8270** RunNo: **206524**
Samp ID: **220422012-006a** PrepRef:**(SW3535A)** Units: **µg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -TCLP	130.6	50	250	0	52.2	26.4	113	0	0		
2,4,5-Trichlorophenol-TCLP	203.2	50	250	0	81.3	45.9	119	0	0		
2,4,6-Trichlorophenol-TCLP	171	50	250	0	68.4	41.8	125	0	0		
2,4-Dinitrotoluene-TCLP	178.6	50	250	0	71.4	48	117	0	0		
Hexachlorobenzene-TCLP	195.9	50	250	0	78.4	50.6	130	0	0		
Hexachlorobutadiene-TCLP	165.6	50	250	0	66.3	23	108	0	0		
Hexachloroethane-TCLP	133	50	250	0	53.2	21.7	97	0	0		
Nitrobenzene-TCLP	159.7	50	250	0	63.9	48	107	0	0		
Pentachlorophenol-TCLP	ND	250	250	0	60	35.8	127	0	0		
Pyridine-TCLP	ND	100	250	0	38.8	16.7	112	0	0		
Cresols, Total-TCLP	524.6	200	750	0	70	33.6	122	0	0		
Surr: 2,4,6-Tribromophenol	424.4	50	500	0	84.9	43.7	123	0	0		
Surr: 2-Fluorobiphenyl	195.8	50	250	0	78.3	48.7	108	0	0		
Surr: 2-Fluorophenol	363.6	50	500	0	72.7	23.5	101	0	0		
Surr: 4-Terphenyl-d14	222.6	0	250	0	89	50.6	121	0	0		
Surr: Nitrobenzene-d5	179.8	0	250	0	71.9	43.7	109	0	0		
Surr: Phenol-d6	412	0	500	0	82.4	12.6	93.5	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92963

msd	SeqNo: **3299457**	**PrepDate:4/26/2022**	TestNo: **SW1311/8270**	RunNo: **206524**
	Samp ID: **220422012-006a**	**PrepRef:(SW3535A)**	Units: **µg/L**	Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -TCLP	119.4	50	250	0	47.8	26.4	113	130.6	8.92	27.8	
2,4,5-Trichlorophenol-TCLP	181.8	50	250	0	72.7	45.9	119	203.2	11.1	22.9	
2,4,6-Trichlorophenol-TCLP	158	50	250	0	63.2	41.8	125	171	7.90	24.9	
2,4-Dinitrotoluene-TCLP	150.6	50	250	0	60.2	48	117	178.6	17.0	21.2	
Hexachlorobenzene-TCLP	181.8	50	250	0	72.7	50.6	130	195.9	7.44	18.3	
Hexachlorobutadiene-TCLP	146.6	50	250	0	58.6	23	108	165.6	12.2	27.3	
Hexachloroethane-TCLP	124	50	250	0	49.6	21.7	97	133	7.08	26.9	
Nitrobenzene-TCLP	141.1	50	250	0	56.4	48	107	159.7	12.4	26.7	
Pentachlorophenol-TCLP	ND	250	250	0	52.2	35.8	127	150	0	22.5	
Pyridine-TCLP	ND	100	250	0	33.4	16.7	112	96.95	0	31	
Cresols, Total-TCLP	474.4	200	750	0	63.2	33.6	122	524.6	10.1	28	
Surr: 2,4,6-Tribromophenol	393.4	50	500	0	78.7	43.7	123	0	0	0	
Surr: 2-Fluorobiphenyl	182.4	50	250	0	73	48.7	108	0	0	0	
Surr: 2-Fluorophenol	326.8	50	500	0	65.4	23.5	101	0	0	0	
Surr: 4-Terphenyl-d14	208.2	0	250	0	83.3	50.6	121	0	0	0	
Surr: Nitrobenzene-d5	161.9	0	250	0	64.8	43.7	109	0	0	0	
Surr: Phenol-d6	360.8	0	500	0	72.2	12.6	93.5	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92974

mblk

SeqNo: **3299071** PrepDate:**4/26/2022** TestNo: **SW1311/8321** RunNo: **206532**
Samp ID: **mb-92974** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)-TCLP	ND	0.050									
2,4-D-TCLP	ND	0.050									
Surr: Acifluorfen	0.7107	0.050	0.5	0	142	52.5	128	0	0		S
Surr: DCAA	0.6213	0	0.5	0	124	56.2	139	0	0		

lcs

SeqNo: **3299072** PrepDate:**4/26/2022** TestNo: **SW1311/8321** RunNo: **206532**
Samp ID: **LCS-92974 0.1P** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)-TCLP	0.07754	0.050	0.1	0	77.5	57.6	128	0	0		
2,4-D-TCLP	0.06035	0.050	0.1	0	60.4	52	138	0	0		
Surr: Acifluorfen	0.6847	0.050	0.5	0	137	52.5	128	0	0		S
Surr: DCAA	0.6194	0	0.5	0	124	56.2	139	0	0		

ms

SeqNo: **3299392** PrepDate:**4/26/2022** TestNo: **SW1311/8321** RunNo: **206532**
Samp ID: **220425008-001a** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)-TCLP	ND	0.050	0.1	0	38.8	53.1	121	0	0		S
2,4-D-TCLP	ND	0.050	0.1	0	36.7	57.3	136	0	0		S
Surr: Acifluorfen	0.3609	0.050	0.5	0	72.2	52.5	128	0	0		
Surr: DCAA	0.455	0	0.5	0	91	56.2	139	0	0		

msd

SeqNo: **3299393** PrepDate:**4/26/2022** TestNo: **SW1311/8321** RunNo: **206532**
Samp ID: **220425008-001a** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/26/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)-TCLP	ND	0.050	0.1	0	38.2	53.1	121	0.03883	0	20.8	S
2,4-D-TCLP	ND	0.050	0.1	0	40.9	57.3	136	0.03674	0	20	S
Surr: Acifluorfen	0.2688	0.050	0.5	0	53.8	52.5	128	0	0	0	
Surr: DCAA	0.4921	0	0.5	0	98.4	56.2	139	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92997

mblk

SeqNo: **3300434** PrepDate:**4/27/2022** TestNo: **SW1311/8081** RunNo: **206604**
Samp ID: **mb-92997** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/27/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane-TCLP	ND	0.010									
Endrin-TCLP	ND	0.0020									
gamma-BHC(Lindane)-TCLP	ND	0.0020									
Heptachlor epoxide-TCLP	ND	0.0020									
Heptachlor-TCLP	ND	0.0020									
Methoxychlor-TCLP	ND	0.010									
Toxaphene-TCLP	ND	0.020									
Surr: Decachlorobiphenyl-TCLP	0.01238	0	0.01	0	124	51.5	141	0	0		

lcs

SeqNo: **3300435** PrepDate:**4/27/2022** TestNo: **SW1311/8081** RunNo: **206604**
Samp ID: **LCS-92997 0.01** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/27/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane-TCLP	0.01088	0.010	0.02	0	54.4	51.4	134	0	0		
Endrin-TCLP	0.00928	0.0020	0.01	0	92.8	46.1	132	0	0		
gamma-BHC(Lindane)-TCLP	0.00558	0.0020	0.01	0	55.8	47.4	116	0	0		
Heptachlor epoxide-TCLP	0.00544	0.0020	0.01	0	54.4	52.4	130	0	0		
Heptachlor-TCLP	0.0059	0.0020	0.01	0	59	45.2	109	0	0		
Methoxychlor-TCLP	0.01098	0.010	0.01	0	110	43.2	134	0	0		
Surr: Decachlorobiphenyl-TCLP	0.00648	0	0.01	0	64.8	51.5	141	0	0		

ms

SeqNo: **3300437** PrepDate:**4/27/2022** TestNo: **SW1311/8081** RunNo: **206604**
Samp ID: **220426013-001a (221687-01A)** PrepRef:**(SW3535A)** Units: **mg/L** Analysis Date: **4/27/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane-TCLP	0.01742	0.010	0.02	0	87.1	49.1	124	0	0		
Endrin-TCLP	0.00756	0.0020	0.01	0	75.6	50.3	128	0	0		
gamma-BHC(Lindane)-TCLP	0.0086	0.0020	0.01	0	86	37.9	129	0	0		
Heptachlor epoxide-TCLP	0.00678	0.0020	0.01	0	67.8	46.5	128	0	0		
Heptachlor-TCLP	0.00792	0.0020	0.01	0	79.2	45.3	116	0	0		
Methoxychlor-TCLP	0.0116	0.010	0.01	0	116	44	139	0	0		
Surr: Decachlorobiphenyl-TCLP	0.0087	0	0.01	0	87	51.5	141	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Paradigm Environmental
Work Order: 220426013
Project: Analysis of Samples

ANALYTICAL QC SUMMARY REPORT

BatchID: 92997

msd

SeqNo: **3300438** **PrepDate:4/27/2022** TestNo: **SW1311/8081** RunNo: **206604**
Samp ID: **220426013-001a (221687-01A)** **PrepRef:(SW3535A)** Units: **mg/L** Analysis Date: **4/27/2022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane-TCLP	0.01992	0.010	0.02	0	99.6	49.1	124	0.01742	13.4	40	
Endrin-TCLP	0.00838	0.0020	0.01	0	83.8	50.3	128	0.00756	10.3	38.8	
gamma-BHC(Lindane)-TCLP	0.00954	0.0020	0.01	0	95.4	37.9	129	0.0086	10.4	45	
Heptachlor epoxide-TCLP	0.00858	0.0020	0.01	0	85.8	46.5	128	0.00678	23.4	43.9	
Heptachlor-TCLP	0.0089	0.0020	0.01	0	89	45.3	116	0.00792	11.7	41.7	
Methoxychlor-TCLP	0.01072	0.010	0.01	0	107	44	139	0.0116	7.89	40	
Surr: Decachlorobiphenyl-TCLP	0.0078	0	0.01	0	78	51.5	141	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

2204260 13

1 of 1

CHAIN OF CUSTODY

ELAP ID: 1

220426013 Page 57 of 58

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJEC
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:		STD 1 2 3 X 5	
PROJECT NAME/SITE NAME:	ATTN: Reporting	ATTN:	Accounts Payable		
LoA Chillers	COMMENTS: Please email results to reporting@paradigmenv.com			Date Due:	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TCLP Herbicides	TCLP Pesticides	TCLP SVOA								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	4/14/22	11:45		X	221687-01A	TCLP extract	2	X	X	X								Sample spun at Paradigm for TCLP extract 4/25/22	
2																			
3																			
4																			
5																			
6																		Batch QC	
7																			
8																			
9																			
10																			

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter		NELAC Compliance	
Container Type:	Comments: Not ab	Y ☐	N ☐
Preservation:	Comments:	Y ☐	N ☐
Holding Time:	Comments:	Y ☐	N ☐
Temperature:	Comments: 4oc	Y ☐	N ☐

Client

Sampled By	Date/Time	
[illegible]	4/26/22	08:30
Relinquished By	Date/Time	
Ryan Zacher	4/26/22	1:21
Received By	Date/Time	
[illegible] Zakar	4/26/22	4:04
Received @ Lab By	Date/Time	

Total Cost: ☐

P.I.F. ☐

Adirondack Environmental Services Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Inventum Engineering, P.C.

For Lab Project ID

221761

Referencing

Building 10S Oil

Prepared

Tuesday, May 3, 2022

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Portions of the enclosed report reflects analysis that has been subcontracted and are presented in their original form.

Emily Farmer

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier:	Build 10S - 04192022		
Lab Sample ID:	221761-01	**Date Sampled:** 4/19/2022	14:30
Matrix:	Oil	**Date Received** 4/20/2022	

Corrosivity as pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH (Strip)	**10.0**	S.U.		4/25/2022 14:14

Due to incompatible matrix or extreme pH which may damage the probe, the result has been measured using pH strip. These results should be considered estimated and only used for screening purposes.

Method Reference(s): EPA 9045D

Flash Point

Analyte	Result	Units	Qualifier	Date Analyzed
Flash Point, Celsius	**16.0**	C		4/29/2022

Method Reference(s): EPA 1010A

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.171**	mg/Kg		4/27/2022 05:47

Method Reference(s): EPA 7471B
Preparation Date: 4/26/2022
Data File: Hg220427A

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 4.85	mg/Kg		4/25/2022 14:12
Antimony	< 2.91	mg/Kg		4/25/2022 14:12
Arsenic	< 0.485	mg/Kg		4/25/2022 14:12
Barium	< 4.85	mg/Kg		4/25/2022 14:12
Beryllium	< 0.243	mg/Kg		4/25/2022 14:12
Cadmium	< 0.243	mg/Kg		4/25/2022 14:12
Calcium	< 121	mg/Kg		4/25/2022 14:12
Chromium	< 0.485	mg/Kg		4/25/2022 14:12
Cobalt	< 2.43	mg/Kg		4/25/2022 14:12
Copper	< 0.971	mg/Kg		4/25/2022 14:12
Iron	< 9.71	mg/Kg		4/25/2022 14:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01 **Date Sampled:** 4/19/2022 14:30
Matrix: Oil **Date Received** 4/20/2022

Lead	< 0.485	mg/Kg		4/25/2022 14:12
Magnesium	< 121	mg/Kg		4/25/2022 14:12
Manganese	< 0.728	mg/Kg		4/25/2022 14:12
Nickel	< 1.94	mg/Kg		4/25/2022 14:12
Potassium	< 121	mg/Kg		4/25/2022 14:12
Selenium	**1.49**	mg/Kg		4/25/2022 14:12
Silver	< 0.485	mg/Kg		4/25/2022 14:12
Sodium	< 121	mg/Kg		4/25/2022 14:12
Thallium	< 1.21	mg/Kg		4/25/2022 14:12
Vanadium	< 1.21	mg/Kg		4/25/2022 14:12
Zinc	< 2.91	mg/Kg		4/25/2022 14:12

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/22/2022
Data File: 220425C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1221	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1232	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1242	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1248	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1254	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1260	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1262	< 0.870	mg/Kg		4/26/2022 21:28
PCB-1268	< 0.870	mg/Kg		4/26/2022 21:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**109**	70 - 130		4/26/2022 21:28

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01 **Date Sampled:** 4/19/2022 14:30
Matrix: Oil **Date Received** 4/20/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 370000	ug/Kg		4/28/2022 13:34
1,1,2,2-Tetrachloroethane	< 370000	ug/Kg		4/28/2022 13:34
1,1,2-Trichloroethane	< 370000	ug/Kg		4/28/2022 13:34
1,1-Dichloroethane	< 370000	ug/Kg		4/28/2022 13:34
1,1-Dichloroethene	< 370000	ug/Kg		4/28/2022 13:34
1,2,3-Trichlorobenzene	< 926000	ug/Kg		4/28/2022 13:34
1,2,4-Trichlorobenzene	< 926000	ug/Kg		4/28/2022 13:34
1,2-Dibromo-3-Chloropropane	< 1850000	ug/Kg		4/28/2022 13:34
1,2-Dibromoethane	< 370000	ug/Kg		4/28/2022 13:34
1,2-Dichlorobenzene	< 370000	ug/Kg		4/28/2022 13:34
1,2-Dichloroethane	< 370000	ug/Kg		4/28/2022 13:34
1,2-Dichloropropane	< 370000	ug/Kg		4/28/2022 13:34
1,3-Dichlorobenzene	< 370000	ug/Kg		4/28/2022 13:34
1,4-Dichlorobenzene	< 370000	ug/Kg		4/28/2022 13:34
1,4-Dioxane	< 1850000	ug/Kg		4/28/2022 13:34
2-Butanone	< 1850000	ug/Kg		4/28/2022 13:34
2-Hexanone	< 926000	ug/Kg		4/28/2022 13:34
4-Methyl-2-pentanone	< 926000	ug/Kg		4/28/2022 13:34
Acetone	< 1850000	ug/Kg		4/28/2022 13:34
Benzene	**315000000**	ug/Kg	E	4/28/2022 13:34
Bromochloromethane	< 926000	ug/Kg		4/28/2022 13:34
Bromodichloromethane	< 370000	ug/Kg		4/28/2022 13:34
Bromoform	< 926000	ug/Kg		4/28/2022 13:34
Bromomethane	< 370000	ug/Kg		4/28/2022 13:34
Carbon disulfide	< 370000	ug/Kg		4/28/2022 13:34
Carbon Tetrachloride	< 370000	ug/Kg		4/28/2022 13:34
Chlorobenzene	< 370000	ug/Kg		4/28/2022 13:34
Chloroethane	< 370000	ug/Kg		4/28/2022 13:34

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01 **Date Sampled:** 4/19/2022 14:30
Matrix: Oil **Date Received** 4/20/2022

Chloroform	< 370000	ug/Kg		4/28/2022	13:34
Chloromethane	< 370000	ug/Kg		4/28/2022	13:34
cis-1,2-Dichloroethene	< 370000	ug/Kg		4/28/2022	13:34
cis-1,3-Dichloropropene	< 370000	ug/Kg		4/28/2022	13:34
Cyclohexane	< 1850000	ug/Kg		4/28/2022	13:34
Dibromochloromethane	< 370000	ug/Kg		4/28/2022	13:34
Dichlorodifluoromethane	< 370000	ug/Kg		4/28/2022	13:34
Ethylbenzene	**1780000**	ug/Kg		4/28/2022	13:34
Freon 113	< 370000	ug/Kg		4/28/2022	13:34
Isopropylbenzene	< 370000	ug/Kg		4/28/2022	13:34
m,p-Xylene	**25300000**	ug/Kg		4/28/2022	13:34
Methyl acetate	< 370000	ug/Kg		4/28/2022	13:34
Methyl tert-butyl Ether	< 370000	ug/Kg		4/28/2022	13:34
Methylcyclohexane	< 370000	ug/Kg		4/28/2022	13:34
Methylene chloride	< 926000	ug/Kg		4/28/2022	13:34
o-Xylene	**6730000**	ug/Kg		4/28/2022	13:34
Styrene	**14700000**	ug/Kg		4/28/2022	13:34
Tetrachloroethene	< 370000	ug/Kg		4/28/2022	13:34
Toluene	**88800000**	ug/Kg	E	4/28/2022	13:34
trans-1,2-Dichloroethene	< 370000	ug/Kg		4/28/2022	13:34
trans-1,3-Dichloropropene	< 370000	ug/Kg		4/28/2022	13:34
Trichloroethene	< 370000	ug/Kg		4/28/2022	13:34
Trichlorofluoromethane	< 370000	ug/Kg		4/28/2022	13:34
Vinyl chloride	< 370000	ug/Kg		4/28/2022	13:34

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01 **Date Sampled:** 4/19/2022 14:30
Matrix: Oil **Date Received** 4/20/2022

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	74.7 - 140		4/28/2022 13:34
4-Bromofluorobenzene	**102**	68 - 130		4/28/2022 13:34
Pentafluorobenzene	**106**	70.3 - 140		4/28/2022 13:34
Toluene-D8	**99.9**	69 - 138		4/28/2022 13:34

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: z08792.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.490	mg/Kg		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01A **Date Sampled:** 4/19/2022 14:30
Matrix: TCLP Extract **Date Received** 4/20/2022

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	< 0.00200	mg/L	0.2		4/25/2022 12:40

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 4/25/2022
Data File: Hg220425A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.500	mg/L	5		4/21/2022 18:02
Barium	< 0.500	mg/L	100		4/21/2022 18:02
Cadmium	< 0.0250	mg/L	1		4/21/2022 18:02
Chromium	< 0.500	mg/L	5		4/21/2022 18:02
Lead	< 0.500	mg/L	5		4/21/2022 18:02
Selenium	< 0.200	mg/L	1		4/21/2022 18:02
Silver	< 0.500	mg/L	5		4/21/2022 18:02

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 4/21/2022
Data File: 220421D

TCLP Volatile Organics

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
1,1-Dichloroethene	< 20000	ug/L	700		4/27/2022 19:43
1,2-Dichloroethane	< 20000	ug/L	500		4/27/2022 19:43
2-Butanone	< 100000	ug/L	200000		4/27/2022 19:43
Benzene	**1870000**	ug/L	500		4/27/2022 19:43
Carbon Tetrachloride	< 20000	ug/L	500		4/27/2022 19:43
Chlorobenzene	< 20000	ug/L	100000		4/27/2022 19:43
Chloroform	< 20000	ug/L	6000		4/27/2022 19:43
Tetrachloroethene	< 20000	ug/L	700		4/27/2022 19:43

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 221761

Client: **Inventum Engineering, P.C.**

Project Reference: Building 10S Oil

Sample Identifier: Build 10S - 04192022
Lab Sample ID: 221761-01A **Date Sampled:** 4/19/2022 14:30
Matrix: TCLP Extract **Date Received** 4/20/2022

Trichloroethene	< 20000	ug/L	500		4/27/2022 19:43
Vinyl chloride	< 20000	ug/L	200		4/27/2022 19:43

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	81.1 - 136		4/27/2022 19:43
4-Bromofluorobenzene	**100**	75.8 - 132		4/27/2022 19:43
Pentafluorobenzene	**105**	82 - 132		4/27/2022 19:43
Toluene-D8	**98.8**	64.6 - 137		4/27/2022 19:43

Method Reference(s): EPA 8260C
EPA 1311 / 5030C
Data File: z08778.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

TAL Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Aluminum	<4.95	mg/Kg		4/25/2022	13:58
Antimony	<2.97	mg/Kg		4/25/2022	13:58
Arsenic	<0.495	mg/Kg		4/25/2022	13:58
Barium	<4.95	mg/Kg		4/25/2022	13:58
Beryllium	<0.248	mg/Kg		4/25/2022	13:58
Cadmium	<0.248	mg/Kg		4/25/2022	13:58
Calcium	<124	mg/Kg		4/25/2022	13:58
Chromium	<0.495	mg/Kg		4/25/2022	13:58
Cobalt	<2.48	mg/Kg		4/25/2022	13:58
Copper	<0.990	mg/Kg		4/25/2022	13:58
Iron	<9.90	mg/Kg		4/25/2022	13:58
Lead	<0.495	mg/Kg		4/25/2022	13:58
Magnesium	<124	mg/Kg		4/25/2022	13:58
Manganese	<0.743	mg/Kg		4/25/2022	13:58
Nickel	<1.98	mg/Kg		4/25/2022	13:58
Potassium	<124	mg/Kg		4/25/2022	13:58
Selenium	<0.990	mg/Kg		4/25/2022	13:58
Silver	<0.495	mg/Kg		4/25/2022	13:58
Sodium	<124	mg/Kg		4/25/2022	13:58
Thallium	<1.24	mg/Kg		4/25/2022	13:58
Vanadium	<1.24	mg/Kg		4/25/2022	13:58
Zinc	<2.97	mg/Kg		4/25/2022	13:58

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/22/2022
Data File: 220425C
QC Batch ID: QC220422Soil
QC Number: Blk 1

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Report Prepared Tuesday, April 26, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Aluminum	119	114	mg/Kg	116	111	97.2	98.0	80 - 120			0.840	20		4/25/2022
Antimony	119	114	mg/Kg	123	118	104	104	80 - 120			0.342	20		4/25/2022
Arsenic	119	114	mg/Kg	114	109	95.6	96.0	80 - 120			0.467	20		4/25/2022
Barium	119	114	mg/Kg	123	118	103	104	80 - 120			0.688	20		4/25/2022
Beryllium	23.8	22.7	mg/Kg	23.0	22.0	96.6	96.8	80 - 120			0.254	20		4/25/2022
Cadmium	47.6	45.5	mg/Kg	49.7	47.9	104	105	80 - 120			1.05	20		4/25/2022
Calcium	190	182	mg/Kg	187	181	98.2	99.6	80 - 120			1.41	20		4/25/2022
Chromium	119	114	mg/Kg	123	119	103	105	80 - 120			1.34	20		4/25/2022
Cobalt	47.6	45.5	mg/Kg	49.0	47.5	103	104	80 - 120			1.51	20		4/25/2022
Copper	119	114	mg/Kg	119	115	99.9	101	80 - 120			1.02	20		4/25/2022
Iron	119	114	mg/Kg	118	115	99.1	101	80 - 120			1.64	20		4/25/2022
Lead	119	114	mg/Kg	116	112	97.2	98.2	80 - 120			1.02	20		4/25/2022
Magnesium	381	364	mg/Kg	395	381	104	105	80 - 120			1.05	20		4/25/2022
Manganese	47.6	45.5	mg/Kg	49.1	47.3	103	104	80 - 120			0.793	20		4/25/2022
Nickel	238	227	mg/Kg	241	233	101	103	80 - 120			1.57	20		4/25/2022
Potassium	2020	1930	mg/Kg	2000	1920	98.9	99.3	80 - 120			0.402	20		4/25/2022

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Report Prepared Tuesday, April 26, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Selenium	119	114	mg/Kg	110	105	92.4	92.6	80 - 120			0.268	20		4/25/2022
Silver	11.9	11.4	mg/Kg	11.4	11.1	96.2	97.3	80 - 120			1.20	20		4/25/2022
Sodium	571	545	mg/Kg	553	528	96.7	96.8	80 - 120			0.0994	20		4/25/2022
Thallium	119	114	mg/Kg	122	118	103	104	80 - 120			0.819	20		4/25/2022
Vanadium	47.6	45.5	mg/Kg	50.4	48.9	106	108	80 - 120			1.55	20		4/25/2022
Zinc	119	114	mg/Kg	117	113	98.2	99.5	80 - 120			1.32	20		4/25/2022

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 4/22/2022
Data File: 220425C
QC Number: 1
QC Batch ID: QC220422Soil

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Report Prepared Tuesday, April 26, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: TCLP Fluid

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/L		4/21/2022	17:15
Barium	<0.500	mg/L		4/21/2022	17:15
Cadmium	<0.0250	mg/L		4/21/2022	17:15
Chromium	<0.500	mg/L		4/21/2022	17:15
Lead	<0.500	mg/L		4/21/2022	17:15
Selenium	<0.200	mg/L		4/21/2022	17:15
Silver	<0.500	mg/L		4/21/2022	17:15

Method Reference(s): EPA 6010C
EPA 3005
Preparation Date: 4/21/2022
Data File: 220421D
QC Batch ID: QC220421TCLP
QC Number: Blk 1

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Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: TCLP Fluid

TCLP Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	12.5	12.5	mg/L	12.3	12.2	98.1	97.9	80 - 120			0.210	20		4/21/2022
Barium	12.5	12.5	mg/L	12.8	13.5	103	108	80 - 120			4.91	20		4/21/2022
Cadmium	5.00	5.00	mg/L	5.06	5.14	101	103	80 - 120			1.51	20		4/21/2022
Chromium	12.5	12.5	mg/L	12.5	12.7	99.8	101	80 - 120			1.44	20		4/21/2022
Lead	12.5	12.5	mg/L	12.3	12.5	98.2	99.7	80 - 120			1.54	20		4/21/2022
Selenium	12.5	12.5	mg/L	13.2	13.2	105	106	80 - 120			0.235	20		4/21/2022
Silver	1.25	1.25	mg/L	1.23	1.25	98.6	99.9	80 - 120			1.33	20		4/21/2022

Method Reference(s): EPA 6010C
EPA 3005
Preparation Date: 4/21/2022
Data File: 220421D
QC Number: 1
QC Batch ID: QC220421TCLP

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Friday, April 22, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00739	mg/Kg		4/27/2022 05:37

Method Reference(s): EPA 7471B
Preparation Date: 4/26/2022
Data File: Hg220427A
QC Batch ID: QC220426HgSoil
QC Number: Blk 1

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Report Prepared Wednesday, April 27, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0721	0.0741	mg/Kg	0.0721	0.0735	100	99.3	80 - 120			0.783	20		4/27/2022

Method Reference(s): EPA 7471B
Preparation Date: 4/26/2022
Data File: Hg220427A
QC Number: 1
QC Batch ID: QC220426HgSoil

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Report Prepared Wednesday, April 27, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: TCLP Fluid

TCLP Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	<0.00200	mg/L		4/25/2022 12:33

Method Reference(s): EPA 7470A
Preparation Date: 4/25/2022
Data File: Hg220425A
QC Batch ID: QC220425HgTCLP
QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: TCLP Fluid

TCLP Mercury

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Mercury	0.0200	0.0200	mg/L	0.0212	0.0203	106	102	80 - 120			4.24	20		4/25/2022

Method Reference(s): EPA 7470A
Preparation Date: 4/25/2022
Data File: Hg220425A
QC Number: 1
QC Batch ID: QC220425HgTCLP

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, April 25, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	<0.833	mg/Kg		4/25/2022 18:11
PCB-1221	<0.833	mg/Kg		4/25/2022 18:11
PCB-1232	<0.833	mg/Kg		4/25/2022 18:11
PCB-1242	<0.833	mg/Kg		4/25/2022 18:11
PCB-1248	<0.833	mg/Kg		4/25/2022 18:11
PCB-1254	<0.833	mg/Kg		4/25/2022 18:11
PCB-1260	<0.833	mg/Kg		4/25/2022 18:11
PCB-1262	<0.833	mg/Kg		4/25/2022 18:11
PCB-1268	<0.833	mg/Kg		4/25/2022 18:11

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**90.1**	70 - 130		4/25/2022 18:11

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022
QC Batch ID: QC220422PCBO
QC Number: BlkC 1

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Report Prepared Wednesday, April 27, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

PCBs

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
PCB-1016/1260	3.85	mg/Kg	3.20	83.1	70 - 130		4/25/2022

Method Reference(s): EPA 8082A Calculated for Oil Matrix
EPA 3580A
Preparation Date: 4/22/2022
QC Number: LCSC 1
QC Batch ID: QC220422PCBO

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Report Prepared Wednesday, April 27, 2022

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ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<1000	ug/Kg		4/28/2022	13:15
1,1,2,2-Tetrachloroethane	<1000	ug/Kg		4/28/2022	13:15
1,1,2-Trichloroethane	<1000	ug/Kg		4/28/2022	13:15
1,1-Dichloroethane	<1000	ug/Kg		4/28/2022	13:15
1,1-Dichloroethene	<1000	ug/Kg		4/28/2022	13:15
1,2,3-Trichlorobenzene	<2500	ug/Kg		4/28/2022	13:15
1,2,4-Trichlorobenzene	<2500	ug/Kg		4/28/2022	13:15
1,2-Dibromo-3-Chloropropane	<5000	ug/Kg		4/28/2022	13:15
1,2-Dibromoethane	<1000	ug/Kg		4/28/2022	13:15
1,2-Dichlorobenzene	<1000	ug/Kg		4/28/2022	13:15
1,2-Dichloroethane	<1000	ug/Kg		4/28/2022	13:15
1,2-Dichloropropane	<1000	ug/Kg		4/28/2022	13:15
1,3-Dichlorobenzene	<1000	ug/Kg		4/28/2022	13:15
1,4-Dichlorobenzene	<1000	ug/Kg		4/28/2022	13:15
1,4-Dioxane	<5000	ug/Kg		4/28/2022	13:15
2-Butanone	<5000	ug/Kg		4/28/2022	13:15
2-Hexanone	<2500	ug/Kg		4/28/2022	13:15
4-Methyl-2-pentanone	<2500	ug/Kg		4/28/2022	13:15
Acetone	<5000	ug/Kg		4/28/2022	13:15
Benzene	<1000	ug/Kg		4/28/2022	13:15
Bromochloromethane	<2500	ug/Kg		4/28/2022	13:15
Bromodichloromethane	<1000	ug/Kg		4/28/2022	13:15
Bromoform	<2500	ug/Kg		4/28/2022	13:15
Bromomethane	<1000	ug/Kg		4/28/2022	13:15
Carbon disulfide	<1000	ug/Kg		4/28/2022	13:15
Carbon Tetrachloride	<1000	ug/Kg		4/28/2022	13:15
Chlorobenzene	<1000	ug/Kg		4/28/2022	13:15
Chloroethane	<1000	ug/Kg		4/28/2022	13:15

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroform	<1000	ug/Kg		4/28/2022	13:15
Chloromethane	<1000	ug/Kg		4/28/2022	13:15
cis-1,2-Dichloroethene	<1000	ug/Kg		4/28/2022	13:15
cis-1,3-Dichloropropene	<1000	ug/Kg		4/28/2022	13:15
Cyclohexane	<5000	ug/Kg		4/28/2022	13:15
Dibromochloromethane	<1000	ug/Kg		4/28/2022	13:15
Dichlorodifluoromethane	<1000	ug/Kg		4/28/2022	13:15
Ethylbenzene	<1000	ug/Kg		4/28/2022	13:15
Freon 113	<1000	ug/Kg		4/28/2022	13:15
Isopropylbenzene	<1000	ug/Kg		4/28/2022	13:15
m,p-Xylene	<1000	ug/Kg		4/28/2022	13:15
Methyl acetate	<1000	ug/Kg		4/28/2022	13:15
Methyl tert-butyl Ether	<1000	ug/Kg		4/28/2022	13:15
Methylcyclohexane	<1000	ug/Kg		4/28/2022	13:15
Methylene chloride	<2500	ug/Kg		4/28/2022	13:15
o-Xylene	<1000	ug/Kg		4/28/2022	13:15
Styrene	<2500	ug/Kg		4/28/2022	13:15
Tetrachloroethene	<1000	ug/Kg		4/28/2022	13:15
Toluene	<1000	ug/Kg		4/28/2022	13:15
trans-1,2-Dichloroethene	<1000	ug/Kg		4/28/2022	13:15
trans-1,3-Dichloropropene	<1000	ug/Kg		4/28/2022	13:15
Trichloroethene	<1000	ug/Kg		4/28/2022	13:15
Trichlorofluoromethane	<1000	ug/Kg		4/28/2022	13:15
Vinyl chloride	<1000	ug/Kg		4/28/2022	13:15

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**110**	74.7 - 140		4/28/2022 13:15
4-Bromofluorobenzene	**91.7**	68 - 130		4/28/2022 13:15
Pentafluorobenzene	**104**	70.3 - 140		4/28/2022 13:15
Toluene-D8	**109**	69 - 138		4/28/2022 13:15

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z08791.D

QC Batch ID: voahl220428

QC Number: Blk 2

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	<2.00	ug/Kg		4/28/2022	12:56
1,1,2,2-Tetrachloroethane	<2.00	ug/Kg		4/28/2022	12:56
1,1,2-Trichloroethane	<2.00	ug/Kg		4/28/2022	12:56
1,1-Dichloroethane	<2.00	ug/Kg		4/28/2022	12:56
1,1-Dichloroethene	<2.00	ug/Kg		4/28/2022	12:56
1,2,3-Trichlorobenzene	<5.00	ug/Kg		4/28/2022	12:56
1,2,4-Trichlorobenzene	<5.00	ug/Kg		4/28/2022	12:56
1,2-Dibromo-3-Chloropropane	<10.0	ug/Kg		4/28/2022	12:56
1,2-Dibromoethane	<2.00	ug/Kg		4/28/2022	12:56
1,2-Dichlorobenzene	<2.00	ug/Kg		4/28/2022	12:56
1,2-Dichloroethane	<2.00	ug/Kg		4/28/2022	12:56
1,2-Dichloropropane	<2.00	ug/Kg		4/28/2022	12:56
1,3-Dichlorobenzene	<2.00	ug/Kg		4/28/2022	12:56
1,4-Dichlorobenzene	<2.00	ug/Kg		4/28/2022	12:56
1,4-Dioxane	<10.0	ug/Kg		4/28/2022	12:56
2-Butanone	<10.0	ug/Kg		4/28/2022	12:56
2-Hexanone	<5.00	ug/Kg		4/28/2022	12:56
4-Methyl-2-pentanone	<5.00	ug/Kg		4/28/2022	12:56
Acetone	<10.0	ug/Kg		4/28/2022	12:56
Benzene	<2.00	ug/Kg		4/28/2022	12:56
Bromochloromethane	<5.00	ug/Kg		4/28/2022	12:56
Bromodichloromethane	<2.00	ug/Kg		4/28/2022	12:56
Bromoform	<5.00	ug/Kg		4/28/2022	12:56
Bromomethane	<2.00	ug/Kg		4/28/2022	12:56
Carbon disulfide	<2.00	ug/Kg		4/28/2022	12:56
Carbon Tetrachloride	<2.00	ug/Kg		4/28/2022	12:56
Chlorobenzene	<2.00	ug/Kg		4/28/2022	12:56

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Chloroethane	<2.00	ug/Kg		4/28/2022	12:56
Chloroform	<2.00	ug/Kg		4/28/2022	12:56
Chloromethane	<2.00	ug/Kg		4/28/2022	12:56
cis-1,2-Dichloroethene	<2.00	ug/Kg		4/28/2022	12:56
cis-1,3-Dichloropropene	<2.00	ug/Kg		4/28/2022	12:56
Cyclohexane	<10.0	ug/Kg		4/28/2022	12:56
Dibromochloromethane	<2.00	ug/Kg		4/28/2022	12:56
Dichlorodifluoromethane	<2.00	ug/Kg		4/28/2022	12:56
Ethylbenzene	<2.00	ug/Kg		4/28/2022	12:56
Freon 113	<2.00	ug/Kg		4/28/2022	12:56
Isopropylbenzene	<2.00	ug/Kg		4/28/2022	12:56
m,p-Xylene	<2.00	ug/Kg		4/28/2022	12:56
Methyl acetate	<2.00	ug/Kg		4/28/2022	12:56
Methyl tert-butyl Ether	<2.00	ug/Kg		4/28/2022	12:56
Methylcyclohexane	<2.00	ug/Kg		4/28/2022	12:56
Methylene chloride	<5.00	ug/Kg		4/28/2022	12:56
o-Xylene	<2.00	ug/Kg		4/28/2022	12:56
Styrene	<5.00	ug/Kg		4/28/2022	12:56
Tetrachloroethene	<2.00	ug/Kg		4/28/2022	12:56
Toluene	<2.00	ug/Kg		4/28/2022	12:56
trans-1,2-Dichloroethene	<2.00	ug/Kg		4/28/2022	12:56
trans-1,3-Dichloropropene	<2.00	ug/Kg		4/28/2022	12:56
Trichloroethene	<2.00	ug/Kg		4/28/2022	12:56
Trichlorofluoromethane	<2.00	ug/Kg		4/28/2022	12:56
Vinyl chloride	<2.00	ug/Kg		4/28/2022	12:56

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	74.7 - 140		4/28/2022 12:56
4-Bromofluorobenzene	**96.1**	68 - 130		4/28/2022 12:56
Pentafluorobenzene	**103**	70.3 - 140		4/28/2022 12:56
Toluene-D8	**105**	69 - 138		4/28/2022 12:56

Method Reference(s): EPA 8260C
EPA 5035A -- H

Data File: z08790.D

QC Batch ID: voahl220428

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1,1-Trichloroethane	20.0	ug/Kg	20.8	104	70.9 - 135		4/28/2022
1,1,2,2-Tetrachloroethane	20.0	ug/Kg	19.6	97.8	31.6 - 154		4/28/2022
1,1,2-Trichloroethane	20.0	ug/Kg	18.9	94.5	62 - 132		4/28/2022
1,1-Dichloroethane	20.0	ug/Kg	19.4	97.0	73 - 128		4/28/2022
1,1-Dichloroethene	20.0	ug/Kg	19.0	95.1	61.7 - 119		4/28/2022
1,2-Dichlorobenzene	20.0	ug/Kg	20.1	100	61 - 118		4/28/2022
1,2-Dichloroethane	20.0	ug/Kg	19.5	97.6	73.4 - 123		4/28/2022
1,2-Dichloropropane	20.0	ug/Kg	20.1	101	71.3 - 123		4/28/2022
1,3-Dichlorobenzene	20.0	ug/Kg	19.8	99.1	68.7 - 112		4/28/2022
1,4-Dichlorobenzene	20.0	ug/Kg	19.6	97.9	66.9 - 113		4/28/2022
Benzene	20.0	ug/Kg	20.1	100	77.8 - 119		4/28/2022
Bromodichloromethane	20.0	ug/Kg	19.5	97.5	65.7 - 125		4/28/2022
Bromoform	20.0	ug/Kg	18.4	91.8	54.7 - 130		4/28/2022
Bromomethane	20.0	ug/Kg	16.2	80.9	44.6 - 167		4/28/2022
Carbon Tetrachloride	20.0	ug/Kg	20.1	100	61.8 - 138		4/28/2022
Chlorobenzene	20.0	ug/Kg	20.5	103	77.2 - 108		4/28/2022

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Report Prepared Thursday, April 28, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Chloroethane	20.0	ug/Kg	16.4	81.9	55.5 - 151		4/28/2022
Chloroform	20.0	ug/Kg	19.6	98.1	70.1 - 134		4/28/2022
Chloromethane	20.0	ug/Kg	14.4	72.2	42.4 - 168		4/28/2022
cis-1,3-Dichloropropene	20.0	ug/Kg	19.0	95.0	66.7 - 122		4/28/2022
Dibromochloromethane	20.0	ug/Kg	19.0	95.2	61.2 - 130		4/28/2022
Ethylbenzene	20.0	ug/Kg	19.8	98.8	71.6 - 112		4/28/2022
Methylene chloride	20.0	ug/Kg	19.9	99.6	38.2 - 155		4/28/2022
Tetrachloroethene	20.0	ug/Kg	20.6	103	61.4 - 137		4/28/2022
Toluene	20.0	ug/Kg	20.1	101	71.1 - 124		4/28/2022
trans-1,2-Dichloroethene	20.0	ug/Kg	19.5	97.4	67.3 - 127		4/28/2022
trans-1,3-Dichloropropene	20.0	ug/Kg	18.9	94.4	55 - 126		4/28/2022
Trichloroethene	20.0	ug/Kg	20.5	102	69.3 - 128		4/28/2022
Trichlorofluoromethane	20.0	ug/Kg	19.0	94.9	64 - 140		4/28/2022
Vinyl chloride	20.0	ug/Kg	16.2	80.9	51.2 - 160		4/28/2022

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared *Thursday, April 28, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed

Method Reference(s): EPA 8260C
EPA 5035A -- H
Data File: z08789.D
QC Number: LCS 1
QC Batch ID: voahl220428

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 28, 2022

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Dichloroethene	<20.0	ug/L		4/27/2022 12:42
1,2-Dichloroethane	<20.0	ug/L		4/27/2022 12:42
2-Butanone	<100	ug/L		4/27/2022 12:42
Benzene	<20.0	ug/L		4/27/2022 12:42
Carbon Tetrachloride	<20.0	ug/L		4/27/2022 12:42
Chlorobenzene	<20.0	ug/L		4/27/2022 12:42
Chloroform	<20.0	ug/L		4/27/2022 12:42
Tetrachloroethene	<20.0	ug/L		4/27/2022 12:42
Trichloroethene	<20.0	ug/L		4/27/2022 12:42
Vinyl chloride	<20.0	ug/L		4/27/2022 12:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	81.1 - 136		4/27/2022 12:42
4-Bromofluorobenzene	**94.4**	75.8 - 132		4/27/2022 12:42
Pentafluorobenzene	**102**	82 - 132		4/27/2022 12:42
Toluene-D8	**106**	64.6 - 137		4/27/2022 12:42

Method Reference(s): EPA 8260C
EPA 5030

Data File: z08757.D

QC Batch ID: voainv220427

QC Number: Blk 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 28, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: TCLP Fluid

TCLP Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1-Dichloroethene	20.0	ug/L	16.6	83.1	65.5 - 116		4/27/2022
1,2-Dichloroethane	20.0	ug/L	19.2	95.9	78.3 - 122		4/27/2022
Benzene	20.0	ug/L	18.4	92.2	81.6 - 114		4/27/2022
Carbon Tetrachloride	20.0	ug/L	17.7	88.7	76.4 - 129		4/27/2022
Chlorobenzene	20.0	ug/L	20.0	99.8	77.2 - 106		4/27/2022
Chloroform	20.0	ug/L	18.0	90.0	84.5 - 122		4/27/2022
Tetrachloroethene	20.0	ug/L	19.9	99.7	64.4 - 130		4/27/2022
Trichloroethene	20.0	ug/L	18.5	92.3	73.4 - 122		4/27/2022
Vinyl chloride	20.0	ug/L	14.1	70.5	50.9 - 164		4/27/2022

Method Reference(s): EPA 8260C
EPA 5030
Data File: z08756.D
QC Number: LCS 1
QC Batch ID: voainv220427

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared *Thursday, April 28, 2022*

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: Inventum Engineering, P.C.

Project Reference: Building 10S Oil

Lab Project ID: 221761

Matrix: Oil

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	<0.500	mg/Kg		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022
QC Batch ID: QC220427WTCN
QC Number: Blk 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, April 27, 2022

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Inventum Engineering, P.C.
Project Reference: Building 10S Oil
Lab Project ID: 221761
Matrix: Oil

Total Cyanide

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Cyanide, Total	4.95	mg/Kg	4.85	97.9	85 - 115		4/27/2022

Method Reference(s): EPA 9014
EPA 9010C
Preparation Date: 4/22/2022
QC Number: 1
QC Batch ID: QC220427WTCN

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, April 27, 2022

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"H" = Denotes a parameter analyzed outside of holding time.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM

REPORT TO:		INVOICE TO:		
CLIENT:	INVENTUM ENGINEERING	CLIENT:	SAME	LAB PROJECT ID: 221761
ADDRESS:	441 CARLISLE DR SUITE C	ADDRESS:		
CITY: HERNDON STATE: VA ZIP: 20170		CITY: STATE: ZIP:		Quotation #:
PHONE:	585-734-5255	PHONE:		Email: roxanne.b[illegible]@inventumeng.com
ATTN:	ROXANNE BIRX	ATTN:	JOHN BLACK	

PROJECT REFERENCE

BUILDING 105 OIL

Matrix Codes:

AQ - Aqueous Liquid; **NQ** - Non-Aqueous Liquid; **WA** - Water; **WG** - Groundwater; **DW** - Drinking Water; **WW** - Wastewater; **SO** - Soil; **SL** - Sludge; **SD** - Solid; **PT** - Paint; **WP** - Wipe; **CK** - Caulk; **OL** - Oil; **AR** - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOC/SVOC	Full TCLP	PCBs	BTU	TAL METALS	Total Hg, Cy	Total Ammonia	Corrosivity	Reactivity	Flammability	REMARKS	PARADIGM LAB SAMPLE NUMBER
4/19/22	14:30		X	BUILD 105 - 04192022	OL	4	X	X	X	/	X	X	X	X	X	X	FULL TCLP: SVOC/VOCs, METALS, PEST, HERB	01A
																	A For TCLP extract. cp 4/20/22	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required		None Required	
10 day		Batch QC	X	Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	X
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed:		Other please indicate package needed:		Other EDD please indicate EDD needed :	

ROXANNE BIRX — Sampled By — 4/19/22 14:30 — Date/Time

[signature] — Relinquished By — 4/19/22 1430 — Date/Time

Brian Zgrabik — Received By — 4/19/22 14:35 — Date/Time

2C2 — Received @ Lab By — 4/20/22 12:49 — Date/Time

5°C rec'd 4/19/22 16:23

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Chain of Custody Supplement

Client: Inventum Engineering **Completed by:** Glenn Perzulo

Lab Project ID: 221761 **Date:** 4/20/22

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X metals
Comments	5'C iced		
Compliant Sample Quantity/Type	X		
Comments			

Adirondack Environmental Services, Inc.

Experience is the solution

314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

April 27, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220422015

RE: Analysis of Samples
Project# 221761

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 4/22/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Tara Daniels
Laboratory Director

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 221761

Date: *27-Apr-22*

Lab WorkOrder: **220422015**

Sample containers were not supplied by Adirondack Environmental Services.

The client performed the TCLP extraction procedure. The TCLP extract was provided for analysis.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:

- ND : Not Detected at reporting limit
- J: Analyte detected below quantitation limit
- B: Analyte detected in Blank
- X : Exceeds maximum contamination limit
- H: Hold time exceeded
- N: Matrix Spike below acceptable limits
- N+: Matrix Spike is above acceptable limits
- C: CCV below acceptable Limits
- C+: CCV above acceptable Limits
- S: LCS Spike recovery is below acceptable limits
- S+: LCS Spike recovery is above acceptable limits
- Z: Duplication outside acceptable limits
- T : Tentatively Identified Compound-Estimated
- E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *27-Apr-22*

CLIENT:	Paradigm Environmental	**Client Sample ID:**	221761-01A
Work Order:	**220422015**	**Collection Date:**	4/19/2022
Reference:	Analysis of Samples / Project# 221761	**Lab Sample ID:**	220422015-001
PO#:		**Matrix:**	TCLP-EXTRACT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP HERBICIDES - EPA 8321B						Analyst: **KF**
(Prep: SW3535A - 4/22/2022)						
2,4,5-TP (Silvex)-TCLP	**ND**	0.050		mg/L	1	4/26/2022 2:37:56 PM
2,4-D-TCLP	**ND**	0.050		mg/L	1	4/26/2022 2:37:56 PM
Surr: Acifluorfen	**105**	52.5-128		%REC	1	4/26/2022 2:37:56 PM
Surr: DCAA	**105**	56.2-139		%REC	1	4/26/2022 2:37:56 PM
TCLP PESTICIDES - EPA 8081B						Analyst: **KF**
(Prep: SW3535A - 4/22/2022)						
Chlordane-TCLP	**ND**	0.0050		mg/L	1	4/22/2022 9:28:50 PM
Endrin-TCLP	**ND**	0.0010		mg/L	1	4/22/2022 9:28:50 PM
gamma-BHC(Lindane)-TCLP	**ND**	0.0010		mg/L	1	4/22/2022 9:28:50 PM
Heptachlor epoxide-TCLP	**ND**	0.0010		mg/L	1	4/22/2022 9:28:50 PM
Heptachlor-TCLP	**ND**	0.0010		mg/L	1	4/22/2022 9:28:50 PM
Methoxychlor-TCLP	**ND**	0.0050		mg/L	1	4/22/2022 9:28:50 PM
Toxaphene-TCLP	**ND**	0.010		mg/L	1	4/22/2022 9:28:50 PM
Surr: Decachlorobiphenyl-TCLP	**112**	51.5-141		%REC	1	4/22/2022 9:28:50 PM
TCLP SEMI-VOLATILES - EPA 8270D						Analyst: **MT**
(Prep: SW3535A - 4/26/2022)						
1,4-Dichlorobenzene -TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
2,4,5-Trichlorophenol-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
2,4,6-Trichlorophenol-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
2,4-Dinitrotoluene-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
Cresols, Total-TCLP	**ND**	2000		µg/L	10	4/26/2022 4:11:00 PM
Hexachlorobenzene-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
Hexachlorobutadiene-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
Hexachloroethane-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
Nitrobenzene-TCLP	**ND**	500		µg/L	10	4/26/2022 4:11:00 PM
Pentachlorophenol-TCLP	**ND**	2500		µg/L	10	4/26/2022 4:11:00 PM
Pyridine-TCLP	**6600**	1000	CX	µg/L	10	4/26/2022 4:11:00 PM
Surr: 2,4,6-Tribromophenol	**65.3**	43.7-123		%REC	10	4/26/2022 4:11:00 PM
Surr: 2-Fluorobiphenyl	**70.0**	48.7-108		%REC	10	4/26/2022 4:11:00 PM
Surr: 2-Fluorophenol	**66.5**	23.5-101		%REC	10	4/26/2022 4:11:00 PM
Surr: 4-Terphenyl-d14	**76.6**	50.6-121		%REC	10	4/26/2022 4:11:00 PM
Surr: Nitrobenzene-d5	**64.4**	43.7-109		%REC	10	4/26/2022 4:11:00 PM
Surr: Phenol-d6	**68.3**	12.6-93.5		%REC	10	4/26/2022 4:11:00 PM

220422015

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 1

CHAIN OF CUSTODY

ELAP ID: 1

220422015 Page 40 of 48 Demo

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN:	Accounts Payable
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due:	4/28/22

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TCLP Herbicides	TCLP Pesticides	TCLP SVOA	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	4/19/22	14:30		X	221761-01A	TCLP extract	1	X	X	X	Spun at Paradigm 4/21/22	
2												
3												
4												
5												
6												
7												
8												
9												
10												

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter		NELAC Compliance	
Container Type:	Comments: not aqs.	Y ☐	N ☐
Preservation:	Comments:	Y ☐	N ☐
Holding Time:	Comments:	Y ☐	N ☐
Temperature:	Comments: 4°C	Y ☐	N ☐

Client

Sampled By		Date/Time 4/22/22 08:30
Relinquished By		Date/Time
Received By	Ryan Zacher	Date/Time 4/22/22 12:06
Received @ Lab By		Date/Time 4/22/22 1600

Total Cost:

P.I.F.

Adirondack Environmental Services Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

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April 28, 2022

Emily Farmen
Paradigm Environmental
179 Lake Avenue
Rochester, NY 14608

TEL: (800) 724-1997

Work Order No: 220421007

RE: Analysis of Samples
Project# 221761

Dear Emily Farmen:

Adirondack Environmental Services, Inc received 1 sample on 4/21/2022 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Tara Daniels
Laboratory Director

Adirondack Environmental Services, Inc — CASE NARRATIVE

Paradigm Environmental

Analysis of Samples

Project# 221761

Date: *28-Apr-22*

Lab WorkOrder: **220421007**

Sample containers were not supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:		
	ND : Not Detected at reporting limit	C: CCV below acceptable Limits
	J: Analyte detected below quantitation limit	C+: CCV above acceptable Limits
	B: Analyte detected in Blank	S: LCS Spike recovery is below acceptable limits
	X : Exceeds maximum contamination limit	S+: LCS Spike recovery is above acceptable limits
	H: Hold time exceeded	Z: Duplication outside acceptable limits
	N: Matrix Spike below acceptable limits	T : Tentatively Identified Compound-Estimated
	N+: Matrix Spike is above acceptable limits	E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *28-Apr-22*

CLIENT:	Paradigm Environmental	**Client Sample ID:**	221761-01
Work Order:	**220421007**	**Collection Date:**	4/19/2022
Reference:	Analysis of Samples / Project# 221761	**Lab Sample ID:**	220421007-001
PO#:		**Matrix:**	OIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE ORGANICS - EPA 8270D						Analyst: **MT**
(Prep: SW3580A - 4/28/2022)						
Phenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Bis(2-chloroethyl)ether	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Chlorophenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
1,3-Dichlorobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
1,4-Dichlorobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
1,2-Dichlorobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Methylphenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Bis(2-chloroisopropyl)ether	**ND**	4200	C	µg/g	10	4/28/2022 9:45:00 AM
4-Methylphenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
N-Nitrosodi-n-propylamine	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Hexachloroethane	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Nitrobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Isophorone	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Nitrophenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,4-Dimethylphenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Bis(2-chloroethoxy)methane	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,4-Dichlorophenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
1,2,4-Trichlorobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Naphthalene	**47000**	4200		µg/g	10	4/28/2022 9:45:00 AM
4-Chloroaniline	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Hexachlorobutadiene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
4-Chloro-3-methylphenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Methylnaphthalene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Hexachlorocyclopentadiene	**ND**	4200	C	µg/g	10	4/28/2022 9:45:00 AM
2,4,6-Trichlorophenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,4,5-Trichlorophenol	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Chloronaphthalene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2-Nitroaniline	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
Dimethyl phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Acenaphthylene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,6-Dinitrotoluene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
3-Nitroaniline	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
Acenaphthene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,4-Dinitrophenol	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
4-Nitrophenol	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
Dibenzofuran	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
2,4-Dinitrotoluene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Diethyl phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
4-Chlorophenyl phenyl ether	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Fluorene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM

Adirondack Environmental Services, Inc

Date: *28-Apr-22*

CLIENT:	Paradigm Environmental	**Client Sample ID:**	221761-01
Work Order:	**220421007**	**Collection Date:**	4/19/2022
Reference:	Analysis of Samples / Project# 221761	**Lab Sample ID:**	220421007-001
PO#:		**Matrix:**	OIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE ORGANICS - EPA 8270D						Analyst: **MT**
(Prep: SW3580A - 4/28/2022)						
4-Nitroaniline	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
4,6-Dinitro-2-methylphenol	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
N-Nitrosodiphenylamine	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
4-Bromophenyl phenyl ether	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Hexachlorobenzene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Pentachlorophenol	**ND**	21000		µg/g	10	4/28/2022 9:45:00 AM
Phenanthrene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Anthracene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Carbazole	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Di-n-butyl phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Fluoranthene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Pyrene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Butyl benzyl phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
3,3´-Dichlorobenzidine	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Benz(a)anthracene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Chrysene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Bis(2-ethylhexyl)phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Di-n-octyl phthalate	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Benzo(b)fluoranthene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Benzo(k)fluoranthene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Benzo(a)pyrene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Indeno(1,2,3-cd)pyrene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Dibenz(a,h)anthracene	**ND**	4200		µg/g	10	4/28/2022 9:45:00 AM
Benzo(g,h,i)perylene	**ND**	4200	C	µg/g	10	4/28/2022 9:45:00 AM
Surr: 2,4,6-Tribromophenol	**61.5**	10-123		%REC	10	4/28/2022 9:45:00 AM
Surr: 2-Fluorobiphenyl	**81.5**	43-116		%REC	10	4/28/2022 9:45:00 AM
Surr: 2-Fluorophenol	**85.5**	21-110		%REC	10	4/28/2022 9:45:00 AM
Surr: 4-Terphenyl-d14	**81.0**	60-125		%REC	10	4/28/2022 9:45:00 AM
Surr: Nitrobenzene-d5	**74.5**	36-90		%REC	10	4/28/2022 9:45:00 AM
Surr: Phenol-d5	**71.0**	1-106		%REC	10	4/28/2022 9:45:00 AM
AMMONIA AS N - SM 4500 NH3 G-2011						Analyst: **CS**
(Prep: SM4500-NH3 G - 4/25/2022)						
Nitrogen, Ammonia- (as N)	**62.1**	40.0		µg/g	20	4/26/2022 11:36:51 AM
HEAT VALUE - ASTM D240-09						Analyst: **AMN**
Heat Value	**18200**	500		btu/lb	1	4/25/2022

Adirondack Environmental Services, Inc

Date: *28-Apr-22*

CLIENT:	Paradigm Environmental	**Client Sample ID:**	221761-01
Work Order:	**220421007**	**Collection Date:**	4/19/2022
Reference:	Analysis of Samples / Project# 221761	**Lab Sample ID:**	220421007-001
PO#:		**Matrix:**	OIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SW 7.3.3.2, NOT ELAP CERTIFIED						Analyst: **KB**
(Prep: E335.4 - 4/26/2022)						
Reactive Cyanide	**ND**	0.9		µg/g	1	4/26/2022 3:05:20 PM
SW 7.3.4.2, NOT ELAP CERTIFIED						Analyst: **CS**
(Prep: E335.4 - 4/26/2022)						
Reactive Sulfide	**16**	10		µg/g	1	4/26/2022
REACTIVITY - SW 7.3.4.2, NOT ELAP CERTIFIED						Analyst: **CS**
Reactivity	**Non Reactive**	0			1	4/26/2022

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

220421007

1 of 1

CHAIN OF CUSTODY

ELAP ID: 1



REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN: Accounts Payable	☐1 ☐2 ☐3 ☐5
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due: 4/28/22	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	BTU	Ammonia	TCN	Reactivity	TCL SVOC					REMARKS	PARADIGM LAB SAMPLE NUMBER
1	4/19/22	14:30		X	22176I-01	oil	1	X	X	X	X	X						
2																		
3																		
4																		
5																	Batch QC	
6																		
7																		
8																		
9																		
10																		

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments: Not Applicable		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature: 4°c	Y ☐	N ☐
Comments:		

Client

Sampled By — Date/Time: 4/21/22 08:30

Relinquished By — Date/Time: Ryan Zacher 4/21/22 1:01 pm

Received By — Date/Time: 4/21/22 4:39pm

Received @ Lab By — Date/Time

Total Cost:

P.I.F.

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(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

Chillers/Heat Exchangers Waste Manifest

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD 0 6 3 4 1 3 8 7 7	1	(877) 818-6087	001563886 VES

GENERATOR

5. Generator's Name and Mailing Address

RIVERVIEW INNOVATION & TECH
140 LEE STREET SUITE 200
BUFFALO, NY 14210
Generator's Phone: 716 374-6936

Generator's Site Address (if different than mailing address)

3875 RIVER ROAD
TONAWANDA, NY 14150

6. Transporter 1 Company Name

VEOLIA ES TECHNICAL SOLUTIONS

U.S. EPA ID Number: NJD 0 8 0 6 3 1 3 6 9

7. Transporter 2 Company Name

FREEHOLD CARTAGE INC

U.S. EPA ID Number: NJD 0 5 4 1 2 6 1 6 4

8. Designated Facility Name and Site Address

VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
125 FACTORY LANE
MIDDLESEX, NJ 08846

Facility's Phone: 732 469-5100

U.S. EPA ID Number: NJD 0 0 2 4 5 4 5 4 4

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (OIL, BENZENE), 3, II, RQ (D001)	1	D M	300	P	D001 D018	D038 B	
X	2. NA3082, HAZARDOUS WASTE, LIQUID, n.o.s., (SELENIUM, BENZENE), 9, III	7	D M	2100	P	D010 D018	B	
	3.							
	4.							

14. Special Handling Instructions and Additional Information

ER Service Contracted by VESTS + NEED C.O.D.'s + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf. + 1) ERG:128 W:1097398 A:MARFS 2) ERG:171 W:1097821 A:MARFS

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Kirsten Colligan on behalf of RITC

Signature: X [signature] on behalf of RITC

Month 06 Day 20 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: OWEN MOSS

Signature: [signature]

Month 06 Day 20 Year 22

Transporter 2 Printed/Typed Name: Henry Atts

Signature: [signature]

Month 6 Day 20 Year 22

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H061	H061		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Kristal Elbon

Signature: [signature]

Month Day Year

VEOLIA

Land Disposal Restriction Notification Form

Generator Name: RIVERVIEW INNOVATION & TECH

EPA ID Number: NYD088413877 Manifest: 001863886VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

This notice is also being provided in accordance with 6 NYCRR 376.1(g)(1).

Container Number: JM-3976441000-002 (1/ 1)

WIP / Approval Code:	1097396 / MARFS
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.2 1(a)(1)), D018, D035
Constituents (F001 - F005):	None
UHCs Present:	ETHYL BENZENE, NAPHTHALENE (CRUDE OR REFINED), TOLUENE, XYLENE, MIXED ISOMERS (NON F-LISTED)
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

Container Number: JM-3976441000-001 (1/ 2)

WIP / Approval Code:	1097821 / MARFS
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D018, D018
Constituents (F001 - F005):	None
UHCs Present:	ARSENIC, ETHYL BENZENE, NAPHTHALENE (CRUDE OR REFINED), TOLUENE, CRESOLS (MIXED ISOMERS), XYLENE, MIXED ISOMERS (NON F-LISTED)
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

I hearby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature: KJ on behalf of RITC

Title: Project Manager Date: 06/20/22

Appendix G1: Exhauster Building

Exhauster Building Pre-Demolition Inspection Form

Building Demolition Inspection Form

Riverview Innovation & Technology Campus

Tonawanda, NY

Building Number: BCP-20
Building Name: Exhauster Building
Permit Number: BP2021-0018

Start Date: 6/29/2022 **Completion Date:** 7/21/2022
NY DEC Notification Date: NA

Approvals

HASP updated: December 2021
NESHAP Notification Date: NA
Landfill: None
Landfill Notification Date: NA
(notification required for each building wastes stream)
Permits issued: None **Permit Date:** NA

Regulated Building Materials

Were Asbestos Containing Building Materials (ACM) present: No.
If so, have all ACM been removed and clearance inspection completed: NA
DOL Notification Date (for controlled demolition with ACM in place): NA
Have all Universal Waste, containers, or other regulated contents been removed: Yes.
If present, have all potential PCB containing equipment has been sampled and removed: NA

Utilities

List utilities entering/leaving the building: Electric, Steam
Have all utilities entering/leaving the building been decommissioned: Yes.
Utility decommissioning completion date: May 2021

Building Structure Category:

(1) not suitable for use as fill, (2) designated for controlled demolition because of current structural conditions or due ACM integrated with building materials, (3) impacted by operations of TCC to the extent which cannot be reasonably be cleaned for use as fill, (4) safety hazards such as the stacks, pits, tunnels, and pipe bridge.

(1) Not suitable for use as fill. Building is constructed of corrugated sheet metal and steel beams. Metal will be sheared and recycled. Three exhausters and associated coke oven gas piping managed under Coke Oven Gas (COG) Piping Work Plan.

Work Zone Delineation Check List

Utilities and utility protection: No active utilities within the work zone.
Fall radius defined: Yes.
Laydown Areas (Waste, recyclable materials, equipment): Laydown area west and adjacent to building pad.

Staff parking and break areas: Maintenance Shop.

CAMP Requirements

Monitoring station confirmed prior to Demolition: Yes.
Type and frequency of monitoring: Perimeter monitoring, particulate and VOC monitoring.

SWPPP Requirements

Dust control plan in place: Yes.
Dust control methods: Wet methods to control demolition dust available by fire hose and hydrant. Water truck used to control dust on roads.
If needed, water control plan: NA
Truck wash station in place: Yes, at truck lining and scale

Process Piping

Was any process piping present: Yes, coke oven gas piping and exhausters.
If so, list inspections prior to management: Building inspection 6/29/2022.
List disposition of process piping containing residuals, list how the waste and any residuals were managed: Process piping was managed under the Coke Oven Gas Piping IRM Work Plan. Three exhausters and associated COG line were removed, residuals emptied into containment for quenching, and lines were inspected and quenched in the eastern quench pit. Steel was then sheared and recycled.

Energetic Materials

Did the demolition plan include the use of Energetic Materials: No.
What were the dates of use? NA
Were there any CAMP excursions at the property line on those dates? No.

Exhausters Photographic Log

Client Name: RITC	**Date Photo was Taken:** 2/28/2022	**Project:** RITC
Photo No. 1		
Direction Photo Taken: View is northwest.		
Description: One of three exhausters located in the former Exhauster Building.		
Client Name: RITC	**Date Photo was Taken:** 6/29/2022	**Project:** RITC
Photo No. 2		
Direction Photo Taken: View is northeast.		
Description: The locations of the former exhausters.		

Client Name: RITC	Date Photo was Taken: 6/29/2022	Project: RITC
Photo No. 3 **Direction Photo Taken:** View is north. **Description:** The former Exhauster Building is removed to expose the exhausters.		

Client Name: RITC	Date Photo was Taken: 7/5/2022	Project: RITC
Photo No. 4 **Direction Photo Taken:** View is north. **Description:** The former Exhauster Building is removed to expose the exhausters.		

Client Name: RITC	Date Photo was Taken: 7/18/2022	Project: RITC
Photo No. 5 **Direction Photo Taken:** View is east. **Description:** The former Exhauster Building is removed.		
Client Name: RITC	**Date Photo was Taken:** 7/20/2022	**Project:** RITC
Photo No. 6 **Direction Photo Taken:** View is **Description:** The former Exhauster Building is removed. The exhausters were empty and recycled.		

Appendix G2: Pump House

INVENTUM ENGINEERING, PC

Revised July 28, 2022

To: Benjamin McPherson, Angela Martin

From: John Black, Roxanne Birx

CC: Dan Flanagan, Matt Reardon

RE: Heat Exchanger/Chiller Area South of the Pump House
Building Demolition Preparation
Riverview Innovation & Technology Campus
NYSDEC Site No. C915353
Town of Tonawanda, New York

In preparation for the demolition of the Pump House the former Heat Exchanger/Chiller Area (Attachment A) was cleared to allow access for the pending demolition of the pump house structure (Photograph No. 1). The concrete slab that previously supported the heat exchangers had collection sumps along the north and south sides of the heat exchanger area. The concrete slab appears to extend between the two sumps but is partially covered with site fill. The south sump is approximately 80 feet long by 4 feet wide by 2 feet deep. It was relatively clean and two pipes that formerly drained to the box culvert were exposed (Photograph No. 2). At some time, the larger 12-inch diameter pipe was cut at the south sump. The sump, after cleaning remained dry.

The north sump had similar dimensions as the south, with two centrally located, deeper side-by-side sumps (5 to 6 feet deep, Photographs Nos. 3 through 5). The north sump contained visibly impacted sludge/soil material that was excavated and staged on polyethylene sheeting along the north property boundary. The western deeper sump has an 8-inch pipe 26 inches below ground surface (BGS) and appears blocked with plant debris/organics, sludge, and process debris. The eastern deeper sump has a 12-inch pipe 53 inches BGS that was observed to be leaking a low to medium viscosity Non-aqueous Phase Liquid (NAPL) (Photograph No. 5).

There exists a shallow conveyance between the north and south sumps (Photographs Nos. 6 and 7). Very low to no flow was observed. The northwest side of the conveyance was filled with concrete. The northeast side of the conveyance appears heavily clogged with plant debris/organics, soil, and sludge. The south side of the conveyance was partially grossly obstructed (Photograph No. 7).

The north and south sumps were located by GPS and temporarily backfilled with brick from the Boiler House and unimpacted sump material was replaced to grade. The backfill will be removed when the slab and subsurface fill is tested.



Photograph No. 1

South Sump (Looking west)



Photograph No. 2

Pipes in south wall of south sump

The pipe was exposed in the south sump and was the discharge for the non-contact cooling water from the Pump House. After it was cut, it would have served to drain the north and south sumps. The north and south sumps are separated by 16 feet and a 3-foot wide by 3-inch (nominal) concrete opening connecting the two sumps. The soils/fill from the south sump were moist and were staged between the two sumps near the east end of the Pump House.



Photograph No. 3

North Sump (Looking west)



Photograph No. 4

8-inch pipe from Pump House entering through north wall of North Sump



Photograph No. 5

West and east sumps in northern sump. The orange circle is the 10-inch pipe leaking NAPL.



Photograph No. 6

Opening under Heat Exchanger Area Between North and South Sumps

The north sump filled with water as it was being cleaned. The water had a sheen, some emulsified substances, and some non-aqueous phase liquid (NAPL) globules. The soils/fill from the north sump were saturated and some NAPL was present. The soils from the north sump were staged on polyethylene sheeting and covered. While the rectangular opening appeared to connect the two sumps, it is almost totally blocked as the water from the north sump was not reaching the south sump.



Photograph No. 7

The south sump rectangular opening. The western side that is filled with concrete on the north appears clogged with organics and sludge. The eastern side that is clogged on the north is not grossly clogged but has debris approximately 6 to 12 inches in depth.

Attachment A
Location Map

N

10 0 5 10 20 40

1 INCH = 10 FEET (22X34)

D

DRAWING BY	RB
CHECKED	
APPROVED	

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CHILLER AREA SOUTH OF PUMP HOUSE
RIVERVIEW INNOVATION & TECHNOLOGY CAMPUS, INC.
3875 RIVER ROAD
TONAWANDA, NEW YORK 14150
BCP SITE No. C915353

INVENTUM ENGINEERING
441 CARLISLE DRIVE
SUITE C
HERNDON, VIRGINIA 20170
(703) 722-6049
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FIGURE 1

DRAWING NUMBER

Pump House Pre-Demolition Inspection Form

Building Demolition Inspection Form

Riverview Innovation & Technology Campus

Tonawanda, NY

Building Number: BCP-38
Building Name: Pump House
Permit Number: BP2021-0018

Start Date: 8/3/2022 **Completion Date:** 8/8/2022
NY DEC Notification Date: NA

Approvals

HASP updated: December 2021
NESHAP Notification Date: NA
Landfill: Pending Debris Classification
Landfill Notification Date: Pending Debris Classification
(notification required for each building wastes stream)
Permits issued: None **Permit Date:** NA

Regulated Building Materials

Were Asbestos Containing Building Materials (ACM) present: No.
If so, have all ACM been removed and clearance inspection completed: NA
DOL Notification Date (for controlled demolition with ACM in place): NA
Have all Universal Waste, containers, or other regulated contents been removed: Yes.
If present, have all potential PCB containing equipment has been sampled and removed: NA

Utilities

List utilities entering/leaving the building: Electric, Steam, Water.
Have all utilities entering/leaving the building been decommissioned: Yes.
Utility decommissioning completion date: May 2021

Building Structure Category:

(1) not suitable for use as fill, (2) designated for controlled demolition because of current structural conditions or due ACM integrated with building materials, (3) impacted by operations of TCC to the extent which cannot be reasonably be cleaned for use as fill, (4) safety hazards such as the stacks, pits, tunnels, and pipe bridge.

(3) Impacted by operations of TCC to the extent which cannot be reasonably cleaned for use as fill. Heavy black staining and oil accumulation present over the floor. Heavy black staining present on all interior wall surfaces.

Work Zone Delineation Check List

Utilities and utility protection: No active utilities within the work zone.
Fall radius defined: Yes.
Laydown Areas (Waste, recyclable materials, equipment): Laydown in area defined by Broadway, building pad, and a radius of approximately 30 feet around building pad.

Staff parking and break areas: Maintenance Shop.

CAMP Requirements

Monitoring station confirmed prior to Demolition: Yes.
Type and frequency of monitoring: Perimeter monitoring, particulate and VOC monitoring.

SWPPP Requirements

Dust control plan in place: Yes.
Dust control methods: Wet methods to control demolition dust available by fire hose and hydrant. Water truck used to control dust on roads and from demolition.

If needed, water control plan: NA
Truck wash station in place: Yes, at truck lining and scale.

Process Piping

Was any process piping present: Yes, the north side of the structure had process lines present for tar, weak ammonia liquor, and oils.
If so, list inspections prior to management: Inspection and line draining performed 8/1/2022 - 8/2/2022.
List disposition of process piping containing residuals, list how the waste and any residuals were managed: Process piping was drained of residuals prior to demolition. Seven drums of material were staged in the Thaw Shed. Disposal samples were collected 8/5/2022. The drums were disposed as hazardous waste at Veolia Environmental Services 10/28/2022. Piping was inspected and determined to be free of residuals. Piping was sheared and recycled with Niagara Metals.

Energetic Materials

Did the demolition plan include the use of Energetic Materials: No.
What were the dates of use? NA
Were there any CAMP excursions at the property line on those dates? No.

Pump House Photographic Log

Client Name: RITC	Date Photo was Taken: 7/16/2021	Project: RITC
Photo No. 1 **Direction Photo Taken:** View is east. **Description:** The pump house exterior.		
Client Name: RITC	**Date Photo was Taken:** 10/27/2021	**Project:** RITC
Photo No. 2 **Direction Photo Taken:** View is aerial – southwest. **Description:** The pump house was located on the east side of the byproducts area.		

Client Name: RITC	Date Photo was Taken: 8/2/2022	Project: RITC
Photo No. 3		
Direction Photo Taken: View is south.		
Description: The pump house interior, north side. Lines in the pump house are drained, and oil is containerized.		

Client Name: RITC	Date Photo was Taken: 8/2/2022	Project: RITC
Photo No. 4		
Direction Photo Taken: View is east.		
Description: Lines in the pump house are drained, and oil is containerized.		

Client Name: RITC	Date Photo was Taken: 8/2/2022	Project: RITC
Photo No. 5 **Direction Photo Taken:** View is east. **Description:** Pump house interior, south side.		
Client Name: RITC	**Date Photo was Taken:** 8/4/2022	**Project:** RITC
Photo No. 6 **Direction Photo Taken:** View is west. **Description:** The pump house is demolished, and brick is being segregated from structural steel.		

Pump House Brick Analytical Results – Table 6

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<190	U
1,1,2,2-Tetrachloroethane		ug/kg	<190	U
1,1,2-Trichloroethane		ug/kg	<300	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		ug/kg	NS	
1,1-Dichloroethane		ug/kg	<160	U
1,1-Dichloroethene		ug/kg	<270	U
1,2,3-Trichlorobenzene		ug/kg	<360	U
1,2,4-Trichlorobenzene		ug/kg	<310	U
1,2-Dibromo-3-Chloropropane		ug/kg	<1100	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<320	U
1,2-Dichlorobenzene		ug/kg	<160	U
1,2-Dichloroethane		ug/kg	<290	U
1,2-Dichloropropane		ug/kg	<140	U
1,3-Dichlorobenzene		ug/kg	<170	U
1,4-Dichlorobenzene		ug/kg	<190	U
1,4-Dioxane (P-Dioxane)		ug/kg	<40000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<2500	U
2-Hexanone		ug/kg	<1300	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<1400	U
Acetone		ug/kg	**6400**	J
Benzene		ug/kg	**1000**	
Bromochloromethane		ug/kg	<230	U
Bromodichloromethane		ug/kg	<120	U
Bromoform		ug/kg	<280	U
Bromomethane		ug/kg	<660	U
Carbon Disulfide		ug/kg	<5200	U
Carbon Tetrachloride		ug/kg	<260	U
Chlorobenzene		ug/kg	<140	U
Chloroethane		ug/kg	<510	U
Chloroform		ug/kg	<160	U
Chloromethane		ug/kg	<1000	U
Cyclohexane		ug/kg	NS	
Dibromochloromethane		ug/kg	<160	U
Dichlorodifluoromethane		ug/kg	<1000	U
Methylene Chloride (Dichloromethane)		ug/kg	<2600	U
Ethylbenzene		ug/kg	**260**	J

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
Isopropylbenzene (Cumene)		ug/kg	<120	U
Methyl Acetate		ug/kg	NS	
Tert-Butyl Methyl Ether		ug/kg	<230	U
Methylcyclohexane		ug/kg	NS	
Styrene		ug/kg	**600**	J
Tetrachloroethylene (PCE)		ug/kg	<220	U
Toluene		ug/kg	**1500**	
Trichloroethylene (TCE)		ug/kg	<160	U
Trichlorofluoromethane		ug/kg	<790	U
Vinyl Chloride		ug/kg	<380	U
Cis-1,2-Dichloroethylene		ug/kg	<200	U
Cis-1,3-Dichloropropene		ug/kg	<180	U
m,p-Xylene		ug/kg	**850**	J
O-Xylene (1,2-Dimethylbenzene)		ug/kg	<330	U
Trans-1,2-Dichloroethene		ug/kg	<160	U
Trans-1,3-Dichloropropene		ug/kg	<310	U

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
SW8270D				
1,2,4,5-Tetrachlorobenzene		ug/kg	<18.0	U
2,3,4,6-Tetrachlorophenol		ug/kg	NS	
2,4,5-Trichlorophenol		ug/kg	<32.0	U
2,4,6-Trichlorophenol		ug/kg	NS	
2,4-Dichlorophenol		ug/kg	<27.0	U
2,4-Dimethylphenol		ug/kg	<55.0	U
2,4-Dinitrophenol		ug/kg	<78.0	U
2,4-Dinitrotoluene		ug/kg	<34.0	U
2,6-Dinitrotoluene		ug/kg	<29.0	U
2-Chloronaphthalene		ug/kg	<17.0	U
2-Chlorophenol		ug/kg	<20.0	U
2-Methylnaphthalene		ug/kg	**72**	J
2-Methylphenol (O-Cresol)		ug/kg	<26.0	U
2-Nitroaniline		ug/kg	<32.0	U
2-Nitrophenol		ug/kg	<63.0	U
3,3'-Dichlorobenzidine		ug/kg	<45.0	U
Cresols, M & P		ug/kg	**51**	J
3-Nitroaniline		ug/kg	<32.0	U
4,6-Dinitro-2-Methylphenol		ug/kg	<80.0	U
4-Bromophenyl Phenyl Ether		ug/kg	<26.0	U
4-Chloro-3-Methylphenol		ug/kg	<25.0	U
4-Chloroaniline		ug/kg	<30.0	U
4-Chlorophenyl Phenyl Ether		ug/kg	<18.0	U
4-Nitroaniline		ug/kg	<69.0	U
4-Nitrophenol		ug/kg	<68.0	U
Acenaphthene		ug/kg	<17.0	U
Acenaphthylene		ug/kg	**170**	
Acetophenone		ug/kg	<21.0	U
Anthracene		ug/kg	**350**	
Atrazine		ug/kg	NS	
Benzo(A)Anthracene		ug/kg	**640**	
Benzaldehyde		ug/kg	NS	
Benzo(A)Pyrene		ug/kg	**460**	
Benzo(B)Fluoranthene		ug/kg	**850**	
Benzo(G,H,I)Perylene		ug/kg	**270**	
Benzo(K)Fluoranthene		ug/kg	**280**	

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
Biphenyl (Diphenyl)		ug/kg	<22.0	U
Bis(2-Chloroisopropyl) Ether		ug/kg	<29.0	U
Bis(2-Chloroethoxy) Methane		ug/kg	<17.0	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<23.0	U
Bis(2-Ethylhexyl) Phthalate		ug/kg	<58.0	U
Benzyl Butyl Phthalate		ug/kg	<42.0	U
Caprolactam		ug/kg	NS	
Carbazole		ug/kg	NS	
Chrysene		ug/kg	**980**	
Di-N-Butyl Phthalate		ug/kg	<32.0	U
Di-N-Octylphthalate		ug/kg	<57.0	U
Dibenz(A,H)Anthracene		ug/kg	**110**	
Dibenzofuran		ug/kg	**120**	J
Diethyl Phthalate		ug/kg	<16.0	U
Dimethyl Phthalate		ug/kg	<35.0	U
Fluoranthene		ug/kg	**1600**	
Fluorene		ug/kg	**250**	
Hexachlorobenzene		ug/kg	<19.0	U
Hexachlorobutadiene		ug/kg	<24.0	U
Hexachlorocyclopentadiene		ug/kg	<150	U
Hexachloroethane		ug/kg	<27.0	U
Indeno(1,2,3-C,D)Pyrene		ug/kg	**350**	
Isophorone		ug/kg	<22.0	U
N-Nitrosodi-N-Propylamine		ug/kg	<26.0	U
N-Nitrosodiphenylamine		ug/kg	<19.0	U
Naphthalene		ug/kg	**180**	
Nitrobenzene		ug/kg	<25.0	U
Pentachlorophenol		ug/kg	<37.0	U
Phenanthrene		ug/kg	**1500**	
Phenol		ug/kg	**89**	J
Pyrene		ug/kg	**940**	

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
SW6010				
Aluminum		mg/kg	**9240**	
Antimony		mg/kg	<0.296	U
Arsenic		mg/kg	**4.52**	
Barium		mg/kg	**77.4**	
Beryllium		mg/kg	**0.312**	J
Cadmium		mg/kg	**0.444**	J
Calcium		mg/kg	**22200**	
Chromium, Total		mg/kg	**11.3**	
Cobalt		mg/kg	**1.48**	J
Copper		mg/kg	**8.23**	
Iron		mg/kg	**8460**	
Lead		mg/kg	**129**	
Magnesium		mg/kg	**1350**	
Manganese		mg/kg	**104**	
Nickel		mg/kg	**5.45**	
Potassium		mg/kg	**1030**	
Selenium		mg/kg	<0.201	U
Silver		mg/kg	<0.220	U
Sodium		mg/kg	**572**	
Thallium		mg/kg	<0.245	U
Vanadium		mg/kg	**10.7**	
Zinc		mg/kg	**40.2**	
SW7471				
Mercury		mg/kg	**0.049**	J
8082A				
PCB-1016 (Aroclor 1016)		ug/kg	<8.76	U
PCB-1221 (Aroclor 1221)		ug/kg	<9.88	U
PCB-1232 (Aroclor 1232)		ug/kg	<20.9	U
PCB-1242 (Aroclor 1242)		ug/kg	<13.3	U
PCB-1248 (Aroclor 1248)		ug/kg	<14.8	U
PCB-1254 (Aroclor 1254)		ug/kg	<10.8	U
PCB-1260 (Aroclor 1260)		ug/kg	<18.2	U

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
SW9012B				
Cyanide		mg/kg	**0.90**	J
SOLIDS				
Total Solids		%	**97.7**	
TCLP - SW8260C				
1,2-Dichloroethane	500	ug/l	<1.3	U
Chlorobenzene	100000	ug/l	<1.8	U
Tetrachloroethylene (PCE)	700	ug/l	<1.8	U
Carbon Tetrachloride	500	ug/l	<1.3	U
Chloroform	6000	ug/l	<2.2	U
Benzene	500	ug/l	<1.6	U
Vinyl Chloride	200	ug/l	<0.71	U
1,1-Dichloroethene	700	ug/l	NS	U
Methyl Ethyl Ketone (2-Butanone)	200000	ug/l	<19.0	U
Trichloroethylene (TCE)	500	ug/l	<1.8	U
TCLP - SW8270D				
1,4-Dichlorobenzene	7500	ug/l	NS	
2,4,5-Trichlorophenol	400000	ug/l	<1.9	U
2,4,6-Trichlorophenol	2000	ug/l	<2.5	U
2,4-Dinitrotoluene	130	ug/l	<1.9	U
Cresols, (as m,p,o-Cresol)	20000	ug/l	**15**	J
Hexachlorobenzene	130	ug/l	<3.4	U
Hexachlorobutadiene	500	ug/l	<3.0	U
Hexachloroethane	3000	ug/l	<2.2	U
Nitrobenzene	2000	ug/l	<3.3	U
Pentachlorophenol	100000	ug/l	<9.8	U
Pyridine	5000	ug/l	<4.5	U

Table 6
Pump House Brick Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	BCP38-BRICK-08172022	
		Contents	Brick	
		Odor	Some	
		Waste Code	None	
TCLP- SW7470				
Mercury	200	ug/l	<0.5	U
TCLP - SW6010				
Arsenic	5000	ug/l	<19	U
Barium	100000	ug/l	**171**	J
Cadmium	1000	ug/l	<10	U
Chromium, Total	5000	ug/l	<21	U
Lead	5000	ug/l	**145**	J
Selenium	1000	ug/l	<0.035	U
Silver	5000	ug/l	<0.028	U
TCLP - 8081B				
Chlordane	30	ug/l	<0.232	U
Endrin	20	ug/l	<0.021	U
Gamma Bhc (Lindane)	400	ug/l	<0.022	U
Heptachlor	8	ug/l	<0.016	U
Heptachlor Epoxide	8	ug/l	<0.021	U
Methoxychlor	10000	ug/l	<0.034	U
Toxaphene	500	ug/l	<0.314	U
TCLP- SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10000	ug/l	<1	U
Silvex (2,4,5-TP)	1000	ug/l	<1	U
Notes:				
NS = Not Sampled				
NC = Not Calculable				
NA = Sample collected, but not analyzed				
"<" = Analyzed for but detected at or above the quantitation limit				
J = Analyte detected below quantitation limit				
C = Continuing Calibration Verification (CCV) below acceptable limits				
S: Lab Control Sample (LCS) Spike recovery is below acceptable limits				
Bold = Analyte was detected				

Pump House Oil Analytical Results – Table 7

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
SW8260C				
1,1,1-Trichloroethane (TCA)		ug/kg	<66.0	U
1,1,2,2-Tetrachloroethane		ug/kg	<65.0	U
1,1,2-Trichloroethane		ug/kg	<100	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		ug/kg	<270	U
1,1-Dichloroethane		ug/kg	<57.0	U
1,1-Dichloroethene		ug/kg	<94.0	U
1,2,3-Trichlorobenzene		ug/kg	<130	U
1,2,4-Trichlorobenzene		ug/kg	<110	U
1,2-Dibromo-3-Chloropropane		ug/kg	<390	U
1,2-Dibromoethane (Ethylene Dibromide)		ug/kg	<110	U
1,2-Dichlorobenzene		ug/kg	<57.0	U
1,2-Dichloroethane		ug/kg	<100	U
1,2-Dichloropropane		ug/kg	<49.0	U
1,3-Dichlorobenzene		ug/kg	<58.0	U
1,4-Dichlorobenzene		ug/kg	<67.0	U
1,4-Dioxane (P-Dioxane)		ug/kg	<14000	U
Methyl Ethyl Ketone (2-Butanone)		ug/kg	<870	U
2-Hexanone		ug/kg	<460	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		ug/kg	<500	U
Acetone		ug/kg	**1900**	J
Benzene		ug/kg	**14000**	
Bromochloromethane		ug/kg	<81.0	U
Bromodichloromethane		ug/kg	<43.0	U
Bromoform		ug/kg	<97.0	U
Bromomethane		ug/kg	<230	U
Carbon Disulfide		ug/kg	<1800	U
Carbon Tetrachloride		ug/kg	<90.0	U
Chlorobenzene		ug/kg	<50.0	U
Chloroethane		ug/kg	<180	U
Chloroform		ug/kg	<55.0	U
Chloromethane		ug/kg	<370	U
Cyclohexane		ug/kg	<210	U
Dibromochloromethane		ug/kg	<55.0	U
Dichlorodifluoromethane		ug/kg	<360	U
Methylene Chloride (Dichloromethane)		ug/kg	<900	U
Ethylbenzene		ug/kg	**110**	J

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
Isopropylbenzene (Cumene)		ug/kg	<43.0	U
Methyl Acetate		ug/kg	<370	U
Tert-Butyl Methyl Ether		ug/kg	<79.0	U
Methylcyclohexane		ug/kg	<240	U
Styrene		ug/kg	**920**	
Tetrachloroethylene (PCE)		ug/kg	<77.0	U
Toluene		ug/kg	**3500**	
Trichloroethylene (TCE)		ug/kg	<54.0	U
Trichlorofluoromethane		ug/kg	<270	U
Vinyl Chloride		ug/kg	<130	U
Cis-1,2-Dichloroethylene		ug/kg	<69.0	U
Cis-1,3-Dichloropropene		ug/kg	<62.0	U
m,p-Xylene		ug/kg	**1500**	
O-Xylene (1,2-Dimethylbenzene)		ug/kg	**370**	J
Trans-1,2-Dichloroethene		ug/kg	<54.0	U
Trans-1,3-Dichloropropene		ug/kg	<110	U
SW8270D				
1,1-Biphenyl		ug/kg	NS	
1,2,4,5-Tetrachlorobenzene		ug/kg	<4900	
2,3,4,6-Tetrachlorophenol		ug/kg	NS	
2,4,5-Trichlorophenol		ug/kg	<9000	
2,4,6-Trichlorophenol		ug/kg	<9000	
2,4-Dichlorophenol		ug/kg	<7600	
2,4-Dimethylphenol		ug/kg	<16000	
2,4-Dinitrophenol		ug/kg	<22000	
2,4-Dinitrotoluene		ug/kg	<9400	
2,6-Dinitrotoluene		ug/kg	<8100	
2-Chloronaphthalene		ug/kg	<4700	
2-Chlorophenol		ug/kg	<5600	
2-Methylnaphthalene		ug/kg	**10000**	J
2-Methylphenol (O-Cresol)		ug/kg	**55000**	
2-Nitroaniline		ug/kg	<9100	
2-Nitrophenol		ug/kg	<18000	
3,3'-Dichlorobenzidine		ug/kg	<12000	
Cresols, M & P		ug/kg	**190000**	
3-Nitroaniline		ug/kg	<8900	

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
4,6-Dinitro-2-Methylphenol		ug/kg	<23000	
4-Bromophenyl Phenyl Ether		ug/kg	<7200	
4-Chloro-3-Methylphenol		ug/kg	<7000	
4-Chloroaniline		ug/kg	<8600	
4-Chlorophenyl Phenyl Ether		ug/kg	<5000	
4-Nitroaniline		ug/kg	<20000	
4-Nitrophenol		ug/kg	<19000	
Acenaphthene		ug/kg	<4900	
Acenaphthylene		ug/kg	**14000**	J
Acetophenone		ug/kg	<5800	
Anthracene		ug/kg	<9200	
Atrazine		ug/kg	NS	
Benzo(A)Anthracene		ug/kg	**5900**	J
Benzaldehyde		ug/kg	NS	
Benzo(A)Pyrene		ug/kg	<12000	
Benzo(B)Fluoranthene		ug/kg	<8000	
Benzo(G,H,I)Perylene		ug/kg	<5600	
Benzo(K)Fluoranthene		ug/kg	<7600	
Biphenyl (Diphenyl)		ug/kg	<6100	
Bis(2-Chloroisopropyl) Ether		ug/kg	<8100	
Bis(2-Chloroethoxy) Methane		ug/kg	<4700	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		ug/kg	<6400	
Bis(2-Ethylhexyl) Phthalate		ug/kg	NS	
Benzyl Butyl Phthalate		ug/kg	<12000	
Caprolactam		ug/kg	NS	
Carbazole		ug/kg	<4600	
Chrysene		ug/kg	<4900	
Di-N-Butyl Phthalate		ug/kg	<9000	
Di-N-Octylphthalate		ug/kg	<16000	
Dibenz(A,H)Anthracene		ug/kg	<5400	
Dibenzofuran		ug/kg	**4900**	J
Diethyl Phthalate		ug/kg	<4400	
Dimethyl Phthalate		ug/kg	<9900	
Fluoranthene		ug/kg	**10000**	J
Fluorene		ug/kg	**6200**	J
Hexachlorobenzene		ug/kg	<5300	
Hexachlorobutadiene		ug/kg	<6900	

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
Hexachlorocyclopentadiene		ug/kg	<43000	
Hexachloroethane		ug/kg	<7600	
Indeno(1,2,3-C,D)Pyrene		ug/kg	<6600	
Isophorone		ug/kg	<6100	
N-Nitrosodi-N-Propylamine		ug/kg	<7300	
N-Nitrosodiphenylamine		ug/kg	<5400	
Naphthalene		ug/kg	**190000**	
Nitrobenzene		ug/kg	<7000	
Pentachlorophenol		ug/kg	<10000	
Phenanthrene		ug/kg	**18000**	J
Phenol		ug/kg	**510000**	
Pyrene		ug/kg	**7100**	J
SW6010				
Aluminum		mg/kg	**33.2**	
Antimony		mg/kg	**1.25**	J
Arsenic		mg/kg	**1.89**	J
Barium		mg/kg	**0.764**	J
Beryllium		mg/kg	<0.103	U
Cadmium		mg/kg	**2.01**	J
Calcium		mg/kg	**372**	
Chromium, Total		mg/kg	**0.590**	J
Cobalt		mg/kg	<0.517	U
Copper		mg/kg	<0.804	U
Iron		mg/kg	**309**	
Lead		mg/kg	**102**	
Magnesium		mg/kg	**19.6**	J
Manganese		mg/kg	**3.93**	
Nickel		mg/kg	<0.754	U
Potassium		mg/kg	<44.8	U
Selenium		mg/kg	**1.24**	J
Silver		mg/kg	<0.882	U
Sodium		mg/kg	**109**	J
Thallium		mg/kg	**4.12**	J
Vanadium		mg/kg	<0.632	U
Zinc		mg/kg	**110**	

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
SW7471				
Mercury		mg/kg	<0.051	U
8082A				
PCB-1016 (Aroclor 1016)		mg/kg	<0.370	U
PCB-1221 (Aroclor 1221)		mg/kg	<0.418	U
PCB-1232 (Aroclor 1232)		mg/kg	<0.884	U
PCB-1242 (Aroclor 1242)		mg/kg	<0.562	U
PCB-1248 (Aroclor 1248)		mg/kg	<0.625	U
PCB-1254 (Aroclor 1254)		mg/kg	<0.456	U
PCB-1260 (Aroclor 1260)		mg/kg	<0.770	U
PCB-1254 (Aroclor 1262)		mg/kg	<0.529	U
PCB-1260 (Aroclor 1268)		mg/kg	<0.432	U
E350.1M				
Nitrogen, Ammonia (As N)		mg/kg	**520**	
9014				
Cyanide		mg/kg	**3.5**	
SW9045D				
pH		ph units	**8.7**	
TCLP - SW8260C (TOTALS!)				
1,2-Dichloroethane	500 (ug/L)	ug/kg	<100.0	U
Chlorobenzene	100000 (ug/L)	ug/kg	<50.0	U
Tetrachloroethylene (PCE)	700 (ug/L)	ug/kg	<77.0	U
Carbon Tetrachloride	500 (ug/L)	ug/kg	<90.0	U
Chloroform	6000 (ug/L)	ug/kg	<55.0	U
Benzene	500 (ug/L)	ug/kg	**14000**	
Vinyl Chloride	200 (ug/L)	ug/kg	<130	U
1,1-Dichloroethene	700 (ug/L)	ug/kg	<94.0	U
Methyl Ethyl Ketone (2-Butanone)	200000 (ug/L)	ug/kg	<870	U
Trichloroethylene (TCE)	500 (ug/L)	ug/kg	<54.0	U

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
	Contents		(7) 55-gallon drums	
	Volume		385	
	Odor		Strong	
TCLP - SW8270D				
1,4-Dichlorobenzene	7500	ug/l	NS	
2,4,5-Trichlorophenol	400000	ug/l	<38.0	U
2,4,6-Trichlorophenol	2000	ug/l	<49.0	U
2,4-Dinitrotoluene	130	ug/l	<38.0	U
3-Methylphenol/4-Methylphenol (3&4 Methlyphen	200000	ug/l	**58000**	
Hexachlorobenzene	130	ug/l	<69.0	U
Hexachlorobutadiene	500	ug/l	<60.0	U
Hexachloroethane	3000	ug/l	<44.0	U
Nitrobenzene	2000	ug/l	<66.0	U
Pentachlorophenol	100000	ug/l	<200	U
Pyridine	5000	ug/l	**3000**	
TCLP- SW7470				
Mercury	0.2	mg/L	<0.0092	U
TCLP - SW6010				
Arsenic	5	mg/L	<0.190	U
Barium	100	mg/L	<0.210	U
Cadmium	1	mg/L	<0.100	U
Chromium, Total	5	mg/L	<0.210	U
Lead	5	mg/L	<0.270	U
Selenium	1	mg/L	<0.350	U
Silver	5	mg/L	<0.280	U
TCLP - 8081B				
Chlordane	30	ug/L	<0.232	U
Endrin	20	ug/L	<0.021	U
Gamma Bhc (Lindane)	400	ug/L	<0.022	U
Heptachlor	8	ug/L	<0.016	U
Heptachlor Epoxide	8	ug/L	<0.021	U
Methoxychlor	10000	ug/L	<0.034	U
Toxaphene	500	ug/L	<0.314	U
TCLP- SW8151A				
2,4-D (Dichlorophenoxyacetic Acid)	10	mg/L	<0.001	U
Silvex (2,4,5-TP)	1	mg/L	<0.001	U

Table 7
Pump House Oil Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

Analytes	TCLP Limits	Units	Pump House Oil	
		Contents	(7) 55-gallon drums	
		Volume	385	
		Odor	Strong	
SW7.3.3.2				
Reactive Cyanide		mg/kg	<10	U
SW7.3.4.2				
Sulfide Reactive		mg/kg	<10	U
SW1010				
Flash Point		deg F	>150	U
ASTM D5865-04 BTUS/High Heat Value				
BTU (As Received)		BTU/lb	**9508**	
Notes:				
NS: Not Sampled				
NA: Sample collected, but not analyzed due to matrix interference				
"<": Analyzed for but detected at or above the quantitation limit				
J: Analyte detected below quantitation limit				
Bold: Analyte was detected				
Bold with red highlight: Analyte exceeds TCLP standards or is characteristically hazardous for corrosivity, flammability, or reactivity.				

Pump House Sump Material Analytical Results – Table 8

Table 8
Pump House Sump Material Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

ANALYTE	EPA-TCLP LIMITS	SAMPLE ID:	PUMPHOUSE-PITS-08042022	
		LAB ID:	L2242102-01	
		COLLECTION DATE:	8/4/2022	
		SAMPLE MATRIX:	SOLID	
		DESCRIPTION:	Material Removed from Pump House Sumps	
		UNITS		
TCLP VOLATILES BY EPA 1311				
1,1-Dichloroethene	0.7	mg/L	<0.0017	U
1,2-Dichloroethane	0.5	mg/L	<0.0013	U
1,4-Dichlorobenzene	7.5	mg/L	<0.0019	U
2-Butanone	200	mg/L	<0.019	U
Benzene	0.5	mg/L	**0.11**	
Carbon tetrachloride	0.5	mg/L	<0.0013	U
Chlorobenzene	100	mg/L	<0.0018	U
Chloroform	6	mg/L	<0.0022	U
Tetrachloroethene	0.7	mg/L	<0.0018	U
Trichloroethene	0.5	mg/L	<0.0018	U
Vinyl chloride	0.2	mg/L	<0.00071	U
SUM		mg/L	**0.11**	-
TCLP SEMIVOLATILES BY EPA 1311				
2,4,5-Trichlorophenol	400	mg/L	<0.0019	U
2,4,6-Trichlorophenol	2	mg/L	<0.0025	U
2,4-Dinitrotoluene	0.13	mg/L	<0.0019	U
2-Methylphenol	200	mg/L	**0.1**	
3-Methylphenol/4-Methylphenol	200	mg/L	**0.02**	J
Hexachlorobenzene	0.13	mg/L	<0.0034	U
Hexachlorobutadiene	0.5	mg/L	<0.003	U
Hexachloroethane	3	mg/L	<0.0022	U
Nitrobenzene	2	mg/L	<0.0033	U
Pentachlorophenol	100	mg/L	<0.0098	U
Pyridine	5	mg/L	<0.0045	U
SUM		mg/L	**0.12**	-
TCLP METALS BY EPA 1311				
Aluminum, TCLP		mg/L	<0.318	U
Antimony, TCLP		mg/L	<0.071	U
Arsenic, TCLP	5	mg/L	<0.019	U
Barium, TCLP	100	mg/L	**0.52**	
Beryllium, TCLP		mg/L	<0.009	U
Cadmium, TCLP	1	mg/L	<0.01	U
Calcium, TCLP		mg/L	**701**	
Chromium, TCLP	5	mg/L	<0.021	U
Cobalt, TCLP		mg/L	0.022	J
Copper, TCLP		mg/L	<0.022	U
Iron, TCLP		mg/L	**0.953**	
Lead, TCLP	5	mg/L	<0.027	U

Table 8
Pump House Sump Material Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

ANALYTE	EPA-TCLP LIMITS	SAMPLE ID:	PUMPHOUSE-PITS-08042022	
		LAB ID:	L2242102-01	
		COLLECTION DATE:	8/4/2022	
		SAMPLE MATRIX:	SOLID	
		DESCRIPTION:	Material Removed from Pump House Sumps	
		UNITS		
Magnesium, TCLP		mg/L	**12.9**	
Manganese, TCLP		mg/L	**4.06**	
Mercury, TCLP	0.2	mg/L	<0.0005	U
Nickel, TCLP		mg/L	**0.08**	J
Potassium, TCLP		mg/L	**5.85**	J
Selenium, TCLP	1	mg/L	<0.035	U
Silver, TCLP	5	mg/L	<0.028	U
Thallium, TCLP		mg/L	<0.025	U
Vanadium, TCLP		mg/L	<0.02	U
Zinc, TCLP		mg/L	**4.66**	
TCLP PESTICIDES BY EPA 1311				
Chlordane	0.03	mg/L	<0.000232	U
Endrin	0.02	mg/L	<0.000021	U
Heptachlor	0.008	mg/L	<0.000016	U
Heptachlor epoxide	0.008	mg/L	<0.000021	U
Lindane	0.4	mg/L	<0.000022	U
Methoxychlor	10	mg/L	<0.000034	U
Toxaphene	0.5	mg/L	<0.000314	U
TCLP HERBICIDES BY EPA 1311				
2,4,5-TP (Silvex)	1	mg/L	<0.001	U
2,4-D	10	mg/L	<0.001	U
POLYCHLORINATED BIPHENYLS BY GC				
Aroclor 1016		mg/kg	<0.0502	U
Aroclor 1221		mg/kg	<0.0567	U
Aroclor 1232		mg/kg	<0.12	U
Aroclor 1242		mg/kg	<0.0763	U
Aroclor 1248		mg/kg	**1.02**	
Aroclor 1254		mg/kg	**1.46**	
Aroclor 1260		mg/kg	<0.104	U
Aroclor 1262		mg/kg	<0.0719	U
Aroclor 1268		mg/kg	<0.0586	U
PCBs, Total		mg/kg	**2.48**	

Table 8
Pump House Sump Material Analytical Results
Riverview Innovation & Technology Campus, Inc.
Town of Tonawanda, New York

ANALYTE	EPA-TCLP LIMITS	SAMPLE ID:	PUMPHOUSE-PITS-08042022	
		LAB ID:	L2242102-01	
		COLLECTION DATE:	8/4/2022	
		SAMPLE MATRIX:	SOLID	
		DESCRIPTION:	Material Removed from Pump House Sumps	
		UNITS		
GENERAL CHEMISTRY				
Cyanide, Reactive		mg/kg	<10	U
pH (H)		S.U.	**7.3**	
Solids, Total		%	**78.6**	
Sulfide, Reactive		mg/kg	<10	U
BTU		BTU/Lb	**5,285**	
IGNITABILITY OF SOLIDS				
Ignitability			NI	
* Comparison is not performed on parameters with non-numeric criteria.				
EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of Septem				
NS: Not Sampled				
NA: Sample collected, but not analyzed due to matrix interference				
"<": Analyzed for but detected at or above the quantitation limit				
J: Analyte detected below quantitation limit				
Bold: Analyte was detected				
Bold with red highlight: Analyte exceeds TCLP standards or is characteristically hazardous for corrosivity				

Pump House Laboratory Reports

ANALYTICAL REPORT

Lab Number:	L2244790
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	BCP38 PUMP HOUSE
Report Date:	09/06/22

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2244790-01	BCP38-BRICK-08172022	SOLID	3875 RIVER RD. TONAWANDA	08/18/22 10:00	08/18/22

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2244790-01: The collection date and time on the chain of custody was 18-AUG-22 10:00; however, the collection date/time on the container label was 17-AUG-22 15:00. At the client's request, the collection date/time is reported as 18-AUG-22 10:00.

L2244790-01: The sample was received in an inappropriate container for the TCL Volatiles - EPA 8260C analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

The Pesticides and Herbicides analyses methods were specified by the client.

Semivolatile Organics

L2244790-01D: The sample has elevated detection limits due to the dilution required by the sample matrix.

L2244790-01D: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (10%), nitrobenzene-d5 (11%), 2-fluorobiphenyl (12%) and 4-terphenyl-d14 (14%); however, re-extraction outside of holding time achieved similar results: 2-fluorophenol (16%), nitrobenzene-d5 (20%), 2-fluorobiphenyl (15%) and 4-terphenyl-d14 (17%). The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

The WG1681024-2/-3 LCS/LCSD recoveries, associated with L2244790-01D, are below the acceptance criteria for 2,4-dinitrophenol (0%/0%) and benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

The WG1683124-2/-3 LCS/LCSD recoveries, associated with L2244790-01RE, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

TCLP Semivolatiles

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

Case Narrative (continued)

The WG1681079-2 LCS recovery, associated with L2244790-01, is below the acceptance criteria for pyridine (1%); however, it has been identified as a "difficult" analyte. The results of the associated sample are reported.

TCLP Pesticides

WG1681053-2: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

TCLP Herbicides

WG1680696-2: One or more surrogates failed to meet the DKQP recovery limits. Please refer to the sample results and/or QC section of the report for specific details.

WG1680696-2/-3: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

Total Metals

L2244790-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/06/22

ORGANICS

VOLATILES

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 09/01/22 06:55
Analyst: MM
Percent Solids: 98%
TCLP/SPLP Ext. Date: 08/31/22 11:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
dibromofluoromethane	112		70-130

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D2 Date Collected: 08/18/22 10:00
Client ID: BCP38-BRICK-08172022 Date Received: 08/18/22
Sample Location: 3875 RIVER RD. TONAWANDA Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 08/31/22 22:11
Analyst: JC
Percent Solids: 98%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	5700	2600	25
1,1-Dichloroethane	ND		ug/kg	1100	160	25
Chloroform	ND		ug/kg	1700	160	25
Carbon tetrachloride	ND		ug/kg	1100	260	25
1,2-Dichloropropane	ND		ug/kg	1100	140	25
Dibromochloromethane	ND		ug/kg	1100	160	25
1,1,2-Trichloroethane	ND		ug/kg	1100	300	25
Tetrachloroethene	ND		ug/kg	570	220	25
Chlorobenzene	ND		ug/kg	570	140	25
Trichlorofluoromethane	ND		ug/kg	4500	790	25
1,2-Dichloroethane	ND		ug/kg	1100	290	25
1,1,1-Trichloroethane	ND		ug/kg	570	190	25
Bromodichloromethane	ND		ug/kg	570	120	25
trans-1,3-Dichloropropene	ND		ug/kg	1100	310	25
cis-1,3-Dichloropropene	ND		ug/kg	570	180	25
1,3-Dichloropropene, Total	ND		ug/kg	570	180	25
1,1-Dichloropropene	ND		ug/kg	570	180	25
Bromoform	ND		ug/kg	4500	280	25
1,1,2,2-Tetrachloroethane	ND		ug/kg	570	190	25
Benzene	1000		ug/kg	570	190	25
Toluene	1500		ug/kg	1100	620	25
Ethylbenzene	260	J	ug/kg	1100	160	25
Chloromethane	ND		ug/kg	4500	1000	25
Bromomethane	ND		ug/kg	2300	660	25
Vinyl chloride	ND		ug/kg	1100	380	25
Chloroethane	ND		ug/kg	2300	510	25
1,1-Dichloroethene	ND		ug/kg	1100	270	25
trans-1,2-Dichloroethene	ND		ug/kg	1700	160	25

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D2 Date Collected: 08/18/22 10:00

Client ID: BCP38-BRICK-08172022 Date Received: 08/18/22

Sample Location: 3875 RIVER RD. TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/kg	570	160	25
1,2-Dichlorobenzene	ND		ug/kg	2300	160	25
1,3-Dichlorobenzene	ND		ug/kg	2300	170	25
1,4-Dichlorobenzene	ND		ug/kg	2300	190	25
Methyl tert butyl ether	ND		ug/kg	2300	230	25
p/m-Xylene	850	J	ug/kg	2300	640	25
o-Xylene	ND		ug/kg	1100	330	25
Xylenes, Total	850	J	ug/kg	1100	330	25
cis-1,2-Dichloroethene	ND		ug/kg	1100	200	25
1,2-Dichloroethene, Total	ND		ug/kg	1100	160	25
Dibromomethane	ND		ug/kg	2300	270	25
Styrene	600	J	ug/kg	1100	220	25
Dichlorodifluoromethane	ND		ug/kg	11000	1000	25
Acetone	6400	J	ug/kg	11000	5400	25
Carbon disulfide	ND		ug/kg	11000	5200	25
2-Butanone	ND		ug/kg	11000	2500	25
Vinyl acetate	ND		ug/kg	11000	2400	25
4-Methyl-2-pentanone	ND		ug/kg	11000	1400	25
1,2,3-Trichloropropane	ND		ug/kg	2300	140	25
2-Hexanone	ND		ug/kg	11000	1300	25
Bromochloromethane	ND		ug/kg	2300	230	25
2,2-Dichloropropane	ND		ug/kg	2300	230	25
1,2-Dibromoethane	ND		ug/kg	1100	320	25
1,3-Dichloropropane	ND		ug/kg	2300	190	25
1,1,1,2-Tetrachloroethane	ND		ug/kg	570	150	25
Bromobenzene	ND		ug/kg	2300	160	25
n-Butylbenzene	ND		ug/kg	1100	190	25
sec-Butylbenzene	ND		ug/kg	1100	160	25
tert-Butylbenzene	ND		ug/kg	2300	130	25
o-Chlorotoluene	ND		ug/kg	2300	220	25
p-Chlorotoluene	ND		ug/kg	2300	120	25
1,2-Dibromo-3-chloropropane	ND		ug/kg	3400	1100	25
Hexachlorobutadiene	ND		ug/kg	4500	190	25
Isopropylbenzene	ND		ug/kg	1100	120	25
p-Isopropyltoluene	ND		ug/kg	1100	120	25
Naphthalene	340000	E	ug/kg	4500	740	25
Acrylonitrile	ND		ug/kg	4500	1300	25

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D2 Date Collected: 08/18/22 10:00

Client ID: BCP38-BRICK-08172022 Date Received: 08/18/22

Sample Location: 3875 RIVER RD. TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1100	190	25
1,2,3-Trichlorobenzene	ND		ug/kg	2300	360	25
1,2,4-Trichlorobenzene	ND		ug/kg	2300	310	25
1,3,5-Trimethylbenzene	ND		ug/kg	2300	220	25
1,2,4-Trimethylbenzene	ND		ug/kg	2300	380	25
1,4-Dioxane	ND		ug/kg	91000	40000	25
p-Diethylbenzene	ND		ug/kg	2300	200	25
p-Ethyltoluene	ND		ug/kg	2300	440	25
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2300	220	25
Ethyl ether	ND		ug/kg	2300	390	25
trans-1,4-Dichloro-2-butene	ND		ug/kg	5700	1600	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 08/30/22 22:25
Analyst: JC
Percent Solids: 98%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	280000		ug/kg	9100	1500	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	103		70-130

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/30/22 16:42
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681874-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/30/22 16:42
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681874-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/30/22 16:42
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681874-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	19	J	ug/kg	100	16.
1,2,4-Trichlorobenzene	14	J	ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/31/22 16:17
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1682395-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/31/22 16:17
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1682395-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	330	J	ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/31/22 16:17
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1682395-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	**131**	Q	70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	117		70-130

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/01/22 05:01
Analyst: MM
TCLP/SPLP Extraction Date: 08/31/22 11:35
Extraction Date: 08/31/22 11:35

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1682462-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681874-3 WG1681874-4								
Methylene chloride	74		74		70-130	0		30
1,1-Dichloroethane	71		71		70-130	0		30
Chloroform	**69**	Q	**69**	Q	70-130	0		30
Carbon tetrachloride	105		106		70-130	1		30
1,2-Dichloropropane	83		82		70-130	1		30
Dibromochloromethane	94		95		70-130	1		30
1,1,2-Trichloroethane	76		76		70-130	0		30
Tetrachloroethene	112		111		70-130	1		30
Chlorobenzene	90		89		70-130	1		30
Trichlorofluoromethane	89		88		70-139	1		30
1,2-Dichloroethane	77		77		70-130	0		30
1,1,1-Trichloroethane	92		92		70-130	0		30
Bromodichloromethane	83		83		70-130	0		30
trans-1,3-Dichloropropene	80		79		70-130	1		30
cis-1,3-Dichloropropene	82		82		70-130	0		30
1,1-Dichloropropene	89		89		70-130	0		30
Bromoform	94		94		70-130	0		30
1,1,2,2-Tetrachloroethane	84		82		70-130	2		30
Benzene	85		85		70-130	0		30
Toluene	88		88		70-130	0		30
Ethylbenzene	87		86		70-130	1		30
Chloromethane	77		75		52-130	3		30
Bromomethane	88		88		57-147	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681874-3 WG1681874-4								
Vinyl chloride	82		82		67-130	0		30
Chloroethane	82		81		50-151	1		30
1,1-Dichloroethene	79		79		65-135	0		30
trans-1,2-Dichloroethene	79		78		70-130	1		30
Trichloroethene	97		98		70-130	1		30
1,2-Dichlorobenzene	94		94		70-130	0		30
1,3-Dichlorobenzene	97		98		70-130	1		30
1,4-Dichlorobenzene	95		96		70-130	1		30
Methyl tert butyl ether	95		95		66-130	0		30
p/m-Xylene	94		93		70-130	1		30
o-Xylene	90		90		70-130	0		30
cis-1,2-Dichloroethene	76		74		70-130	3		30
Dibromomethane	74		74		70-130	0		30
Styrene	90		90		70-130	0		30
Dichlorodifluoromethane	66		67		30-146	2		30
Acetone	82		82		54-140	0		30
Carbon disulfide	79		80		59-130	1		30
2-Butanone	**67**	Q	**69**	Q	70-130	3		30
Vinyl acetate	94		83		70-130	12		30
4-Methyl-2-pentanone	93		93		70-130	0		30
1,2,3-Trichloropropane	83		82		68-130	1		30
2-Hexanone	86		80		70-130	7		30
Bromochloromethane	81		81		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681874-3 WG1681874-4								
2,2-Dichloropropane	83		83		70-130	0		30
1,2-Dibromoethane	82		82		70-130	0		30
1,3-Dichloropropane	85		86		69-130	1		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Bromobenzene	98		98		70-130	0		30
n-Butylbenzene	87		87		70-130	0		30
sec-Butylbenzene	94		94		70-130	0		30
tert-Butylbenzene	101		101		70-130	0		30
o-Chlorotoluene	90		91		70-130	1		30
p-Chlorotoluene	88		88		70-130	0		30
1,2-Dibromo-3-chloropropane	97		97		68-130	0		30
Hexachlorobutadiene	97		96		67-130	1		30
Isopropylbenzene	99		100		70-130	1		30
p-Isopropyltoluene	101		101		70-130	0		30
Naphthalene	94		96		70-130	2		30
Acrylonitrile	78		75		70-130	4		30
n-Propylbenzene	92		93		70-130	1		30
1,2,3-Trichlorobenzene	92		93		70-130	1		30
1,2,4-Trichlorobenzene	95		95		70-130	0		30
1,3,5-Trimethylbenzene	94		94		70-130	0		30
1,2,4-Trimethylbenzene	91		92		70-130	1		30
1,4-Dioxane	90		90		65-136	0		30
p-Diethylbenzene	99		99		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681874-3 WG1681874-4								
p-Ethyltoluene	97		98		70-130	1		30
1,2,4,5-Tetramethylbenzene	92		92		70-130	0		30
Ethyl ether	76		76		67-130	0		30
trans-1,4-Dichloro-2-butene	89		92		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	80		81		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	80		81		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1682395-3 WG1682395-4								
Methylene chloride	96		98		70-130	2		30
1,1-Dichloroethane	99		101		70-130	2		30
Chloroform	91		91		70-130	0		30
Carbon tetrachloride	86		89		70-130	3		30
1,2-Dichloropropane	92		95		70-130	3		30
Dibromochloromethane	85		88		70-130	3		30
1,1,2-Trichloroethane	90		91		70-130	1		30
Tetrachloroethene	99		102		70-130	3		30
Chlorobenzene	94		95		70-130	1		30
Trichlorofluoromethane	102		105		70-139	3		30
1,2-Dichloroethane	94		97		70-130	3		30
1,1,1-Trichloroethane	93		95		70-130	2		30
Bromodichloromethane	82		86		70-130	5		30
trans-1,3-Dichloropropene	87		89		70-130	2		30
cis-1,3-Dichloropropene	82		84		70-130	2		30
1,1-Dichloropropene	95		98		70-130	3		30
Bromoform	84		87		70-130	4		30
1,1,2,2-Tetrachloroethane	87		87		70-130	0		30
Benzene	89		91		70-130	2		30
Toluene	91		92		70-130	1		30
Ethylbenzene	96		96		70-130	0		30
Chloromethane	106		105		52-130	1		30
Bromomethane	125		124		57-147	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1682395-3 WG1682395-4								
Vinyl chloride	109		110		67-130	1		30
Chloroethane	114		117		50-151	3		30
1,1-Dichloroethene	98		100		65-135	2		30
trans-1,2-Dichloroethene	91		93		70-130	2		30
Trichloroethene	97		100		70-130	3		30
1,2-Dichlorobenzene	94		96		70-130	2		30
1,3-Dichlorobenzene	96		97		70-130	1		30
1,4-Dichlorobenzene	93		96		70-130	3		30
Methyl tert butyl ether	71		73		66-130	3		30
p/m-Xylene	97		98		70-130	1		30
o-Xylene	94		96		70-130	2		30
cis-1,2-Dichloroethene	87		89		70-130	2		30
Dibromomethane	84		87		70-130	4		30
Styrene	95		96		70-130	1		30
Dichlorodifluoromethane	79		78		30-146	1		30
Acetone	127		137		54-140	8		30
Carbon disulfide	96		98		59-130	2		30
2-Butanone	91		99		70-130	8		30
Vinyl acetate	77		77		70-130	0		30
4-Methyl-2-pentanone	95		97		70-130	2		30
1,2,3-Trichloropropane	90		90		68-130	0		30
2-Hexanone	96		98		70-130	2		30
Bromochloromethane	90		90		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1682395-3 WG1682395-4								
2,2-Dichloropropane	89		92		70-130	3		30
1,2-Dibromoethane	89		91		70-130	2		30
1,3-Dichloropropane	91		91		69-130	0		30
1,1,1,2-Tetrachloroethane	86		89		70-130	3		30
Bromobenzene	91		93		70-130	2		30
n-Butylbenzene	107		107		70-130	0		30
sec-Butylbenzene	100		101		70-130	1		30
tert-Butylbenzene	96		97		70-130	1		30
o-Chlorotoluene	113		115		70-130	2		30
p-Chlorotoluene	96		98		70-130	2		30
1,2-Dibromo-3-chloropropane	81		83		68-130	2		30
Hexachlorobutadiene	105		108		67-130	3		30
Isopropylbenzene	95		96		70-130	1		30
p-Isopropyltoluene	101		102		70-130	1		30
Naphthalene	90		93		70-130	3		30
Acrylonitrile	91		94		70-130	3		30
n-Propylbenzene	100		101		70-130	1		30
1,2,3-Trichlorobenzene	97		100		70-130	3		30
1,2,4-Trichlorobenzene	96		98		70-130	2		30
1,3,5-Trimethylbenzene	97		98		70-130	1		30
1,2,4-Trimethylbenzene	98		100		70-130	2		30
1,4-Dioxane	94		92		65-136	2		30
p-Diethylbenzene	98		99		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1682395-3 WG1682395-4								
p-Ethyltoluene	97		98		70-130	1		30
1,2,4,5-Tetramethylbenzene	89		92		70-130	3		30
Ethyl ether	82		80		67-130	2		30
trans-1,4-Dichloro-2-butene	97		101		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	102		99		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	94		92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1682462-3 WG1682462-4								
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
Tetrachloroethene	96		96		70-130	0		20
Chlorobenzene	98		98		75-130	0		25
1,2-Dichloroethane	100		100		70-130	0		20
Benzene	100		100		70-130	0		25
Vinyl chloride	100		100		55-140	0		20
1,1-Dichloroethene	100		99		61-145	1		25
Trichloroethene	100		100		70-130	0		25
1,4-Dichlorobenzene	97		97		70-130	0		20
2-Butanone	110		120		63-138	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	96		98		70-130
dibromofluoromethane	102		101		70-130

SEMIVOLATILES

Project Name: RITC
Lab Number: L2244790
Project Number: BCP38 PUMP HOUSE
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 08/30/22 20:56
Analyst: SLR
Percent Solids: 98%
TCLP/SPLP Ext. Date: 08/26/22 19:20

Extraction Method: EPA 3510C
Extraction Date: 08/29/22 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	15	J	ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		21-120
Phenol-d6	78		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	88		33-120

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 RE
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/03/22 17:58
Analyst: WR
Percent Solids: 98%

Extraction Method: EPA 3540C
Extraction Date: 09/02/22 18:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	1600		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	24.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	130	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	180		ug/kg	170	20.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	130	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	57.	1

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 RE Date Collected: 08/18/22 10:00
Client ID: BCP38-BRICK-08172022 Date Received: 08/18/22
Sample Location: 3875 RIVER RD. TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	640		ug/kg	100	19.	1
Benzo(a)pyrene	460		ug/kg	130	41.	1
Benzo(b)fluoranthene	850		ug/kg	100	28.	1
Benzo(k)fluoranthene	280		ug/kg	100	27.	1
Chrysene	980		ug/kg	100	17.	1
Acenaphthylene	170		ug/kg	130	26.	1
Anthracene	350		ug/kg	100	33.	1
Benzo(ghi)perylene	270		ug/kg	130	20.	1
Fluorene	250		ug/kg	170	16.	1
Phenanthrene	1500		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	110		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	350		ug/kg	130	23.	1
Pyrene	940		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	22.	1
4-Chloroaniline	ND		ug/kg	170	30.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	69.	1
Dibenzofuran	120	J	ug/kg	170	16.	1
2-Methylnaphthalene	72	J	ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	55.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	230	68.	1
2,4-Dinitrophenol	ND		ug/kg	800	78.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	80.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	89	J	ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	51	J	ug/kg	240	26.	1

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 RE
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	540	170	1
Benzyl Alcohol	ND		ug/kg	170	51.	1
Carbazole	360		ug/kg	170	16.	1
1,4-Dioxane	ND		ug/kg	25	7.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**16**	Q	25-120
Phenol-d6	17		10-120
Nitrobenzene-d5	**20**	Q	23-120
2-Fluorobiphenyl	**15**	Q	30-120
2,4,6-Tribromophenol	18		10-136
4-Terphenyl-d14	**17**	Q	18-120

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 09/02/22 14:08
Analyst: IM
Percent Solids: 98%

Extraction Method: EPA 3540C
Extraction Date: 08/29/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	89	J	ug/kg	680	88.	5
1,2,4-Trichlorobenzene	ND		ug/kg	850	97.	5
Hexachlorobenzene	ND		ug/kg	510	95.	5
Bis(2-chloroethyl)ether	ND		ug/kg	760	120	5
2-Chloronaphthalene	ND		ug/kg	850	84.	5
1,2-Dichlorobenzene	ND		ug/kg	850	150	5
1,3-Dichlorobenzene	ND		ug/kg	850	140	5
1,4-Dichlorobenzene	ND		ug/kg	850	150	5
3,3'-Dichlorobenzidine	ND		ug/kg	850	220	5
2,4-Dinitrotoluene	ND		ug/kg	850	170	5
2,6-Dinitrotoluene	ND		ug/kg	850	140	5
Fluoranthene	7800		ug/kg	510	97.	5
4-Chlorophenyl phenyl ether	ND		ug/kg	850	91.	5
4-Bromophenyl phenyl ether	ND		ug/kg	850	130	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	140	5
Bis(2-chloroethoxy)methane	ND		ug/kg	920	85.	5
Hexachlorobutadiene	ND		ug/kg	850	120	5
Hexachlorocyclopentadiene	ND		ug/kg	2400	770	5
Hexachloroethane	ND		ug/kg	680	140	5
Isophorone	ND		ug/kg	760	110	5
Naphthalene	660	J	ug/kg	850	100	5
Nitrobenzene	ND		ug/kg	760	120	5
NDPA/DPA	ND		ug/kg	680	96.	5
n-Nitrosodi-n-propylamine	ND		ug/kg	850	130	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	850	290	5
Butyl benzyl phthalate	ND		ug/kg	850	210	5
Di-n-butylphthalate	ND		ug/kg	850	160	5
Di-n-octylphthalate	ND		ug/kg	850	290	5

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	850	78.	5
Dimethyl phthalate	ND		ug/kg	850	180	5
Benzo(a)anthracene	3600		ug/kg	510	96.	5
Benzo(a)pyrene	2100		ug/kg	680	210	5
Benzo(b)fluoranthene	3700		ug/kg	510	140	5
Benzo(k)fluoranthene	1000		ug/kg	510	140	5
Chrysene	6000		ug/kg	510	88.	5
Acenaphthylene	1000		ug/kg	680	130	5
Anthracene	2200		ug/kg	510	160	5
Benzo(ghi)perylene	1100		ug/kg	680	100	5
Fluorene	1600		ug/kg	850	82.	5
Phenanthrene	8500		ug/kg	510	100	5
Dibenzo(a,h)anthracene	490	J	ug/kg	510	98.	5
Indeno(1,2,3-cd)pyrene	1400		ug/kg	680	120	5
Pyrene	4700		ug/kg	510	84.	5
Biphenyl	ND		ug/kg	1900	110	5
4-Chloroaniline	ND		ug/kg	850	150	5
2-Nitroaniline	ND		ug/kg	850	160	5
3-Nitroaniline	ND		ug/kg	850	160	5
4-Nitroaniline	ND		ug/kg	850	350	5
Dibenzofuran	680	J	ug/kg	850	80.	5
2-Methylnaphthalene	310	J	ug/kg	1000	100	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	850	88.	5
Acetophenone	ND		ug/kg	850	100	5
2,4,6-Trichlorophenol	ND		ug/kg	510	160	5
p-Chloro-m-cresol	ND		ug/kg	850	130	5
2-Chlorophenol	ND		ug/kg	850	100	5
2,4-Dichlorophenol	ND		ug/kg	760	140	5
2,4-Dimethylphenol	ND		ug/kg	850	280	5
2-Nitrophenol	ND		ug/kg	1800	320	5
4-Nitrophenol	ND		ug/kg	1200	350	5
2,4-Dinitrophenol	ND		ug/kg	4100	400	5
4,6-Dinitro-o-cresol	ND		ug/kg	2200	410	5
Pentachlorophenol	ND		ug/kg	680	190	5
Phenol	190	J	ug/kg	850	130	5
2-Methylphenol	ND		ug/kg	850	130	5
3-Methylphenol/4-Methylphenol	140	J	ug/kg	1200	130	5

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01 D
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	850	160	5
Benzoic Acid	ND		ug/kg	2700	860	5
Benzyl Alcohol	ND		ug/kg	850	260	5
Carbazole	2000		ug/kg	850	82.	5
1,4-Dioxane	ND		ug/kg	130	39.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**10**	Q	25-120
Phenol-d6	11		10-120
Nitrobenzene-d5	**11**	Q	23-120
2-Fluorobiphenyl	**12**	Q	30-120
2,4,6-Tribromophenol	12		10-136
4-Terphenyl-d14	**14**	Q	18-120

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/31/22 22:47
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 08/29/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681024-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/31/22 22:47
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 08/29/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681024-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	22.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/31/22 22:47
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 08/29/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1681024-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	68		10-136
4-Terphenyl-d14	77		18-120

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/30/22 18:06
Analyst: MG
TCLP/SPLP Extraction Date: 08/26/22 19:20

Extraction Method: EPA 3510C
Extraction Date: 08/29/22 19:30

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1681079-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	75		33-120

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/03/22 15:38
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 09/02/22 18:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683124-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	18.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/03/22 15:38
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 09/02/22 18:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683124-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	29.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	53.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/03/22 15:38
Analyst: JG

Extraction Method: EPA 3540C
Extraction Date: 09/02/22 18:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1683124-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	75.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	60		10-136
4-Terphenyl-d14	56		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681024-2 WG1681024-3								
Acenaphthene	76		70		31-137	8		50
1,2,4-Trichlorobenzene	71		64		38-107	10		50
Hexachlorobenzene	76		70		40-140	8		50
Bis(2-chloroethyl)ether	74		66		40-140	11		50
2-Chloronaphthalene	72		66		40-140	9		50
1,2-Dichlorobenzene	69		63		40-140	9		50
1,3-Dichlorobenzene	70		63		40-140	11		50
1,4-Dichlorobenzene	70		63		28-104	11		50
3,3'-Dichlorobenzidine	64		56		40-140	13		50
2,4-Dinitrotoluene	76		70		40-132	8		50
2,6-Dinitrotoluene	71		66		40-140	7		50
Fluoranthene	77		71		40-140	8		50
4-Chlorophenyl phenyl ether	73		68		40-140	7		50
4-Bromophenyl phenyl ether	75		70		40-140	7		50
Bis(2-chloroisopropyl)ether	74		68		40-140	8		50
Bis(2-chloroethoxy)methane	73		67		40-117	9		50
Hexachlorobutadiene	70		63		40-140	11		50
Hexachlorocyclopentadiene	53		47		40-140	12		50
Hexachloroethane	70		61		40-140	14		50
Isophorone	69		63		40-140	9		50
Naphthalene	74		67		40-140	10		50
Nitrobenzene	71		64		40-140	10		50
NDPA/DPA	75		70		36-157	7		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681024-2 WG1681024-3								
n-Nitrosodi-n-propylamine	72		65		32-121	10		50
Bis(2-ethylhexyl)phthalate	76		70		40-140	8		50
Butyl benzyl phthalate	75		69		40-140	8		50
Di-n-butylphthalate	76		70		40-140	8		50
Di-n-octylphthalate	74		69		40-140	7		50
Diethyl phthalate	73		68		40-140	7		50
Dimethyl phthalate	68		64		40-140	6		50
Benzo(a)anthracene	76		69		40-140	10		50
Benzo(a)pyrene	81		75		40-140	8		50
Benzo(b)fluoranthene	80		77		40-140	4		50
Benzo(k)fluoranthene	81		71		40-140	13		50
Chrysene	76		71		40-140	7		50
Acenaphthylene	71		67		40-140	6		50
Anthracene	79		72		40-140	9		50
Benzo(ghi)perylene	80		74		40-140	8		50
Fluorene	75		70		40-140	7		50
Phenanthrene	77		71		40-140	8		50
Dibenzo(a,h)anthracene	79		73		40-140	8		50
Indeno(1,2,3-cd)pyrene	87		80		40-140	8		50
Pyrene	78		71		35-142	9		50
Biphenyl	71		64		37-127	10		50
4-Chloroaniline	60		54		40-140	11		50
2-Nitroaniline	71		66		47-134	7		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681024-2 WG1681024-3								
3-Nitroaniline	68		56		26-129	19		50
4-Nitroaniline	77		71		41-125	8		50
Dibenzofuran	76		70		40-140	8		50
2-Methylnaphthalene	73		67		40-140	9		50
1,2,4,5-Tetrachlorobenzene	69		63		40-117	9		50
Acetophenone	68		63		14-144	8		50
2,4,6-Trichlorophenol	71		66		30-130	7		50
p-Chloro-m-cresol	75		70		26-103	7		50
2-Chlorophenol	74		67		25-102	10		50
2,4-Dichlorophenol	74		68		30-130	8		50
2,4-Dimethylphenol	72		66		30-130	9		50
2-Nitrophenol	70		64		30-130	9		50
4-Nitrophenol	79		76		11-114	4		50
2,4-Dinitrophenol	**0**	Q	**0**	Q	4-130	NC		50
4,6-Dinitro-o-cresol	10		13		10-130	26		50
Pentachlorophenol	28		30		17-109	7		50
Phenol	78		71		26-90	9		50
2-Methylphenol	75		68		30-130.	10		50
3-Methylphenol/4-Methylphenol	74		68		30-130	8		50
2,4,5-Trichlorophenol	73		68		30-130	7		50
Benzoic Acid	**0**	Q	**0**	Q	10-110	NC		50
Benzyl Alcohol	73		67		40-140	9		50
Carbazole	79		72		54-128	9		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1681024-2 WG1681024-3								
1,4-Dioxane	59		53		40-140	11		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	80		71		25-120
Phenol-d6	80		73		10-120
Nitrobenzene-d5	74		68		23-120
2-Fluorobiphenyl	73		67		30-120
2,4,6-Tribromophenol	75		69		10-136
4-Terphenyl-d14	78		74		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1681079-2 WG1681079-3								
Hexachlorobenzene	68		62		40-140	9		30
2,4-Dinitrotoluene	72		66		40-132	9		30
Hexachlorobutadiene	63		58		28-111	8		30
Hexachloroethane	58		54		21-105	7		30
Nitrobenzene	61		57		40-140	7		30
2,4,6-Trichlorophenol	68		65		30-130	5		30
Pentachlorophenol	58		56		9-103	4		30
2-Methylphenol	63		62		30-130	2		30
3-Methylphenol/4-Methylphenol	66		66		30-130	0		30
2,4,5-Trichlorophenol	69		66		30-130	4		30
Pyridine	**1**	Q	29		10-66	**182**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		65		21-120
Phenol-d6	64		61		10-120
Nitrobenzene-d5	63		60		23-120
2-Fluorobiphenyl	69		66		15-120
2,4,6-Tribromophenol	71		66		10-120
4-Terphenyl-d14	67		64		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683124-2 WG1683124-3								
Acenaphthene	57		66		31-137	15		50
1,2,4-Trichlorobenzene	52		59		38-107	13		50
Hexachlorobenzene	54		60		40-140	11		50
Bis(2-chloroethyl)ether	58		69		40-140	17		50
2-Chloronaphthalene	52		58		40-140	11		50
1,2-Dichlorobenzene	52		60		40-140	14		50
1,3-Dichlorobenzene	51		60		40-140	16		50
1,4-Dichlorobenzene	51		58		28-104	13		50
3,3'-Dichlorobenzidine	40		**39**	Q	40-140	3		50
2,4-Dinitrotoluene	63		71		40-132	12		50
2,6-Dinitrotoluene	53		61		40-140	14		50
Fluoranthene	53		58		40-140	9		50
4-Chlorophenyl phenyl ether	56		63		40-140	12		50
4-Bromophenyl phenyl ether	57		65		40-140	13		50
Bis(2-chloroisopropyl)ether	70		80		40-140	13		50
Bis(2-chloroethoxy)methane	60		70		40-117	15		50
Hexachlorobutadiene	50		59		40-140	17		50
Hexachlorocyclopentadiene	**34**	Q	41		40-140	19		50
Hexachloroethane	55		62		40-140	12		50
Isophorone	57		64		40-140	12		50
Naphthalene	52		60		40-140	14		50
Nitrobenzene	61		70		40-140	14		50
NDPA/DPA	58		64		36-157	10		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683124-2 WG1683124-3								
n-Nitrosodi-n-propylamine	60		68		32-121	13		50
Bis(2-ethylhexyl)phthalate	70		79		40-140	12		50
Butyl benzyl phthalate	58		63		40-140	8		50
Di-n-butylphthalate	60		67		40-140	11		50
Di-n-octylphthalate	68		78		40-140	14		50
Diethyl phthalate	62		66		40-140	6		50
Dimethyl phthalate	52		59		40-140	13		50
Benzo(a)anthracene	56		65		40-140	15		50
Benzo(a)pyrene	56		64		40-140	13		50
Benzo(b)fluoranthene	52		61		40-140	16		50
Benzo(k)fluoranthene	61		71		40-140	15		50
Chrysene	57		69		40-140	19		50
Acenaphthylene	52		59		40-140	13		50
Anthracene	56		64		40-140	13		50
Benzo(ghi)perylene	52		59		40-140	13		50
Fluorene	59		64		40-140	8		50
Phenanthrene	55		62		40-140	12		50
Dibenzo(a,h)anthracene	51		58		40-140	13		50
Indeno(1,2,3-cd)pyrene	57		65		40-140	13		50
Pyrene	51		58		35-142	13		50
Biphenyl	52		58		37-127	11		50
4-Chloroaniline	64		72		40-140	12		50
2-Nitroaniline	57		66		47-134	15		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683124-2 WG1683124-3								
3-Nitroaniline	53		56		26-129	6		50
4-Nitroaniline	58		64		41-125	10		50
Dibenzofuran	57		63		40-140	10		50
2-Methylnaphthalene	52		60		40-140	14		50
1,2,4,5-Tetrachlorobenzene	50		59		40-117	17		50
Acetophenone	54		63		14-144	15		50
2,4,6-Trichlorophenol	52		61		30-130	16		50
p-Chloro-m-cresol	58		67		26-103	14		50
2-Chlorophenol	55		63		25-102	14		50
2,4-Dichlorophenol	54		66		30-130	20		50
2,4-Dimethylphenol	56		67		30-130	18		50
2-Nitrophenol	60		68		30-130	13		50
4-Nitrophenol	57		64		11-114	12		50
2,4-Dinitrophenol	24		59		4-130	**84**	Q	50
4,6-Dinitro-o-cresol	65		76		10-130	16		50
Pentachlorophenol	49		55		17-109	12		50
Phenol	59		68		26-90	14		50
2-Methylphenol	58		67		30-130.	14		50
3-Methylphenol/4-Methylphenol	55		65		30-130	17		50
2,4,5-Trichlorophenol	52		63		30-130	19		50
Benzoic Acid	**0**	Q	**0**	Q	10-110	NC		50
Benzyl Alcohol	59		67		40-140	13		50
Carbazole	54		62		54-128	14		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1683124-2 WG1683124-3								
1,4-Dioxane	**38**	Q	45		40-140	17		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	55		64		25-120
Phenol-d6	61		73		10-120
Nitrobenzene-d5	61		74		23-120
2-Fluorobiphenyl	51		60		30-120
2,4,6-Tribromophenol	58		64		10-136
4-Terphenyl-d14	51		56		18-120

PCBS

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8082A
Analytical Date: 09/02/22 10:41
Analyst: JM
Percent Solids: 98%

Extraction Method: EPA 3540C
Extraction Date: 08/31/22 14:00
Cleanup Method: EPA 3665A
Cleanup Date: 09/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/02/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	98.6	8.76	1	A
Aroclor 1221	ND		ug/kg	98.6	9.88	1	A
Aroclor 1232	ND		ug/kg	98.6	20.9	1	A
Aroclor 1242	ND		ug/kg	98.6	13.3	1	A
Aroclor 1248	ND		ug/kg	98.6	14.8	1	A
Aroclor 1254	ND		ug/kg	98.6	10.8	1	A
Aroclor 1260	ND		ug/kg	98.6	18.2	1	A
Aroclor 1262	ND		ug/kg	98.6	12.5	1	A
Aroclor 1268	ND		ug/kg	98.6	10.2	1	A
PCBs, Total	ND		ug/kg	98.6	8.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/02/22 10:15
Analyst: JM

Extraction Method: EPA 3540C
Extraction Date: 08/31/22 14:00
Cleanup Method: EPA 3665A
Cleanup Date: 09/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 09/02/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1682019-1						
Aroclor 1016	ND		ug/kg	88.8	7.89	A
Aroclor 1221	ND		ug/kg	88.8	8.90	A
Aroclor 1232	ND		ug/kg	88.8	18.8	A
Aroclor 1242	ND		ug/kg	88.8	12.0	A
Aroclor 1248	ND		ug/kg	88.8	13.3	A
Aroclor 1254	ND		ug/kg	88.8	9.72	A
Aroclor 1262	ND		ug/kg	88.8	11.3	A
Aroclor 1268	ND		ug/kg	88.8	9.20	A
Aroclor 1260	24.0	J	ug/kg	88.8	16.4	B
PCBs, Total	24.0	J	ug/kg	88.8	7.89	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	80		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1682019-2 WG1682019-3									
Aroclor 1016	78		81		40-140	4		50	A
Aroclor 1260	72		75		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		88		30-150	A
Decachlorobiphenyl	87		90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		86		30-150	B
Decachlorobiphenyl	76		79		30-150	B

PESTICIDES

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8081B
Analytical Date: 08/30/22 16:09
Analyst: MMG
Percent Solids: 98%
TCLP/SPLP Ext. Date: 08/26/22 19:20

Extraction Method: EPA 3510C
Extraction Date: 08/29/22 18:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**154**	Q	30-150	A
Decachlorobiphenyl	142		30-150	A
2,4,5,6-Tetrachloro-m-xylene	128		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: RITC
Lab Number: L2244790
Project Number: BCP38 PUMP HOUSE
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8151A
Analytical Date: 08/30/22 12:32
Analyst: AR
Percent Solids: 98%
TCLP/SPLP Ext. Date: 08/26/22 19:20
Methylation Date: 08/29/22 22:45

Extraction Method: EPA 8151A
Extraction Date: 08/28/22 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	**28**	Q	30-150	A
DCAA	31		30-150	B

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 08/30/22 09:26
Analyst: AR
TCLP/SPLP Extraction Date: 08/26/22 19:20
Methylation Date: 08/29/22 22:45

Extraction Method: EPA 8151A
Extraction Date: 08/28/22 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1680696-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	33		30-150	A
DCAA	39		30-150	B

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 08/30/22 15:17
Analyst: MMG
TCLP/SPLP Extraction Date: 08/26/22 19:20

Extraction Method: EPA 3510C
Extraction Date: 08/29/22 18:13

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1681053-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	127		30-150	A
Decachlorobiphenyl	124		30-150	A
2,4,5,6-Tetrachloro-m-xylene	133		30-150	B
Decachlorobiphenyl	97		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790

Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1680696-2 WG1680696-3									
2,4-D	101		96		30-150	5		25	A
2,4,5-TP (Silvex)	39		52		30-150	**29**	Q	25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	60		60		30-150	A
DCAA	**24**	Q	45		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1681053-2 WG1681053-3									
Lindane	**152**	Q	132		30-150	14		20	A
Heptachlor	**154**	Q	133		30-150	15		20	A
Heptachlor epoxide	**155**	Q	132		30-150	16		20	A
Endrin	**158**	Q	134		30-150	16		20	A
Methoxychlor	144		125		30-150	14		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	138		121		30-150	A
Decachlorobiphenyl	131		113		30-150	A
2,4,5,6-Tetrachloro-m-xylene	147		125		30-150	B
Decachlorobiphenyl	108		93		30-150	B

METALS

Project Name: RITC
Lab Number: L2244790
Project Number: BCP38 PUMP HOUSE
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA
Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 98%
TCLP/SPLP Ext. Date: 08/27/22 07:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Barium, TCLP	0.171	J	mg/l	0.500	0.021	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Lead, TCLP	0.145	J	mg/l	0.500	0.027	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/29/22 18:24	08/30/22 11:55	EPA 7470A	1,7470A	DMB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/29/22 17:58	08/30/22 13:15	EPA 3015	1,6010D	JF

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA
Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 98%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9240		mg/kg	7.79	2.10	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Antimony, Total	ND		mg/kg	3.89	0.296	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Arsenic, Total	4.52		mg/kg	0.779	0.162	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Barium, Total	77.4		mg/kg	0.779	0.136	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Beryllium, Total	0.312	J	mg/kg	0.389	0.026	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Cadmium, Total	0.444	J	mg/kg	0.779	0.076	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Calcium, Total	22200		mg/kg	7.79	2.73	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Chromium, Total	11.3		mg/kg	0.779	0.075	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Cobalt, Total	1.48	J	mg/kg	1.56	0.129	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Copper, Total	8.23		mg/kg	0.779	0.201	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Iron, Total	8460		mg/kg	3.89	0.703	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Lead, Total	129		mg/kg	3.89	0.209	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Magnesium, Total	1350		mg/kg	7.79	1.20	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Manganese, Total	104		mg/kg	0.779	0.124	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Mercury, Total	0.049	J	mg/kg	0.065	0.042	1	08/20/22 13:45	08/22/22 15:58	EPA 7471B	1,7471B	ZK
Nickel, Total	5.45		mg/kg	1.95	0.188	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Potassium, Total	1030		mg/kg	195	11.2	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Selenium, Total	ND		mg/kg	1.56	0.201	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Silver, Total	ND		mg/kg	0.779	0.220	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Sodium, Total	572		mg/kg	156	2.45	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Thallium, Total	ND		mg/kg	1.56	0.245	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Vanadium, Total	10.7		mg/kg	0.779	0.158	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL
Zinc, Total	40.2		mg/kg	3.89	0.228	2	08/20/22 10:30	08/23/22 22:46	EPA 3050B	1,6010D	DL

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1677550-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Antimony, Total	ND		mg/kg	2.00	0.152	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Arsenic, Total	ND		mg/kg	0.400	0.083	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Barium, Total	ND		mg/kg	0.400	0.070	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Beryllium, Total	ND		mg/kg	0.200	0.013	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Cadmium, Total	ND		mg/kg	0.400	0.039	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Calcium, Total	ND		mg/kg	4.00	1.40	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Chromium, Total	ND		mg/kg	0.400	0.038	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Cobalt, Total	ND		mg/kg	0.800	0.066	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Copper, Total	ND		mg/kg	0.400	0.103	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Iron, Total	0.388	J	mg/kg	2.00	0.361	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Lead, Total	ND		mg/kg	2.00	0.107	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Magnesium, Total	ND		mg/kg	4.00	0.616	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Manganese, Total	ND		mg/kg	0.400	0.064	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Nickel, Total	ND		mg/kg	1.00	0.097	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Potassium, Total	ND		mg/kg	100	5.76	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Selenium, Total	ND		mg/kg	0.800	0.103	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Silver, Total	ND		mg/kg	0.400	0.113	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Sodium, Total	ND		mg/kg	80.0	1.26	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Thallium, Total	ND		mg/kg	0.800	0.126	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Vanadium, Total	ND		mg/kg	0.400	0.081	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL
Zinc, Total	ND		mg/kg	2.00	0.117	1	08/20/22 10:30	08/23/22 19:21	1,6010D	DL

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1677552-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	08/20/22 13:45	08/22/22 15:25	1,7471B	ZK

Project Name: RITC **Lab Number:** L2244790

Project Number: BCP38 PUMP HOUSE **Report Date:** 09/06/22

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1680959-1										
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Barium, TCLP	ND		mg/l	0.500	0.021	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Lead, TCLP	ND		mg/l	0.500	0.027	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/29/22 17:58	08/30/22 13:01	1,6010D	JF

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 08/26/22 19:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1680962-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/29/22 18:24	08/30/22 11:16	1,7470A	DMB

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 08/26/22 19:20

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790

Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1677550-2 SRM Lot Number: D113-540								
Aluminum, Total	67		-		51-149	-		
Antimony, Total	140		-		20-250	-		
Arsenic, Total	89		-		70-130	-		
Barium, Total	81		-		75-125	-		
Beryllium, Total	79		-		75-125	-		
Cadmium, Total	85		-		75-125	-		
Calcium, Total	83		-		73-128	-		
Chromium, Total	84		-		70-130	-		
Cobalt, Total	87		-		75-125	-		
Copper, Total	83		-		75-125	-		
Iron, Total	79		-		36-164	-		
Lead, Total	86		-		72-128	-		
Magnesium, Total	80		-		63-138	-		
Manganese, Total	80		-		77-123	-		
Nickel, Total	85		-		70-130	-		
Potassium, Total	80		-		59-141	-		
Selenium, Total	86		-		66-134	-		
Silver, Total	83		-		70-131	-		
Sodium, Total	87		-		35-164	-		
Thallium, Total	83		-		70-130	-		
Vanadium, Total	84		-		74-126	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1677550-2 SRM Lot Number: D113-540					
Zinc, Total	84	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1677552-2 SRM Lot Number: D113-540					
Mercury, Total	80	-	60-140	-	
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1680959-2					
Arsenic, TCLP	97	-	75-125	-	20
Barium, TCLP	96	-	75-125	-	20
Cadmium, TCLP	91	-	75-125	-	20
Chromium, TCLP	96	-	75-125	-	20
Lead, TCLP	94	-	75-125	-	20
Selenium, TCLP	94	-	75-125	-	20
Silver, TCLP	97	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1680962-2					
Mercury, TCLP	96	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677550-3 WG1677550-4 QC Sample: L2245072-01 Client ID: MS Sample												
Aluminum, Total	5190	178	5550	**202**	Q	5350	90		75-125	4		20
Antimony, Total	ND	44.5	29.8	**67**	Q	29.6	**67**	Q	75-125	1		20
Arsenic, Total	1.53	10.7	10.0	79		9.73	77		75-125	3		20
Barium, Total	29.5	178	167	77		159	**73**	Q	75-125	5		20
Beryllium, Total	0.212J	4.45	3.67	82		3.51	79		75-125	4		20
Cadmium, Total	0.345J	4.72	3.94	83		3.78	80		75-125	4		20
Calcium, Total	4920	890	5560	**72**	Q	4700	**0**	Q	75-125	17		20
Chromium, Total	10.5	17.8	23.8	75		23.0	**70**	Q	75-125	3		20
Cobalt, Total	3.55	44.5	35.8	**72**	Q	34.5	**70**	Q	75-125	4		20
Copper, Total	9.36	22.2	26.5	77		25.5	**73**	Q	75-125	4		20
Iron, Total	8700	89	8910	**236**	Q	8510	**0**	Q	75-125	5		20
Lead, Total	27.5	47.2	59.6	**68**	Q	58.7	**66**	Q	75-125	2		20
Magnesium, Total	2390	890	3130	83		2870	**54**	Q	75-125	9		20
Manganese, Total	127	44.5	165	85		156	**65**	Q	75-125	6		20
Nickel, Total	8.32	44.5	40.5	**72**	Q	39.3	**70**	Q	75-125	3		20
Potassium, Total	553	890	1300	84		1270	81		75-125	2		20
Selenium, Total	ND	10.7	8.24	77		7.96	75		75-125	3		20
Silver, Total	ND	26.7	21.0	79		20.1	76		75-125	4		20
Sodium, Total	142J	890	889	100		844	95		75-125	5		20
Thallium, Total	ND	10.7	7.12	**67**	Q	6.81	**64**	Q	75-125	4		20
Vanadium, Total	11.0	44.5	45.4	77		43.4	**73**	Q	75-125	5		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677550-3 WG1677550-4 QC Sample: L2245072-01 Client ID: MS Sample											
Zinc, Total	33.7	44.5	64.9	**70**	Q	63.6	**67**	Q	75-125	2	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677552-3 WG1677552-4 QC Sample: L2245072-01 Client ID: MS Sample											
Mercury, Total	0.053J	1.44	1.44	100		1.41	97		80-120	2	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680959-3 QC Sample: L2244697-01 Client ID: MS Sample											
Arsenic, TCLP	ND	1.2	1.11	92		-	-		75-125	-	20
Barium, TCLP	0.682	20	18.6	90		-	-		75-125	-	20
Cadmium, TCLP	ND	0.53	0.440	83		-	-		75-125	-	20
Chromium, TCLP	ND	2	1.73	86		-	-		75-125	-	20
Lead, TCLP	ND	5.3	4.65	88		-	-		75-125	-	20
Selenium, TCLP	ND	1.2	1.08	90		-	-		75-125	-	20
Silver, TCLP	ND	0.5	0.457	91		-	-		75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680962-3 QC Sample: L2246105-01 Client ID: MS Sample											
Mercury, TCLP	ND	0.025	0.0228	91		-	-		80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680959-4 QC Sample: L2244697-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.682	0.679	mg/l	0		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1680962-4 QC Sample: L2246105-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

Project Name: RITC
Project Number: BCP38 PUMP HOUS

Lab Serial Dilution Analysis
Batch Quality Control

Lab Number: L2244790
Report Date: 09/06/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677550-6 QC Sample: L2245072-01 Client ID: DUP Sample						
Aluminum, Total	5190	5890	mg/kg	13		20
Barium, Total	29.5	33.7	mg/kg	14		20
Calcium, Total	4920	5650	mg/kg	15		20
Iron, Total	8700	10100	mg/kg	16		20
Magnesium, Total	2390	2840	mg/kg	19		20
Manganese, Total	127	148	mg/kg	17		20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

SAMPLE RESULTS

Lab ID: L2244790-01
Client ID: BCP38-BRICK-08172022
Sample Location: 3875 RIVER RD. TONAWANDA

Date Collected: 08/18/22 10:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97.7		%	0.100	NA	1	-	08/23/22 10:18	121,2540G	RI
Cyanide, Total	0.90	J	mg/kg	1.0	0.21	1	08/23/22 06:15	08/23/22 11:53	1,9010C/9012B	CS
Paint Filter Liquid	NEGATIVE		-	0	NA	1	-	08/23/22 17:06	1,9095B	AS

Project Name: RITC
Project Number: BCP38 PUMP HOUSE
Lab Number: L2244790
Report Date: 09/06/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1678395-1										
Cyanide, Total	ND		mg/kg	0.96	0.20	1	08/23/22 06:15	08/23/22 11:41	1,9010C/9012B	CS

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790

Report Date: 09/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1678395-2 WG1678395-3								
Cyanide, Total	82		88		80-120	10		35

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1678395-4 WG1678395-5 QC Sample: L2244654-02 Client ID: MS Sample												
Cyanide, Total	ND	10	11	100		11	100		75-125	0		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC

Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790

Report Date: 09/06/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1678548-1 QC Sample: L2245290-01 Client ID: DUP Sample						
Solids, Total	81.6	80.8	%	1		20

Project Name: RITC
Project Number: BCP38 PUMP HOUSE

Lab Number: L2244790
Report Date: 09/06/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2244790-01A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CU-TI(180),SB-TI(180),V-TI(180),CO-TI(180),MN-TI(180),FE-TI(180),MG-TI(180),HG-T(28),CD-TI(180),K-TI(180),NA-TI(180),CA-TI(180)
L2244790-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L2244790-01C	Vial Large Septa unpreserved (4oz)	A	NA		3.6	Y	Absent		TCLP-EXT-ZHE(14)
L2244790-01D	Glass 500ml/16oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7),NYTCL-8082-3540C(365),PAINTF()
L2244790-01S	Vial unpreserved Extracts	A	NA		3.6	Y	Absent		TCLP-VOA(14)
L2244790-01T	Vial unpreserved Extracts	A	NA		3.6	Y	Absent		TCLP-VOA(14)
L2244790-01V	Plastic 120ml HNO3 preserved Extracts	A	NA		3.6	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2244790-01V9	Tumble Vessel	A	NA		3.6	Y	Absent		-
L2244790-01W	Amber 1000ml unpreserved Extracts	A	NA		3.6	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L2244790-01X	Vial MeOH preserved split	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L2244790-01Y	Vial Water preserved split	A	NA		3.6	Y	Absent	**28-AUG-22 06:08**	NYTCL-8260(14)
L2244790-01Z	Vial Water preserved split	A	NA		3.6	Y	Absent	**28-AUG-22 06:08**	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RITC	**Lab Number:**	L2244790
Project Number:	BCP38 PUMP HOUSE	**Report Date:**	09/06/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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320 Forbes Blvd
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FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/19/22

ALPHA Job # L2244790

Client Information

Client: INVENTUM ENG
Address: 441 CARLISLE DR
HERNDON, VA 20170
Phone: 585-734-5255
Fax: roxanne.birx@inventumeng.com
Email: john.black@ " "

Project Information

Project Name: RITC
Project Location: 3875 RIVER RD TONAWANDA
Project # BCP38 PUMP HOUSE
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL 8260/8270 TCLP 8260/8270	TAL Metals + Hg TCLP Metals	Total Pest/Herb	Total PCBs	Paint Filter	Total Cyanide			Sample Specific Comments	Total Bottle
44790-01	BCP38-BRICK-08172022	8/18	1000	SD	RB	✓	✓	✓	✓	✓	✓				

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type														
Preservative														

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	8/18/22 2:19	[signature]	8/18/22 12:19
[signature] (AAL)	8/18/22 12:19	[signature]	8/19/22 0010

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2242249
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	PUMP HOUSE LINES
Report Date:	08/26/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2242249-01	BCP38-LINES-08052022	OIL	3875 RIVER ROAD, TONAWANDA	08/05/22 10:30	08/05/22

Project Name:	RITC	**Lab Number:**	L2242249
Project Number:	PUMP HOUSE LINES	**Report Date:**	08/26/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	RITC	**Lab Number:**	L2242249
Project Number:	PUMP HOUSE LINES	**Report Date:**	08/26/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of BTU was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Semivolatile Organics

The WG1677237-2/-3 LCS/LCSD recoveries, associated with L2242249-01, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

TCLP Semivolatiles

L2242249-01D: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L2242249-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

TCLP Metals

L2242249-01: The sample has elevated detection limits for all elements due to the prep dilution required by the sample matrix.

Cyanide, Total

Project Name:	RITC	**Lab Number:**	L2242249
Project Number:	PUMP HOUSE LINES	**Report Date:**	08/26/22

Case Narrative (continued)

The WG1674172-2 LCS recovery for cyanide, total (66%), associated with L2242249-01, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 08/26/22

ORGANICS

VOLATILES

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8260C
Analytical Date: 08/18/22 09:40
Analyst: NLK
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	2000	900	1
1,1-Dichloroethane	ND		ug/kg	390	57.	1
Chloroform	ND		ug/kg	590	55.	1
Carbon tetrachloride	ND		ug/kg	390	90.	1
1,2-Dichloropropane	ND		ug/kg	390	49.	1
Dibromochloromethane	ND		ug/kg	390	55.	1
1,1,2-Trichloroethane	ND		ug/kg	390	100	1
Tetrachloroethene	ND		ug/kg	200	77.	1
Chlorobenzene	ND		ug/kg	200	50.	1
Trichlorofluoromethane	ND		ug/kg	1600	270	1
1,2-Dichloroethane	ND		ug/kg	390	100	1
1,1,1-Trichloroethane	ND		ug/kg	200	66.	1
Bromodichloromethane	ND		ug/kg	200	43.	1
trans-1,3-Dichloropropene	ND		ug/kg	390	110	1
cis-1,3-Dichloropropene	ND		ug/kg	200	62.	1
1,3-Dichloropropene, Total	ND		ug/kg	200	62.	1
Bromoform	ND		ug/kg	1600	97.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	200	65.	1
Benzene	14000		ug/kg	200	65.	1
Toluene	3500		ug/kg	390	210	1
Ethylbenzene	110	J	ug/kg	390	56.	1
Chloromethane	ND		ug/kg	1600	370	1
Bromomethane	ND		ug/kg	790	230	1
Vinyl chloride	ND		ug/kg	390	130	1
Chloroethane	ND		ug/kg	790	180	1
1,1-Dichloroethene	ND		ug/kg	390	94.	1
trans-1,2-Dichloroethene	ND		ug/kg	590	54.	1
Trichloroethene	ND		ug/kg	200	54.	1

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 Date Collected: 08/05/22 10:30

Client ID: BCP38-LINES-08052022 Date Received: 08/05/22

Sample Location: 3875 RIVER ROAD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	790	57.	1
1,3-Dichlorobenzene	ND		ug/kg	790	58.	1
1,4-Dichlorobenzene	ND		ug/kg	790	67.	1
Methyl tert butyl ether	ND		ug/kg	790	79.	1
p/m-Xylene	1500		ug/kg	790	220	1
o-Xylene	370	J	ug/kg	390	110	1
Xylenes, Total	1900	J	ug/kg	390	110	1
cis-1,2-Dichloroethene	ND		ug/kg	390	69.	1
1,2-Dichloroethene, Total	ND		ug/kg	390	54.	1
Styrene	920		ug/kg	390	77.	1
Dichlorodifluoromethane	ND		ug/kg	3900	360	1
Acetone	1900	J	ug/kg	3900	1900	1
Carbon disulfide	ND		ug/kg	3900	1800	1
2-Butanone	ND		ug/kg	3900	870	1
4-Methyl-2-pentanone	ND		ug/kg	3900	500	1
2-Hexanone	ND		ug/kg	3900	460	1
Bromochloromethane	ND		ug/kg	790	81.	1
1,2-Dibromoethane	ND		ug/kg	390	110	1
n-Butylbenzene	ND		ug/kg	390	66.	1
sec-Butylbenzene	ND		ug/kg	390	57.	1
tert-Butylbenzene	ND		ug/kg	790	46.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1200	390	1
Isopropylbenzene	ND		ug/kg	390	43.	1
p-Isopropyltoluene	ND		ug/kg	390	43.	1
Naphthalene	200000	E	ug/kg	1600	260	1
n-Propylbenzene	ND		ug/kg	390	67.	1
1,2,3-Trichlorobenzene	ND		ug/kg	790	130	1
1,2,4-Trichlorobenzene	ND		ug/kg	790	110	1
1,3,5-Trimethylbenzene	300	J	ug/kg	790	76.	1
1,2,4-Trimethylbenzene	470	J	ug/kg	790	130	1
Methyl Acetate	ND		ug/kg	1600	370	1
Cyclohexane	ND		ug/kg	3900	210	1
1,4-Dioxane	ND		ug/kg	31000	14000	1
Freon-113	ND		ug/kg	1600	270	1
Methyl cyclohexane	ND		ug/kg	1600	240	1

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 Date Collected: 08/05/22 10:30

Client ID: BCP38-LINES-08052022 Date Received: 08/05/22

Sample Location: 3875 RIVER ROAD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 D
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8260C
Analytical Date: 08/18/22 10:06
Analyst: NLK
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	190000		ug/kg	16000	2600	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/18/22 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677284-5					
Methylene chloride	ND		ug/kg	2500	1100
1,1-Dichloroethane	ND		ug/kg	500	72.
Chloroform	ND		ug/kg	750	70.
Carbon tetrachloride	ND		ug/kg	500	120
1,2-Dichloropropane	ND		ug/kg	500	62.
Dibromochloromethane	ND		ug/kg	500	70.
1,1,2-Trichloroethane	ND		ug/kg	500	130
Tetrachloroethene	ND		ug/kg	250	98.
Chlorobenzene	ND		ug/kg	250	64.
Trichlorofluoromethane	ND		ug/kg	2000	350
1,2-Dichloroethane	ND		ug/kg	500	130
1,1,1-Trichloroethane	ND		ug/kg	250	84.
Bromodichloromethane	ND		ug/kg	250	54.
trans-1,3-Dichloropropene	ND		ug/kg	500	140
cis-1,3-Dichloropropene	ND		ug/kg	250	79.
1,3-Dichloropropene, Total	ND		ug/kg	250	79.
Bromoform	ND		ug/kg	2000	120
1,1,2,2-Tetrachloroethane	ND		ug/kg	250	83.
Benzene	ND		ug/kg	250	83.
Toluene	ND		ug/kg	500	270
Ethylbenzene	ND		ug/kg	500	70.
Chloromethane	ND		ug/kg	2000	470
Bromomethane	ND		ug/kg	1000	290
Vinyl chloride	ND		ug/kg	500	170
Chloroethane	ND		ug/kg	1000	230
1,1-Dichloroethene	ND		ug/kg	500	120
trans-1,2-Dichloroethene	ND		ug/kg	750	68.
Trichloroethene	ND		ug/kg	250	68.
1,2-Dichlorobenzene	ND		ug/kg	1000	72.

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/18/22 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677284-5					
1,3-Dichlorobenzene	ND		ug/kg	1000	74.
1,4-Dichlorobenzene	ND		ug/kg	1000	86.
Methyl tert butyl ether	ND		ug/kg	1000	100
p/m-Xylene	ND		ug/kg	1000	280
o-Xylene	ND		ug/kg	500	140
Xylenes, Total	ND		ug/kg	500	140
cis-1,2-Dichloroethene	ND		ug/kg	500	88.
1,2-Dichloroethene, Total	ND		ug/kg	500	68.
Styrene	ND		ug/kg	500	98.
Dichlorodifluoromethane	ND		ug/kg	5000	460
Acetone	ND		ug/kg	5000	2400
Carbon disulfide	ND		ug/kg	5000	2300
2-Butanone	ND		ug/kg	5000	1100
4-Methyl-2-pentanone	ND		ug/kg	5000	640
2-Hexanone	ND		ug/kg	5000	590
Bromochloromethane	ND		ug/kg	1000	100
1,2-Dibromoethane	ND		ug/kg	500	140
n-Butylbenzene	ND		ug/kg	500	84.
sec-Butylbenzene	ND		ug/kg	500	73.
tert-Butylbenzene	ND		ug/kg	1000	59.
1,2-Dibromo-3-chloropropane	ND		ug/kg	1500	500
Isopropylbenzene	ND		ug/kg	500	54.
p-Isopropyltoluene	ND		ug/kg	500	54.
Naphthalene	ND		ug/kg	2000	320
n-Propylbenzene	ND		ug/kg	500	86.
1,2,3-Trichlorobenzene	ND		ug/kg	1000	160
1,2,4-Trichlorobenzene	ND		ug/kg	1000	140
1,3,5-Trimethylbenzene	ND		ug/kg	1000	96.
1,2,4-Trimethylbenzene	ND		ug/kg	1000	170

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/18/22 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677284-5					
Methyl Acetate	ND		ug/kg	2000	480
Cyclohexane	ND		ug/kg	5000	270
1,4-Dioxane	ND		ug/kg	40000	18000
Freon-113	ND		ug/kg	2000	350
Methyl cyclohexane	ND		ug/kg	2000	300

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677284-3 WG1677284-4								
Methylene chloride	84		88		70-130	5		30
1,1-Dichloroethane	100		105		70-130	5		30
Chloroform	90		94		70-130	4		30
Carbon tetrachloride	85		91		70-130	7		30
1,2-Dichloropropane	96		100		70-130	4		30
Dibromochloromethane	88		92		70-130	4		30
1,1,2-Trichloroethane	89		90		70-130	1		30
Tetrachloroethene	90		94		70-130	4		30
Chlorobenzene	85		88		70-130	3		30
Trichlorofluoromethane	76		80		70-139	5		30
1,2-Dichloroethane	108		112		70-130	4		30
1,1,1-Trichloroethane	92		96		70-130	4		30
Bromodichloromethane	92		96		70-130	4		30
trans-1,3-Dichloropropene	100		103		70-130	3		30
cis-1,3-Dichloropropene	94		98		70-130	4		30
Bromoform	84		86		70-130	2		30
1,1,2,2-Tetrachloroethane	81		81		70-130	0		30
Benzene	87		90		70-130	3		30
Toluene	86		89		70-130	3		30
Ethylbenzene	88		91		70-130	3		30
Chloromethane	125		**132**	Q	52-130	5		30
Bromomethane	66		69		57-147	4		30
Vinyl chloride	88		94		67-130	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677284-3 WG1677284-4								
Chloroethane	71		74		50-151	4		30
1,1-Dichloroethene	85		89		65-135	5		30
trans-1,2-Dichloroethene	84		89		70-130	6		30
Trichloroethene	88		94		70-130	7		30
1,2-Dichlorobenzene	90		92		70-130	2		30
1,3-Dichlorobenzene	91		93		70-130	2		30
1,4-Dichlorobenzene	88		91		70-130	3		30
Methyl tert butyl ether	95		98		66-130	3		30
p/m-Xylene	88		92		70-130	4		30
o-Xylene	88		93		70-130	6		30
cis-1,2-Dichloroethene	82		87		70-130	6		30
Styrene	81		85		70-130	5		30
Dichlorodifluoromethane	113		119		30-146	5		30
Acetone	129		135		54-140	5		30
Carbon disulfide	83		88		59-130	6		30
2-Butanone	110		114		70-130	4		30
4-Methyl-2-pentanone	97		102		70-130	5		30
2-Hexanone	106		111		70-130	5		30
Bromochloromethane	89		91		70-130	2		30
1,2-Dibromoethane	86		91		70-130	6		30
n-Butylbenzene	95		99		70-130	4		30
sec-Butylbenzene	91		95		70-130	4		30
tert-Butylbenzene	91		94		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677284-3 WG1677284-4								
1,2-Dibromo-3-chloropropane	82		87		68-130	6		30
Isopropylbenzene	89		93		70-130	4		30
p-Isopropyltoluene	93		97		70-130	4		30
Naphthalene	89		93		70-130	4		30
n-Propylbenzene	91		94		70-130	3		30
1,2,3-Trichlorobenzene	86		87		70-130	1		30
1,2,4-Trichlorobenzene	86		88		70-130	2		30
1,3,5-Trimethylbenzene	92		96		70-130	4		30
1,2,4-Trimethylbenzene	94		97		70-130	3		30
Methyl Acetate	115		119		51-146	3		30
Cyclohexane	107		113		59-142	5		30
1,4-Dioxane	84		85		65-136	1		30
Freon-113	91		95		50-139	4		30
Methyl cyclohexane	84		88		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	119		122		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	93		93		70-130

SEMIVOLATILES

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8270D
Analytical Date: 08/22/22 12:33
Analyst: CMM
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	38000	4900	1
1,2,4-Trichlorobenzene	ND		ug/kg	47000	5400	1
Hexachlorobenzene	ND		ug/kg	28000	5300	1
Bis(2-chloroethyl)ether	ND		ug/kg	42000	6400	1
2-Chloronaphthalene	ND		ug/kg	47000	4700	1
1,2-Dichlorobenzene	ND		ug/kg	47000	8500	1
1,3-Dichlorobenzene	ND		ug/kg	47000	8100	1
1,4-Dichlorobenzene	ND		ug/kg	47000	8200	1
3,3'-Dichlorobenzidine	ND		ug/kg	47000	12000	1
2,4-Dinitrotoluene	ND		ug/kg	47000	9400	1
2,6-Dinitrotoluene	ND		ug/kg	47000	8100	1
Fluoranthene	10000	J	ug/kg	28000	5400	1
4-Chlorophenyl phenyl ether	ND		ug/kg	47000	5000	1
4-Bromophenyl phenyl ether	ND		ug/kg	47000	7200	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	57000	8100	1
Bis(2-chloroethoxy)methane	ND		ug/kg	51000	4700	1
Hexachlorobutadiene	ND		ug/kg	47000	6900	1
Hexachlorocyclopentadiene	ND		ug/kg	140000	43000	1
Hexachloroethane	ND		ug/kg	38000	7600	1
Isophorone	ND		ug/kg	42000	6100	1
Naphthalene	69000		ug/kg	47000	5800	1
Nitrobenzene	ND		ug/kg	42000	7000	1
NDPA/DPA	ND		ug/kg	38000	5400	1
n-Nitrosodi-n-propylamine	ND		ug/kg	47000	7300	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	47000	16000	1
Butyl benzyl phthalate	ND		ug/kg	47000	12000	1
Di-n-butylphthalate	ND		ug/kg	47000	9000	1
Di-n-octylphthalate	ND		ug/kg	47000	16000	1

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 Date Collected: 08/05/22 10:30

Client ID: BCP38-LINES-08052022 Date Received: 08/05/22

Sample Location: 3875 RIVER ROAD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	47000	4400	1
Dimethyl phthalate	ND		ug/kg	47000	9900	1
Benzo(a)anthracene	5900	J	ug/kg	28000	5300	1
Benzo(a)pyrene	ND		ug/kg	38000	12000	1
Benzo(b)fluoranthene	ND		ug/kg	28000	8000	1
Benzo(k)fluoranthene	ND		ug/kg	28000	7600	1
Chrysene	ND		ug/kg	28000	4900	1
Acenaphthylene	14000	J	ug/kg	38000	7300	1
Anthracene	ND		ug/kg	28000	9200	1
Benzo(ghi)perylene	ND		ug/kg	38000	5600	1
Fluorene	6200	J	ug/kg	47000	4600	1
Phenanthrene	18000	J	ug/kg	28000	5700	1
Dibenzo(a,h)anthracene	ND		ug/kg	28000	5400	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	38000	6600	1
Pyrene	7100	J	ug/kg	28000	4700	1
Biphenyl	ND		ug/kg	110000	6100	1
4-Chloroaniline	ND		ug/kg	47000	8600	1
2-Nitroaniline	ND		ug/kg	47000	9100	1
3-Nitroaniline	ND		ug/kg	47000	8900	1
4-Nitroaniline	ND		ug/kg	47000	20000	1
Dibenzofuran	4900	J	ug/kg	47000	4500	1
2-Methylnaphthalene	10000	J	ug/kg	57000	5700	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	47000	4900	1
Acetophenone	ND		ug/kg	47000	5800	1
2,4,6-Trichlorophenol	ND		ug/kg	28000	9000	1
p-Chloro-m-cresol	ND		ug/kg	47000	7000	1
2-Chlorophenol	ND		ug/kg	47000	5600	1
2,4-Dichlorophenol	ND		ug/kg	42000	7600	1
2,4-Dimethylphenol	ND		ug/kg	47000	16000	1
2-Nitrophenol	ND		ug/kg	100000	18000	1
4-Nitrophenol	ND		ug/kg	66000	19000	1
2,4-Dinitrophenol	ND		ug/kg	230000	22000	1
4,6-Dinitro-o-cresol	ND		ug/kg	120000	23000	1
Pentachlorophenol	ND		ug/kg	38000	10000	1
Phenol	510000		ug/kg	47000	7100	1
2-Methylphenol	55000		ug/kg	47000	7300	1
3-Methylphenol/4-Methylphenol	190000		ug/kg	68000	7400	1

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 Date Collected: 08/05/22 10:30

Client ID: BCP38-LINES-08052022 Date Received: 08/05/22

Sample Location: 3875 RIVER ROAD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	47000	9000	1
Benzoic Acid	ND		ug/kg	150000	48000	1
Benzyl Alcohol	ND		ug/kg	47000	14000	1
Carbazole	ND		ug/kg	47000	4600	1
1,4-Dioxane	ND		ug/kg	7100	2200	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	105		25-120
Phenol-d6	116		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	105		30-120
2,4,6-Tribromophenol	104		10-136
4-Terphenyl-d14	102		18-120

Project Name: RITC
Lab Number: L2242249
Project Number: PUMP HOUSE LINES
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 D2
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8270D
Analytical Date: 08/21/22 12:19
Analyst: WR
Percent Solids: Results reported on an 'AS RECEIVED' basis.
TCLP/SPLP Ext. Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/18/22 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
3-Methylphenol/4-Methylphenol	58000		ug/l	2500	280	100

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01 D
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8270D
Analytical Date: 08/21/22 12:43
Analyst: WR
Percent Solids: Results reported on an 'AS RECEIVED' basis.
TCLP/SPLP Ext. Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/18/22 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	200	69.	20
2,4-Dinitrotoluene	ND		ug/l	500	38.	20
Hexachlorobutadiene	ND		ug/l	200	60.	20
Hexachloroethane	ND		ug/l	200	44.	20
Nitrobenzene	ND		ug/l	200	66.	20
2,4,6-Trichlorophenol	ND		ug/l	500	49.	20
Pentachlorophenol	ND		ug/l	1000	200	20
2-Methylphenol	19000		ug/l	500	110	20
3-Methylphenol/4-Methylphenol	52000	E	ug/l	500	55.	20
2,4,5-Trichlorophenol	ND		ug/l	500	38.	20
Pyridine	3000		ug/l	350	90.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	21-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	15-120
2,4,6-Tribromophenol	**0**	Q	10-120
4-Terphenyl-d14	**0**	Q	33-120

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/20/22 16:19
Analyst: CMM
TCLP/SPLP Extraction Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:10

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1676836-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	71		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	80		33-120

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/20/22 14:08
Analyst: CMM

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677237-1					
Acenaphthene	ND		ug/kg	37000	4800
1,2,4-Trichlorobenzene	ND		ug/kg	47000	5300
Hexachlorobenzene	ND		ug/kg	28000	5200
Bis(2-chloroethyl)ether	ND		ug/kg	42000	6300
2-Chloronaphthalene	ND		ug/kg	47000	4600
1,2-Dichlorobenzene	ND		ug/kg	47000	8400
1,3-Dichlorobenzene	ND		ug/kg	47000	8000
1,4-Dichlorobenzene	ND		ug/kg	47000	8200
3,3'-Dichlorobenzidine	ND		ug/kg	47000	12000
2,4-Dinitrotoluene	ND		ug/kg	47000	9300
2,6-Dinitrotoluene	ND		ug/kg	47000	8000
Fluoranthene	ND		ug/kg	28000	5400
4-Chlorophenyl phenyl ether	ND		ug/kg	47000	5000
4-Bromophenyl phenyl ether	ND		ug/kg	47000	7100
Bis(2-chloroisopropyl)ether	ND		ug/kg	56000	8000
Bis(2-chloroethoxy)methane	ND		ug/kg	50000	4700
Hexachlorobutadiene	ND		ug/kg	47000	6800
Hexachlorocyclopentadiene	ND		ug/kg	130000	42000
Hexachloroethane	ND		ug/kg	37000	7600
Isophorone	ND		ug/kg	42000	6000
Naphthalene	ND		ug/kg	47000	5700
Nitrobenzene	ND		ug/kg	42000	6900
NDPA/DPA	ND		ug/kg	37000	5300
n-Nitrosodi-n-propylamine	ND		ug/kg	47000	7200
Bis(2-ethylhexyl)phthalate	ND		ug/kg	47000	16000
Butyl benzyl phthalate	ND		ug/kg	47000	12000
Di-n-butylphthalate	ND		ug/kg	47000	8800
Di-n-octylphthalate	ND		ug/kg	47000	16000
Diethyl phthalate	ND		ug/kg	47000	4300

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/20/22 14:08
Analyst: CMM

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677237-1					
Dimethyl phthalate	ND		ug/kg	47000	9800
Benzo(a)anthracene	ND		ug/kg	28000	5200
Benzo(a)pyrene	ND		ug/kg	37000	11000
Benzo(b)fluoranthene	ND		ug/kg	28000	7900
Benzo(k)fluoranthene	ND		ug/kg	28000	7500
Chrysene	ND		ug/kg	28000	4800
Acenaphthylene	ND		ug/kg	37000	7200
Anthracene	ND		ug/kg	28000	9100
Benzo(ghi)perylene	ND		ug/kg	37000	5500
Fluorene	ND		ug/kg	47000	4500
Phenanthrene	ND		ug/kg	28000	5700
Dibenzo(a,h)anthracene	ND		ug/kg	28000	5400
Indeno(1,2,3-cd)pyrene	ND		ug/kg	37000	6500
Pyrene	ND		ug/kg	28000	4600
Biphenyl	ND		ug/kg	110000	6100
4-Chloroaniline	ND		ug/kg	47000	8500
2-Nitroaniline	ND		ug/kg	47000	9000
3-Nitroaniline	ND		ug/kg	47000	8800
4-Nitroaniline	ND		ug/kg	47000	19000
Dibenzofuran	ND		ug/kg	47000	4400
2-Methylnaphthalene	ND		ug/kg	56000	5600
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	47000	4900
Acetophenone	ND		ug/kg	47000	5800
2,4,6-Trichlorophenol	ND		ug/kg	28000	8800
p-Chloro-m-cresol	ND		ug/kg	47000	7000
2-Chlorophenol	ND		ug/kg	47000	5500
2,4-Dichlorophenol	ND		ug/kg	42000	7500
2,4-Dimethylphenol	ND		ug/kg	47000	15000
2-Nitrophenol	ND		ug/kg	100000	18000

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/20/22 14:08
Analyst: CMM

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1677237-1					
4-Nitrophenol	ND		ug/kg	65000	19000
2,4-Dinitrophenol	ND		ug/kg	220000	22000
4,6-Dinitro-o-cresol	ND		ug/kg	120000	22000
Pentachlorophenol	ND		ug/kg	37000	10000
Phenol	ND		ug/kg	47000	7000
2-Methylphenol	ND		ug/kg	47000	7200
3-Methylphenol/4-Methylphenol	ND		ug/kg	67000	7300
2,4,5-Trichlorophenol	ND		ug/kg	47000	8900
Benzoic Acid	ND		ug/kg	150000	47000
Benzyl Alcohol	ND		ug/kg	47000	14000
Carbazole	ND		ug/kg	47000	4500
1,4-Dioxane	ND		ug/kg	7000	2100

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	116		25-120
Phenol-d6	105		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	102		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	106		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1676836-2 WG1676836-3								
Hexachlorobenzene	89		80		40-140	11		30
2,4-Dinitrotoluene	96		85		40-132	12		30
Hexachlorobutadiene	85		74		28-111	14		30
Hexachloroethane	80		70		21-105	13		30
Nitrobenzene	84		73		40-140	14		30
2,4,6-Trichlorophenol	93		82		30-130	13		30
Pentachlorophenol	73		67		9-103	9		30
2-Methylphenol	88		75		30-130	16		30
3-Methylphenol/4-Methylphenol	91		82		30-130	10		30
2,4,5-Trichlorophenol	97		87		30-130	11		30
Pyridine	26		25		10-66	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	93		79		21-120
Phenol-d6	86		76		10-120
Nitrobenzene-d5	83		72		23-120
2-Fluorobiphenyl	92		80		15-120
2,4,6-Tribromophenol	93		80		10-120
4-Terphenyl-d14	88		79		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677237-2 WG1677237-3								
Acenaphthene	104		103		31-137	1		50
1,2,4-Trichlorobenzene	103		100		38-107	3		50
Hexachlorobenzene	99		96		40-140	3		50
Bis(2-chloroethyl)ether	102		99		40-140	3		50
2-Chloronaphthalene	100		100		40-140	0		50
1,2-Dichlorobenzene	106		104		40-140	2		50
1,3-Dichlorobenzene	111		106		40-140	5		50
1,4-Dichlorobenzene	**109**	Q	**105**	Q	28-104	4		50
3,3'-Dichlorobenzidine	88		92		40-140	4		50
2,4-Dinitrotoluene	96		94		40-132	2		50
2,6-Dinitrotoluene	96		93		40-140	3		50
Fluoranthene	106		105		40-140	1		50
4-Chlorophenyl phenyl ether	103		99		40-140	4		50
4-Bromophenyl phenyl ether	101		99		40-140	2		50
Bis(2-chloroisopropyl)ether	114		107		40-140	6		50
Bis(2-chloroethoxy)methane	104		99		40-117	5		50
Hexachlorobutadiene	106		102		40-140	4		50
Hexachlorocyclopentadiene	128		124		40-140	3		50
Hexachloroethane	112		109		40-140	3		50
Isophorone	102		98		40-140	4		50
Naphthalene	106		108		40-140	2		50
Nitrobenzene	102		99		40-140	3		50
NDPA/DPA	105		103		36-157	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677237-2 WG1677237-3								
n-Nitrosodi-n-propylamine	107		103		32-121	4		50
Bis(2-ethylhexyl)phthalate	111		98		40-140	12		50
Butyl benzyl phthalate	107		99		40-140	8		50
Di-n-butylphthalate	110		101		40-140	9		50
Di-n-octylphthalate	110		102		40-140	8		50
Diethyl phthalate	105		100		40-140	5		50
Dimethyl phthalate	100		98		40-140	2		50
Benzo(a)anthracene	107		104		40-140	3		50
Benzo(a)pyrene	108		110		40-140	2		50
Benzo(b)fluoranthene	106		108		40-140	2		50
Benzo(k)fluoranthene	108		108		40-140	0		50
Chrysene	108		106		40-140	2		50
Acenaphthylene	103		101		40-140	2		50
Anthracene	109		106		40-140	3		50
Benzo(ghi)perylene	105		104		40-140	1		50
Fluorene	102		102		40-140	0		50
Phenanthrene	105		103		40-140	2		50
Dibenzo(a,h)anthracene	103		102		40-140	1		50
Indeno(1,2,3-cd)pyrene	113		114		40-140	1		50
Pyrene	108		105		35-142	3		50
Biphenyl	101		102		37-127	1		50
4-Chloroaniline	70		73		40-140	4		50
2-Nitroaniline	94		94		47-134	0		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677237-2 WG1677237-3								
3-Nitroaniline	92		92		26-129	0		50
4-Nitroaniline	100		101		41-125	1		50
Dibenzofuran	105		103		40-140	2		50
2-Methylnaphthalene	108		107		40-140	1		50
1,2,4,5-Tetrachlorobenzene	102		98		40-117	4		50
Acetophenone	102		96		14-144	6		50
2,4,6-Trichlorophenol	97		96		30-130	1		50
p-Chloro-m-cresol	**105**	Q	**106**	Q	26-103	1		50
2-Chlorophenol	**110**	Q	**106**	Q	25-102	4		50
2,4-Dichlorophenol	102		99		30-130	3		50
2,4-Dimethylphenol	107		105		30-130	2		50
2-Nitrophenol	94		91		30-130	3		50
4-Nitrophenol	102		104		11-114	2		50
2,4-Dinitrophenol	92		91		4-130	1		50
4,6-Dinitro-o-cresol	109		106		10-130	3		50
Pentachlorophenol	95		90		17-109	5		50
Phenol	**108**	Q	**108**	Q	26-90	0		50
2-Methylphenol	111		105		30-130.	6		50
3-Methylphenol/4-Methylphenol	100		100		30-130	0		50
2,4,5-Trichlorophenol	103		96		30-130	7		50
Benzoic Acid	**0**	Q	**0**	Q	10-110	NC		50
Benzyl Alcohol	102		102		40-140	0		50
Carbazole	107		107		54-128	0		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1677237-2 WG1677237-3								
1,4-Dioxane	110		103		40-140	7		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	118		118		25-120
Phenol-d6	116		110		10-120
Nitrobenzene-d5	111		106		23-120
2-Fluorobiphenyl	107		102		30-120
2,4,6-Tribromophenol	116		107		10-136
4-Terphenyl-d14	108		102		18-120

PCBS

Project Name: RITC
Lab Number: L2242249
Project Number: PUMP HOUSE LINES
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8082A
Analytical Date: 08/20/22 10:27
Analyst: ER
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:24
Cleanup Method: EPA 3665A
Cleanup Date: 08/20/22
Cleanup Method: EPA 3660B
Cleanup Date: 08/20/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	4.17	0.370	1	A
Aroclor 1221	ND		mg/kg	4.17	0.418	1	A
Aroclor 1232	ND		mg/kg	4.17	0.884	1	A
Aroclor 1242	ND		mg/kg	4.17	0.562	1	A
Aroclor 1248	ND		mg/kg	4.17	0.625	1	A
Aroclor 1254	ND		mg/kg	4.17	0.456	1	A
Aroclor 1260	ND		mg/kg	4.17	0.770	1	A
Aroclor 1262	ND		mg/kg	4.17	0.529	1	A
Aroclor 1268	ND		mg/kg	4.17	0.432	1	A
PCBs, Total	ND		mg/kg	4.17	0.370	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	124		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	119		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 08/20/22 10:02
Analyst: ER

Extraction Method: EPA 3580A
Extraction Date: 08/19/22 08:24
Cleanup Method: EPA 3665A
Cleanup Date: 08/20/22
Cleanup Method: EPA 3660B
Cleanup Date: 08/20/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1677235-1						
Aroclor 1016	ND		mg/kg	4.79	0.425	A
Aroclor 1221	ND		mg/kg	4.79	0.480	A
Aroclor 1232	ND		mg/kg	4.79	1.02	A
Aroclor 1242	ND		mg/kg	4.79	0.646	A
Aroclor 1248	ND		mg/kg	4.79	0.718	A
Aroclor 1254	ND		mg/kg	4.79	0.524	A
Aroclor 1260	ND		mg/kg	4.79	0.885	A
Aroclor 1262	ND		mg/kg	4.79	0.608	A
Aroclor 1268	ND		mg/kg	4.79	0.496	A
PCBs, Total	ND		mg/kg	4.79	0.425	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	98		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1677235-2 WG1677235-3									
Aroclor 1016	94		84		40-140	11		50	A
Aroclor 1260	86		79		40-140	8		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		84		30-150	A
Decachlorobiphenyl	76		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		84		30-150	B
Decachlorobiphenyl	89		75		30-150	B

PESTICIDES

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8081B
Analytical Date: 08/19/22 14:11
Analyst: AKM
Percent Solids: Results reported on an 'AS RECEIVED' basis.
TCLP/SPLP Ext. Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/18/22 10:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: RITC
Lab Number: L2242249
Project Number: PUMP HOUSE LINES
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8151A
Analytical Date: 08/17/22 11:35
Analyst: AKM
Percent Solids: Results reported on an 'AS RECEIVED' basis.
TCLP/SPLP Ext. Date: 08/11/22 05:26
Methylation Date: 08/16/22 20:06

Extraction Method: EPA 8151A
Extraction Date: 08/15/22 22:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	114		30-150	A
DCAA	118		30-150	B

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 08/17/22 09:44
Analyst: AKM
TCLP/SPLP Extraction Date: 08/11/22 05:26
Methylation Date: 08/16/22 20:06

Extraction Method: EPA 8151A
Extraction Date: 08/15/22 22:35

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1675539-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	70		30-150	A
DCAA	62		30-150	B

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 08/18/22 01:54
Analyst: MMG
TCLP/SPLP Extraction Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1676840-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	92		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1675539-2 WG1675539-3									
2,4-D	134		142		30-150	6		25	A
2,4,5-TP (Silvex)	75		76		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	95		95		30-150	A
DCAA	73		75		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1676840-2 WG1676840-3									
Lindane	90		100		30-150	11		20	A
Heptachlor	88		98		30-150	11		20	A
Heptachlor epoxide	88		97		30-150	10		20	A
Endrin	93		103		30-150	10		20	A
Methoxychlor	94		103		30-150	10		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		95		30-150	A
Decachlorobiphenyl	89		100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		94		30-150	B
Decachlorobiphenyl	85		98		30-150	B

METALS

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA
Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Percent Solids: Results are reported on an 'AS RECEIVED' basis.
TCLP/SPLP Ext. Date: 08/11/22 05:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	10.0	0.190	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Barium, TCLP	ND		mg/l	5.00	0.210	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Cadmium, TCLP	ND		mg/l	1.00	0.100	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Chromium, TCLP	ND		mg/l	2.00	0.210	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Lead, TCLP	ND		mg/l	5.00	0.270	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Mercury, TCLP	ND		mg/l	0.0200	0.0092	1	08/12/22 13:26	08/15/22 08:26	EPA 7470A	1,7470A	DMB
Selenium, TCLP	ND		mg/l	5.00	0.350	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB
Silver, TCLP	ND		mg/l	1.00	0.280	1	08/12/22 14:32	08/15/22 20:00	EPA 3015	1,6010D	NB

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA
Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Percent Solids: Results are reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	33.2		mg/kg	31.2	8.41	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Antimony, Total	1.25	J	mg/kg	15.6	1.18	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Arsenic, Total	1.89	J	mg/kg	3.12	0.648	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Barium, Total	0.764	J	mg/kg	3.12	0.542	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Beryllium, Total	ND		mg/kg	1.56	0.103	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Cadmium, Total	2.01	J	mg/kg	3.12	0.305	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Calcium, Total	372		mg/kg	31.2	10.9	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Chromium, Total	0.590	J	mg/kg	3.12	0.299	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Cobalt, Total	ND		mg/kg	6.23	0.517	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Copper, Total	ND		mg/kg	3.12	0.804	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Iron, Total	309		mg/kg	15.6	2.81	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Lead, Total	102		mg/kg	15.6	0.835	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Magnesium, Total	19.6	J	mg/kg	31.2	4.80	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Manganese, Total	3.93		mg/kg	3.12	0.495	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Mercury, Total	ND		mg/kg	0.078	0.051	1	08/21/22 09:25	08/21/22 13:08	EPA 7471B	1,7471B	AW
Nickel, Total	ND		mg/kg	7.79	0.754	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Potassium, Total	ND		mg/kg	779	44.8	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Selenium, Total	1.24	J	mg/kg	6.23	0.804	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Silver, Total	ND		mg/kg	3.12	0.882	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Sodium, Total	109	J	mg/kg	623	9.81	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Thallium, Total	4.12	J	mg/kg	6.23	0.981	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Vanadium, Total	ND		mg/kg	3.12	0.632	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP
Zinc, Total	110		mg/kg	15.6	0.913	2	08/16/22 06:30	08/25/22 17:44	EPA 3050B	1,6010D	WP

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1674579-1										
Arsenic, TCLP	0.029	J	mg/l	1.00	0.019	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Barium, TCLP	ND		mg/l	0.500	0.021	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Lead, TCLP	ND		mg/l	0.500	0.027	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/12/22 14:32	08/15/22 18:57	1,6010D	NB

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 08/11/22 05:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1674580-1										
Mercury, TCLP	ND		mg/l	0.0002	0.0001	1	08/12/22 13:26	08/15/22 07:58	1,7470A	DMB

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 08/11/22 05:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1675466-1										
Aluminum, Total	ND		mg/kg	16.7	4.50	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Antimony, Total	ND		mg/kg	8.33	0.633	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Arsenic, Total	ND		mg/kg	1.67	0.347	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Barium, Total	ND		mg/kg	1.67	0.290	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Beryllium, Total	ND		mg/kg	0.833	0.055	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Cadmium, Total	ND		mg/kg	1.67	0.163	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Calcium, Total	ND		mg/kg	16.7	5.83	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Chromium, Total	0.160	J	mg/kg	1.67	0.160	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Cobalt, Total	ND		mg/kg	3.33	0.277	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP

Project Name: RITC **Lab Number:** L2242249

Project Number: PUMP HOUSE LINES **Report Date:** 08/26/22

Method Blank Analysis
Batch Quality Control

Copper, Total	ND		mg/kg	1.67	0.430	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Iron, Total	ND		mg/kg	8.33	1.50	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Lead, Total	ND		mg/kg	8.33	0.447	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Magnesium, Total	ND		mg/kg	16.7	2.57	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Manganese, Total	ND		mg/kg	1.67	0.265	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Nickel, Total	ND		mg/kg	4.17	0.403	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Potassium, Total	ND		mg/kg	417	24.0	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Selenium, Total	1.70	J	mg/kg	3.33	0.430	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Silver, Total	ND		mg/kg	1.67	0.472	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Sodium, Total	ND		mg/kg	333	5.25	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Thallium, Total	ND		mg/kg	3.33	0.525	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Vanadium, Total	ND		mg/kg	1.67	0.338	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP
Zinc, Total	ND		mg/kg	8.33	0.488	1	08/16/22 06:30	08/25/22 17:27	1,6010D	WP

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1677766-1										
Mercury, Total	ND		mg/kg	0.050	0.033	1	08/21/22 09:25	08/21/22 13:02	1,7471B	AW

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMP HOUSE LINES

Lab Number: L2242249

Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1674579-2								
Arsenic, TCLP	103		-		75-125	-		20
Barium, TCLP	102		-		75-125	-		20
Cadmium, TCLP	101		-		75-125	-		20
Chromium, TCLP	102		-		75-125	-		20
Lead, TCLP	94		-		75-125	-		20
Selenium, TCLP	98		-		75-125	-		20
Silver, TCLP	97		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1674580-2								
Mercury, TCLP	105		-		80-120	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1675466-2					
Aluminum, Total	106	-	48-151	-	
Antimony, Total	90	-	1-208	-	
Arsenic, Total	92	-	79-121	-	
Barium, Total	101	-	83-117	-	
Beryllium, Total	103	-	83-117	-	
Cadmium, Total	99	-	83-117	-	
Calcium, Total	110	-	81-119	-	
Chromium, Total	103	-	80-120	-	
Cobalt, Total	97	-	84-115	-	
Copper, Total	100	-	81-118	-	
Iron, Total	107	-	45-155	-	
Lead, Total	96	-	81-117	-	
Magnesium, Total	106	-	76-124	-	
Manganese, Total	101	-	81-117	-	
Nickel, Total	98	-	83-117	-	
Potassium, Total	109	-	71-129	-	
Selenium, Total	92	-	78-122	-	
Silver, Total	96	-	75-124	-	
Sodium, Total	113	-	72-127	-	
Thallium, Total	94	-	80-120	-	
Vanadium, Total	105	-	78-122	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMP HOUSE LINES

Lab Number: L2242249

Report Date: 08/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1675466-2					
Zinc, Total	96	-	82-118	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1677766-2					
Mercury, Total	90	-	72-128	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674579-3 QC Sample: L2241195-01 Client ID: MS Sample												
Arsenic, TCLP	ND	12	12.5	104		-	-		75-125	-		20
Barium, TCLP	ND	200	209	104		-	-		75-125	-		20
Cadmium, TCLP	ND	5.3	5.56	105		-	-		75-125	-		20
Chromium, TCLP	ND	20	21.1	106		-	-		75-125	-		20
Lead, TCLP	ND	53	52.4	99		-	-		75-125	-		20
Selenium, TCLP	ND	12	11.6	97		-	-		75-125	-		20
Silver, TCLP	ND	5	4.96	99		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674580-3 QC Sample: L2241195-01 Client ID: MS Sample												
Mercury, TCLP	ND	0.5	0.4906	98		-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1675466-3 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022									
Aluminum, Total	33.2	621	675	103	-	-	75-125	-	20
Antimony, Total	1.25J	155	143	92	-	-	75-125	-	20
Arsenic, Total	1.89J	37.3	37.0	99	-	-	75-125	-	20
Barium, Total	0.764J	621	604	97	-	-	75-125	-	20
Beryllium, Total	ND	15.5	15.5	100	-	-	75-125	-	20
Cadmium, Total	2.01J	16.4	17.0	103	-	-	75-125	-	20
Calcium, Total	372	3100	3620	105	-	-	75-125	-	20
Chromium, Total	0.590J	62.1	60.6	98	-	-	75-125	-	20
Cobalt, Total	ND	155	144	93	-	-	75-125	-	20
Copper, Total	ND	77.6	75.2	97	-	-	75-125	-	20
Iron, Total	309	310	623	101	-	-	75-125	-	20
Lead, Total	102	164	248	89	-	-	75-125	-	20
Magnesium, Total	19.6J	3100	3220	104	-	-	75-125	-	20
Manganese, Total	3.93	155	152	95	-	-	75-125	-	20
Nickel, Total	ND	155	144	93	-	-	75-125	-	20
Potassium, Total	ND	3100	3290	106	-	-	75-125	-	20
Selenium, Total	1.24J	37.3	33.7	90	-	-	75-125	-	20
Silver, Total	ND	93.2	73.4	79	-	-	75-125	-	20
Sodium, Total	109J	3100	3400	109	-	-	75-125	-	20
Thallium, Total	4.12J	37.3	38.8	104	-	-	75-125	-	20
Vanadium, Total	ND	155	153	98	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1675466-3 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022									
Zinc, Total	110	155	241	84	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677766-3 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022									
Mercury, Total	ND	0.162	0.153	94	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674579-4 QC Sample: L2241195-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	ND	ND	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674580-4 QC Sample: L2241195-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1675466-4 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022					
Aluminum, Total	33.2	31.4	mg/kg	6	20
Antimony, Total	1.25J	ND	mg/kg	NC	20
Arsenic, Total	1.89J	1.98J	mg/kg	NC	20
Barium, Total	0.764J	0.981J	mg/kg	NC	20
Beryllium, Total	ND	ND	mg/kg	NC	20
Cadmium, Total	2.01J	1.83J	mg/kg	NC	20
Calcium, Total	372	434	mg/kg	15	20
Chromium, Total	0.590J	0.304J	mg/kg	NC	20
Cobalt, Total	ND	ND	mg/kg	NC	20
Copper, Total	ND	ND	mg/kg	NC	20
Iron, Total	309	286	mg/kg	8	20
Lead, Total	102	93.9	mg/kg	8	20
Magnesium, Total	19.6J	20.5J	mg/kg	NC	20
Manganese, Total	3.93	3.98	mg/kg	1	20
Nickel, Total	ND	ND	mg/kg	NC	20
Potassium, Total	ND	ND	mg/kg	NC	20
Selenium, Total	1.24J	1.18J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	109J	30.0J	mg/kg	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1675466-4 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022					
Thallium, Total	4.12J	3.54J	mg/kg	NC	20
Vanadium, Total	ND	ND	mg/kg	NC	20
Zinc, Total	110	103	mg/kg	7	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677766-4 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022					
Mercury, Total	ND	ND	mg/kg	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

SAMPLE RESULTS

Lab ID: L2242249-01
Client ID: BCP38-LINES-08052022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 08/05/22 10:30
Date Received: 08/05/22
Field Prep: Not Specified

Sample Depth:
Matrix: Oil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	3.5		mg/kg	0.91	0.21	1	08/11/22 14:30	08/12/22 12:36	1,9010C/9012B	CS
pH (H)	8.7		SU	-	NA	1	-	08/11/22 18:16	1,9045D	AS
Nitrogen, Ammonia	520		mg/kg	6.8	0.05	1	08/22/22 13:40	08/22/22 20:46	121,4500NH3-BH	AT
Flash Point	>150		deg F	70	NA	1	-	08/09/22 16:15	1,1010A	MD
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/12/22 19:10	08/12/22 21:38	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/12/22 19:10	08/12/22 21:30	125,7.3	TL

Project Name: RITC
Project Number: PUMP HOUSE LINES
Lab Number: L2242249
Report Date: 08/26/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1674172-1										
Cyanide, Total	ND		mg/kg	0.92	0.22	1	08/11/22 14:30	08/12/22 12:09	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1674174-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/12/22 19:10	08/12/22 21:27	125,7.3	TL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1674739-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/12/22 19:10	08/12/22 21:34	125,7.3	TL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1678047-1										
Nitrogen, Ammonia	ND		mg/kg	7.5	0.02	1	08/22/22 13:40	08/22/22 20:39	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1673132-1								
Flash Point	101		-		96-104	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1674172-2 WG1674172-3								
Cyanide, Total	**66**	Q	81		80-120	17		35
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1674174-2								
Sulfide, Reactive	111		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1674246-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1674739-2								
Cyanide, Reactive	84		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1678047-2								
Nitrogen, Ammonia	90		-			-		

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1674172-4 WG1674172-5 QC Sample: L2242249-01 Client ID: BCP38-LINES-08052022												
Cyanide, Total	3.5	9.6	15	120		15	120		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1678047-4 QC Sample: L2242582-01 Client ID: MS Sample												
Nitrogen, Ammonia	28000	5020	28000	0		-	-			-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMP HOUSE LINES

Lab Number: L2242249

Report Date: 08/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1674174-3 QC Sample: L2242115-57 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1674246-2 QC Sample: L2241456-05 Client ID: DUP Sample						
pH	7.8	7.8	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1674739-3 QC Sample: L2242115-57 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1678047-3 QC Sample: L2242582-01 Client ID: DUP Sample						
Nitrogen, Ammonia	28000	28000	mg/kg	0		

Project Name: RITC
Project Number: PUMP HOUSE LINES

Lab Number: L2242249
Report Date: 08/26/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2242249-01A	Glass 60mL/2oz unpreserved	A	NA		4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),SB-TI(180),SE-TI(180),PB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MN-TI(180),HG-T(28),MG-TI(180),NA-TI(180),CD-TI(180),CA-TI(180),K-TI(180)
L2242249-01B	Vial Large Septa unpreserved (4oz)	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L2242249-01C	Vial Large Septa unpreserved (4oz)	A	NA		4.1	Y	Absent		SUB-BTU()
L2242249-01D	Glass 250ml/8oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14),REACTS(14),TCN-9010(14),FLASH(),PH-9045(1),NYTCL-8082(365),REACTCN(14),NH3-4500(28)
L2242249-01E	Glass 500ml/16oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14),REACTS(14),TCN-9010(14),FLASH(),PH-9045(1),NYTCL-8082(365),REACTCN(14),NH3-4500(28)
L2242249-01T	Amber 1000ml unpreserved Extracts	A	NA		4.1	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L2242249-01W	Plastic 120ml HNO3 preserved Extracts	A	NA		4.1	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2242249-01X	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L2242249-01Y	Vial Water preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L2242249-01Z	Vial Water preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2242249
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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2242249
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Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RITC	**Lab Number:**	L2242249
Project Number:	PUMP HOUSE LINES	**Report Date:**	08/26/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/6/22

ALPHA Job #: L2242249

Client Information

Client: INVENTUM ENG
Address: 441 CARLISLE DR
SUITE C, HERNDON VA 20170
Phone: 585-734-5255
Fax: john.black@inventumeng.com
Email: roxanne.birx@ " "

Project Information

Project Name: RITC
Project Location: 3875 RIVER ROAD, TONAWANDA
Project #: PUMP HOUSE LINES
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

★ TCLP 8260 - REPORT TOTALS W/ OILY MATRIX
★ HAZCAT - FLAMMABILITY, REACTIVITY, CORROSIVITY

Please specify Metals or TAL. TAL

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	FULL TCLP-8260 8270, 6010, PEST/HERB	TAL METALS	TCL VOCs, SVOCs	PCBs	HAZCAT, BTU	TOTAL AMMONIA, Hg, CYANIDE		
42249-01	BCP38-LINES-08052022	8/5/22	10:30	OIL	RB	✓	✓	✓	✓	✓	✓		

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Total Bottle

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
Roxanne Birx	8/5/22 1115		8/05/22 @ 11:15
BJ AA	8/05/22 11:15		8/6/22 0020

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date August 11, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Oil Sample

Samples Analyzed

Enclosed are Report No(s): 77751

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

8/11/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Visit our website: www.sterlinganalytical.com

Sample Analysis

Work Order 22-0817

Sample	Description	Source	Taken/Time	Received
77751	L2242249 BCP-38-Lines	Alpha Analytical Lab	8/5/22 10:30	8/8/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	9,508	500.00	ASTM D240	08/09/22	sjr

(1) MA & CT do not certify this parameter

Sterling Analytical, Inc.

ANALYTICAL REPORT

Lab Number:	L2242102
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	PUMPHOUSE PITS
Report Date:	08/22/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2242102-01	PUMPHOUSE-PITS-08042022	SOLID	3875 RIVER RD, TONAWANDA	08/04/22 13:30	08/04/22

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of BTU was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 08/22/22

ORGANICS

VOLATILES

Project Name: RITC **Lab Number:** L2242102

Project Number: PUMPHOUSE PITS **Report Date:** 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 08/17/22 13:10
Analyst: MM
Percent Solids: 79%
TCLP/SPLP Ext. Date: 08/16/22 13:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	110		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
dibromofluoromethane	99		70-130

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/17/22 11:58
Analyst: MM
TCLP/SPLP Extraction Date: 08/16/22 13:26
Extraction Date: 08/16/22 13:26

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1676683-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	113		70-130
dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1676683-3 WG1676683-4								
Chloroform	93		96		70-130	3		20
Carbon tetrachloride	92		93		63-132	1		20
Tetrachloroethene	91		93		70-130	2		20
Chlorobenzene	90		92		75-130	2		25
1,2-Dichloroethane	95		92		70-130	3		20
Benzene	91		93		70-130	2		25
Vinyl chloride	81		80		55-140	1		20
1,1-Dichloroethene	96		99		61-145	3		25
Trichloroethene	89		91		70-130	2		25
1,4-Dichlorobenzene	90		96		70-130	6		20
2-Butanone	110		120		63-138	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		94		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	106		104		70-130
dibromofluoromethane	98		95		70-130

SEMIVOLATILES

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270D
Analytical Date: 08/20/22 19:33
Analyst: CMM
Percent Solids: 79%
TCLP/SPLP Ext. Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	100		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	20	J	ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	82		33-120

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/20/22 16:19
Analyst: CMM
TCLP/SPLP Extraction Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:09

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1676297-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	71		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	80		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1676297-2 WG1676297-3								
Hexachlorobenzene	89		80		40-140	11		30
2,4-Dinitrotoluene	96		85		40-132	12		30
Hexachlorobutadiene	85		74		28-111	14		30
Hexachloroethane	80		70		21-105	13		30
Nitrobenzene	84		73		40-140	14		30
2,4,6-Trichlorophenol	93		82		30-130	13		30
Pentachlorophenol	73		67		9-103	9		30
2-Methylphenol	88		75		30-130	16		30
3-Methylphenol/4-Methylphenol	91		82		30-130	10		30
2,4,5-Trichlorophenol	97		87		30-130	11		30
Pyridine	26		25		10-66	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	93		79		21-120
Phenol-d6	86		76		10-120
Nitrobenzene-d5	83		72		23-120
2-Fluorobiphenyl	92		80		15-120
2,4,6-Tribromophenol	93		80		10-120
4-Terphenyl-d14	88		79		33-120

PCBS

Project Name: RITC **Lab Number:** L2242102

Project Number: PUMPHOUSE PITS **Report Date:** 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01 D
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8082A
Analytical Date: 08/11/22 21:55
Analyst: JM
Percent Solids: 79%

Extraction Method: EPA 3540C
Extraction Date: 08/09/22 10:45
Cleanup Method: EPA 3665A
Cleanup Date: 08/10/22
Cleanup Method: EPA 3660B
Cleanup Date: 08/11/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	566	50.2	5	A
Aroclor 1221	ND		ug/kg	566	56.7	5	A
Aroclor 1232	ND		ug/kg	566	120.	5	A
Aroclor 1242	ND		ug/kg	566	76.3	5	A
Aroclor 1248	1020		ug/kg	566	84.9	5	A
Aroclor 1254	1460		ug/kg	566	61.9	5	A
Aroclor 1260	ND		ug/kg	566	104.	5	A
Aroclor 1262	ND		ug/kg	566	71.9	5	A
Aroclor 1268	ND		ug/kg	566	58.6	5	A
PCBs, Total	2480		ug/kg	566	50.2	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	**522**	Q	30-150	B

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 08/11/22 10:42
Analyst: JM

Extraction Method: EPA 3540C
Extraction Date: 08/09/22 10:45
Cleanup Method: EPA 3665A
Cleanup Date: 08/10/22
Cleanup Method: EPA 3660B
Cleanup Date: 08/11/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1672935-1						
Aroclor 1016	ND		ug/kg	99.6	8.84	A
Aroclor 1221	ND		ug/kg	99.6	9.98	A
Aroclor 1232	ND		ug/kg	99.6	21.1	A
Aroclor 1242	ND		ug/kg	99.6	13.4	A
Aroclor 1248	ND		ug/kg	99.6	14.9	A
Aroclor 1254	ND		ug/kg	99.6	10.9	A
Aroclor 1260	ND		ug/kg	99.6	18.4	A
Aroclor 1262	ND		ug/kg	99.6	12.6	A
Aroclor 1268	ND		ug/kg	99.6	10.3	A
PCBs, Total	ND		ug/kg	99.6	8.84	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	59		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMPHOUSE PITS

Lab Number: L2242102

Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1672935-2 WG1672935-3									
Aroclor 1016	60		66		40-140	10		50	A
Aroclor 1260	44		50		40-140	13		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		76		30-150	A
Decachlorobiphenyl	43		45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		81		30-150	B
Decachlorobiphenyl	52		53		30-150	B

PESTICIDES

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8081B
Analytical Date: 08/18/22 02:49
Analyst: MMG
Percent Solids: 79%
TCLP/SPLP Ext. Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	135		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	140		30-150	B
Decachlorobiphenyl	84		30-150	B

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8151A
Analytical Date: 08/17/22 11:17
Analyst: AKM
Percent Solids: 79%
TCLP/SPLP Ext. Date: 08/11/22 05:26
Methylation Date: 08/16/22 20:06

Extraction Method: EPA 8151A
Extraction Date: 08/15/22 22:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	83		30-150	B

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 08/17/22 09:44
Analyst: AKM
TCLP/SPLP Extraction Date: 08/11/22 05:26
Methylation Date: 08/16/22 20:06

Extraction Method: EPA 8151A
Extraction Date: 08/15/22 22:35

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1675539-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	70		30-150	A
DCAA	62		30-150	B

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 08/18/22 01:54
Analyst: MMG
TCLP/SPLP Extraction Date: 08/11/22 05:26

Extraction Method: EPA 3510C
Extraction Date: 08/17/22 10:55

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1676321-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	92		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1675539-2 WG1675539-3									
2,4-D	134		142		30-150	6		25	A
2,4,5-TP (Silvex)	75		76		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	95		95		30-150	A
DCAA	73		75		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1676321-2 WG1676321-3									
Lindane	90		100		30-150	11		20	A
Heptachlor	88		98		30-150	11		20	A
Heptachlor epoxide	88		97		30-150	10		20	A
Endrin	93		103		30-150	10		20	A
Methoxychlor	94		103		30-150	10		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		95		30-150	A
Decachlorobiphenyl	89		100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		94		30-150	B
Decachlorobiphenyl	85		98		30-150	B

METALS

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA
Sample Depth:
Matrix: Solid
Percent Solids: 79%

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 08/11/22 05:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Aluminum, TCLP	ND		mg/l	1.00	0.318	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Antimony, TCLP	ND		mg/l	0.500	0.071	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Barium, TCLP	0.520		mg/l	0.500	0.021	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Beryllium, TCLP	ND		mg/l	0.100	0.009	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Calcium, TCLP	701		mg/l	5.00	0.350	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Cobalt, TCLP	0.022	J	mg/l	0.200	0.017	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Copper, TCLP	ND		mg/l	0.200	0.022	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Iron, TCLP	0.953		mg/l	0.500	0.090	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Magnesium, TCLP	12.9		mg/l	1.00	0.153	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Manganese, TCLP	4.06		mg/l	0.100	0.016	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/12/22 13:26	08/12/22 21:37	EPA 7470A	1,7470A	DMB
Nickel, TCLP	0.080	J	mg/l	0.500	0.024	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Potassium, TCLP	5.85	J	mg/l	25.0	2.37	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Thallium, TCLP	ND		mg/l	0.200	0.025	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Vanadium, TCLP	ND		mg/l	0.100	0.020	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC
Zinc, TCLP	4.66		mg/l	0.500	0.021	1	08/12/22 14:29	08/13/22 00:25	EPA 3015	1,6010D	MC

Project Name: RITC **Lab Number:** L2242102

Project Number: PUMPHOUSE PITS **Report Date:** 08/22/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1674576-1										
Aluminum, TCLP	ND		mg/l	1.00	0.318	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Antimony, TCLP	ND		mg/l	0.500	0.071	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Barium, TCLP	ND		mg/l	0.500	0.021	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Beryllium, TCLP	ND		mg/l	0.100	0.009	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Calcium, TCLP	ND		mg/l	5.00	0.350	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Cobalt, TCLP	ND		mg/l	0.200	0.017	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Copper, TCLP	ND		mg/l	0.200	0.022	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Iron, TCLP	ND		mg/l	0.500	0.090	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Magnesium, TCLP	ND		mg/l	1.00	0.153	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Manganese, TCLP	ND		mg/l	0.100	0.016	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Nickel, TCLP	ND		mg/l	0.500	0.024	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Potassium, TCLP	ND		mg/l	25.0	2.37	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Thallium, TCLP	ND		mg/l	0.200	0.025	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Vanadium, TCLP	ND		mg/l	0.100	0.020	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC
Zinc, TCLP	ND		mg/l	0.500	0.021	1	08/12/22 14:29	08/13/22 00:04	1,6010D	MC

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 08/11/22 05:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1674578-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/12/22 13:26	08/12/22 21:14	1,7470A	DMB

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 08/11/22 05:26

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMPHOUSE PITS

Lab Number: L2242102

Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1674576-2								
Aluminum, TCLP	115		-		75-125	-		20
Antimony, TCLP	116		-		75-125	-		20
Arsenic, TCLP	119		-		75-125	-		20
Barium, TCLP	115		-		75-125	-		20
Beryllium, TCLP	121		-		75-125	-		20
Cadmium, TCLP	117		-		75-125	-		20
Calcium, TCLP	116		-		75-125	-		20
Chromium, TCLP	118		-		75-125	-		20
Cobalt, TCLP	117		-		75-125	-		20
Copper, TCLP	120		-		75-125	-		20
Iron, TCLP	122		-		75-125	-		20
Lead, TCLP	112		-		75-125	-		20
Magnesium, TCLP	116		-		75-125	-		20
Manganese, TCLP	112		-		75-125	-		20
Nickel, TCLP	111		-		75-125	-		20
Potassium, TCLP	120		-		75-125	-		20
Selenium, TCLP	111		-		75-125	-		20
Silver, TCLP	109		-		75-125	-		20
Thallium, TCLP	110		-		75-125	-		20
Vanadium, TCLP	121		-		75-125	-		20
Zinc, TCLP	113		-		75-125	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMPHOUSE PITS

Lab Number: L2242102

Report Date: 08/22/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1674578-2					
Mercury, TCLP	96	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674576-3 QC Sample: L2243214-01 Client ID: MS Sample												
Aluminum, TCLP	ND	20	24.0	120		-	-		75-125	-		20
Antimony, TCLP	ND	5	5.87	117		-	-		75-125	-		20
Arsenic, TCLP	ND	1.2	1.47	122		-	-		75-125	-		20
Barium, TCLP	0.370J	20	24.3	122		-	-		75-125	-		20
Beryllium, TCLP	ND	0.5	0.628	**126**	Q	-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.621	117		-	-		75-125	-		20
Calcium, TCLP	431	100	569	**138**	Q	-	-		75-125	-		20
Chromium, TCLP	ND	2	2.39	120		-	-		75-125	-		20
Cobalt, TCLP	0.032J	5	5.80	116		-	-		75-125	-		20
Copper, TCLP	ND	2.5	3.04	122		-	-		75-125	-		20
Iron, TCLP	1.78	10	12.6	108		-	-		75-125	-		20
Lead, TCLP	ND	5.3	5.94	112		-	-		75-125	-		20
Magnesium, TCLP	53.0	100	174	121		-	-		75-125	-		20
Manganese, TCLP	3.80	5	9.79	120		-	-		75-125	-		20
Nickel, TCLP	0.029J	5	5.57	111		-	-		75-125	-		20
Potassium, TCLP	2.89J	100	128	**128**	Q	-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.37	114		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.559	112		-	-		75-125	-		20
Thallium, TCLP	ND	1.2	1.31	109		-	-		75-125	-		20
Vanadium, TCLP	ND	5	6.16	123		-	-		75-125	-		20
Zinc, TCLP	0.057J	5	5.70	114		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674578-3 QC Sample: L2243214-01 Client ID: MS Sample									
Mercury, TCLP	ND	0.025	0.0227	91	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674576-4 QC Sample: L2243214-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.370J	0.375J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1674578-4 QC Sample: L2243214-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Coarse
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	08/15/22 17:27	1,1030	MD

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

SAMPLE RESULTS

Lab ID: L2242102-01
Client ID: PUMPHOUSE-PITS-08042022
Sample Location: 3875 RIVER RD, TONAWANDA

Date Collected: 08/04/22 13:30
Date Received: 08/04/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.6		%	0.100	NA	1	-	08/06/22 11:58	121,2540G	RI
pH (H)	7.3		SU	-	NA	1	-	08/11/22 18:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/14/22 21:40	08/15/22 00:03	125,7.3	RM
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/14/22 21:40	08/14/22 23:17	125,7.3	RM

Project Name: RITC
Project Number: PUMPHOUSE PITS
Lab Number: L2242102
Report Date: 08/22/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1675178-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	08/14/22 21:40	08/14/22 23:14	125,7.3	RM
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1675179-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	08/14/22 21:40	08/15/22 00:01	125,7.3	RM

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMPHOUSE PITS

Lab Number: L2242102

Report Date: 08/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1674246-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1675178-2								
Sulfide, Reactive	94		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1675179-2								
Cyanide, Reactive	84		-		30-125	-		40

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC

Project Number: PUMPHOUSE PITS

Lab Number: L2242102

Report Date: 08/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1672005-1 QC Sample: L2242224-03 Client ID: DUP Sample						
Solids, Total	81.0	81.6	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1674246-2 QC Sample: L2241456-05 Client ID: DUP Sample						
pH	7.8	7.8	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1675178-3 QC Sample: L2242115-30 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1675179-3 QC Sample: L2242115-30 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40

Project Name: RITC
Project Number: PUMPHOUSE PITS

Lab Number: L2242102
Report Date: 08/22/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2242102-01A	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L2242102-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.9	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),SUB-BTU()
L2242102-01C	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		REACTS(14),IGNIT-1030(14),NYTCL-8082-3540C(365),PH-9045(1),REACTCN(14)
L2242102-01D	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		REACTS(14),IGNIT-1030(14),NYTCL-8082-3540C(365),PH-9045(1),REACTCN(14)
L2242102-01E	Vial Large Septa unpreserved (4oz)	A	NA		3.9	Y	Absent		TCLP-EXT-ZHE(14)
L2242102-01W	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		BE-CI(180),E&I-FEE(),V-CI(180),CD-CI(180),NI-CI(180),CA-CI(180),AS-CI(180),BA-CI(180),CU-CI(180),HG-C(28),AL-CI(180),MN-CI(180),PB-CI(180),ZN-CI(180),CO-CI(180),FE-CI(180),TL-CI(180),SE-CI(180),CR-CI(180),K-CI(180),MG-CI(180),SB-CI(180),AG-CI(180)
L2242102-01X	Amber 1000ml unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L2242102-01X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2242102-01Y	Vial unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-VOA(14)
L2242102-01Z	Vial unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-VOA(14)

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RITC	**Lab Number:**	L2242102
Project Number:	PUMPHOUSE PITS	**Report Date:**	08/22/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/5/22

ALPHA Job #: L2242102

Client Information
Client: INVENTUM ENG
Address: 441 CARLISLE DR
HERNDON, VA 20170
Phone: 585-734-5255
Fax: john.black@u ..
Email: roxanne.brx@inventumeng.com

Project Information
Project Name: RITC
Project Location: 3875 RIVER RD, TONAWANDA
Project # PUMP HOUSE PITS
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
* HAZ CAT - pH, IGNITABILITY, REACTIVITY

Please specify Metals or TAL. TAL

Deliverables
☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	% Solids	HAZ CAT*	PCBs	TCLP METALS (TAL) w/ Hg	TCLP HERB/PEST	TCLP 8260	TCLP 8270	BTU	Sample Specific Comments	Total Bottle
L2242-01	PUMPHOUSE-PITS-08042022	8/4/22	13:30	SD	RB	✓	✓	✓	✓	✓	✓	✓	✓		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
ROXANNE BRX	8/4/22 1425		8/4/22 1425
	8/4/22 1425		8/5/22 0000

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date August 11, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Sample

Samples Analyzed

Enclosed are Report No(s): 77750

Reported on dry basis.

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

8/11/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Sample Analysis

Work Order 22-0816

Sample	Description	Source	Taken/Time	Received
77750	L2242102 Pumphouse-Pits	Alpha Analytical Lab	8/4/22 13:30	8/8/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	5,285	500.00	ASTM D5865	08/09/22	sjr

(1) MA & CT do not certify this parameter

Pump House Waste Manifests

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011176

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011176
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete	1	CM	20	~~Tons~~ CY

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	08/16/22

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
Modern Disposal Services
4746 Model City Road
Model City, NY 14107
b: Phone: 716-754-8226

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
PAT LISTER		8/16/22

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	8/16/22

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003228254
Date: 8/16/2022
Time: 15:10:36 - 15:37:47
Scale

Gross: 48520 POU In Scale 1-INBOI
Tare: 39300 POU Out Scale 2-OUTB
Net: 9220 POU

Truck: 2674-30
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: MDS-001/MODERN DISPOSAL
Driver: PATCASTILE/Patrick B. Castile
License: 14764MM
Truck Type: RO
Route: M0103/MODERN ROLL OFF 03
Profile: M21-3292/RIVERVIEW INNV.TECH.
WO: 0003697596
Generator: 0250310004/Modern Disposal Routes - N
PO: .
Service Site: 0005730122 OSC @ TONAWANDA COKE
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	4.61	TON

Driver: PAT CASTILE 2674

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011177

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011177
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete	1CM	30yard	30	~~Tons~~ CY

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Matt Reardon on behalf of RITC	on behalf of RITC	8/19/22

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
Modern Disposal Services
4746 Model City Road
Model City, NY 14107
b: Phone: 716-754-8226

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
PAT CASHLF		8/19/22

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	8/19/22

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003229560
Date: 8/19/2022
Time: 15:02:57 - 15:20:19

Scale
Gross: 58180 POU In Scale 1-INBOU
Tare: 36780 POU Out Scale 2-OUTB
Net: 21400 POU

Truck: 2674-30
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: MDS-001/MODERN DISPOSAL
Driver: PATCASTILE/Patrick B. Castile

License: 14764MM
Truck Type: RO
Route: M0103/MODERN ROLL OFF 03
Profile: M21-3292/RIVERVIEW INNV.TECH.
PO: .

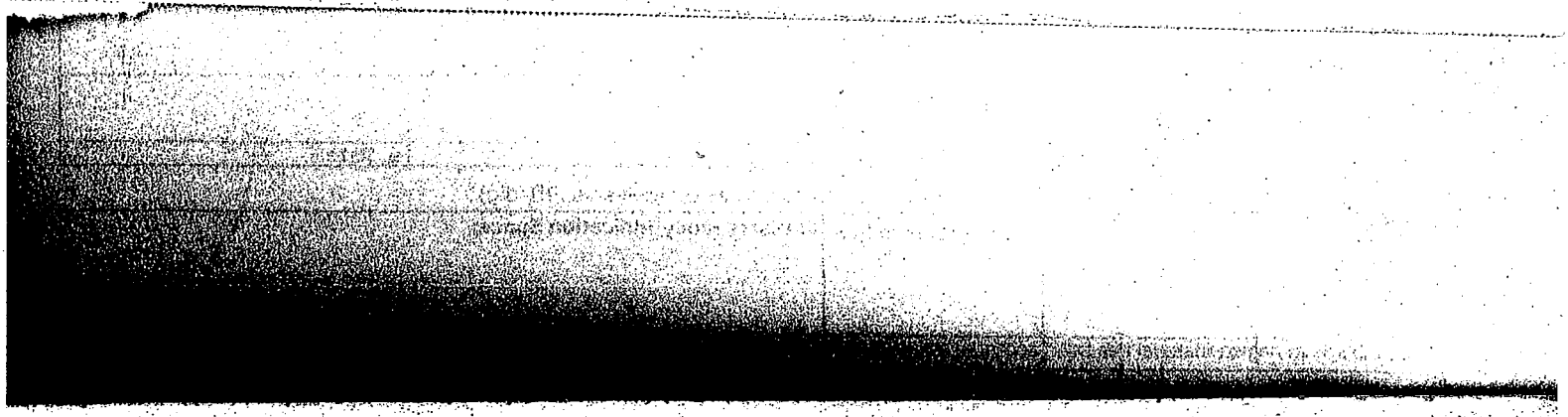
WO: 0003701134
Manifest: 11177

Generator: 0250310004/Modern Disposal Routes - N
Service Site: 0005730122 OSC @ TONAWANDA COKE
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	10.70	TON

Driver: PAT CASTILE 2874

Weighmaster: Michelle Petrea



MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

1

0011181

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011181
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:		
~~Modern Disposal Services~~ Pariso Logistics 9A 82b #26 ~~4746 Model City Road~~ KC 1/17/23 3649 River Rd ~~Model City, NY 14107~~ Tonawanda NY 14150 b: Phone: ~~716-754-8226~~ 716-875-101168		
Sharma M Abdalla		1-17-23
c. Generator Authorized Agent Name (Print)	d. Signature	e. Date

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Dawn Smith	Dawn Smith	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279288
Date: 1/17/2023
Time: 09:16:52 - 09:17:34
Scale
Gross: 67100 POU In Scale 1-INBOU
Tare: 25180 POU P.T.
Net: 41920 POU

Truck: PARISO-26
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling
Truck Type: TA
Route: BROKER/SUB OUT VARIOUS BRC
Profile: M21-3292/RIVERVIEW INNV.TECI
Manifest: 11181
Generator: 0250310004/Modern Disposal Routes - N
PO: .
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	20.96	TON

Driver: _____

Weighmaster: Dawn Srock

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011182

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011182
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:		
~~Modern Disposal Services~~ ~~4746 Model City Road~~ ~~Model City, NY 14107~~ b: Phone: ~~716-754-8226~~ KC 1/17/23	Pariso 3649 River Rd Tonawanda NY 14150 716-875-6168	
c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
		1/17/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279296
Date: 1/17/2023
Time: 09:24:21 - 09:25:17
Scale

Gross: 70700 POU In Scale 1-INBOI
Tare: 26980 POU P.T.
Net: 43720 POU

Truck: PARISO-36
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: PARISO/PARISO
Profile: M21-3292/RIVERVIEW INNV.TECH. Manifest: 11182
PO: .

Generator: 0250310004/Modern Disposal Routes - N
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	21.86	TON

Driver: _____

Weighmaster: Michelle Petrea

MODEF La: ION-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

2

0011183

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011183
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazordous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:		
~~Modern Disposal Services~~ ~~4746 Model City Road~~ ~~Model City, NY 14107~~ KC 1/17/23 Pariso 3649 River Road Tonawanda NY 14150 716-875-6168 b: Phone: ~~716-754-8226~~ 9A826 - #26		
Sherman M Abdallah		1-17-23
c. Generator Authorized Agent Name (Print)	d. Signature	e. Date

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279394
Date: 1/17/2023
Time: 11:28:56 - 11:29:29
Scale

Gross: 66680 POU In Scale 1-INBOU
Tare: 25180 POU P.T.
Net: 41500 POU

Truck: PARISO-26
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: BROKER/SUB OUT VARIOUS BRC
Profile: M21-3292/RIVERVIEW INNV.TECH. Manifest: 11183
PO: .

Generator: 0250310004/Modern Disposal Routes - M
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	20.75	TON

Driver: _____

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011184

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011184
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address: ~~Modern Disposal Services 4746 Model City Road Model City, NY 14107~~ KC 1/17/23 b: Phone: ~~716-754-8226~~	Pariso 3649 River Road Tonawanda NY 14150 716-875-6168	
c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
		1/17/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:

d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279422
Date: 1/17/2023
Time: 12:05:59 - 12:07:08
Scale

Gross: 67120 POU In Scale 1-INBOI
Tare: 26980 POU P.T.
Net: 40140 POU

Truck: PARISO-36
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: PARISO/PARISO
Profile: M21-3292/RIVERVIEW INNV.TECH. Manifest: 11184
PO: .

Generator: 0250310004/Modern Disposal Routes - N
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	20.07	TON

Driver: _____

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

3

0011185

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011185
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	20 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
~~Modern Disposal Services~~
~~4746 Model City Road~~
~~Model City, NY 14107~~
b: Phone: ~~716-754-8226~~

Pariso
3649 River Rd
Tonawanda NY 14150
716-875-6160

9A 826 #26

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
Shevma M Adams		1-17-23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Dawn Smith		1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279487
Date: 1/17/2023
Time: 13:28:37 - 13:29:06
Scale
Gross: 68400 POUIn Scale 1-INBOU
Tare: 25180 POU P.T.
Net: 43220 POU

Truck: PARISO-26
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling
Truck Type: TA
Route: BROKER/SUB OUT VARIOUS BRC
Profile: M21-3292/RIVERVIEW INNV.TECI Manifest: 11185
Generator: 0250310004/Modern Disposal Routes - N
PO: .
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	21.61	TON

Driver: _____

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011186

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011186
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	K on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
~~Modern Disposal Services~~
~~4746 Model City Road~~ 1/17/23
~~Model City, NY 14107~~
b: Phone: ~~716-754-8226~~

Pariso
3649 River Rd
Tonawanda NY 14150
716-875-6168

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
Jaquan		1/17/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
[illegible]	[illegible]	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279492
Date: 1/17/2023
Time: 13:37:26 - 13:38:03
Scale
Gross: 66440 POUIn Scale 1-INBOU
Tare: 26980 POU P.T.
Net: 39460 POU

Truck: PARISO-36
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: PARISO/PARISO
Profile: M21-3292/RIVERVIEW INNV.TECI
Manifest: 11186
PO: .

Generator: 0250310004/Modern Disposal Routes - N
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	19.73	TON

Driver: _____

Weighmaster: Michelle Petrea

NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0011187

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011187
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	22 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
~~Modern Disposal Services~~ KC 01/17/23
~~4746 Model City Road~~
~~Model City, NY 14107~~
b: Phone: ~~716-754-8226~~

Pavise
3649 River Rd
Tonawanda NY 14150

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
Colligan		1/17/23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address:	c: US EPA Number	d: Discrepancy Indication Space:
Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226		

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:

d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279593
Date: 1/17/2023
Time: 15:33:53 - 15:34:11
Scale

Gross: 79340 POU In Scale 1-INBOI
Tare: 26980 POU P.T.
Net: 52360 POU

Truck: PARISO-36
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: PARISO/PARISO
Profile: M21-3292/RIVERVIEW INNV.TECH. Manifest: 11187
PO: .

Generator: 0250310004/Modern Disposal Routes - N
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	26.18	TON

Driver: _____

Weighmaster: Michelle Petrea

NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

4

0011188

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0011188
c: Generator's Name and Location: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 d: Generators Phone:	e: Generator's Mailing Address: Riverview Innovation & Technology Campus Inc. 3875 River Road Tonawanda, New York 14150 f: Phone:
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M21-3292	3/29/22	Wood/Metal/Brick/Concrete pump house brick	1	DT	20 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	K on behalf of RITC	01/17/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
~~Modern Disposal Services~~
~~4746 Model City Road~~
~~Model City, NY 14107~~
b: Phone: ~~716-754-8226~~

KC 1/17/23

Pariso
3649 River Rd
Tonawanda NY 14150
716-875-6168

9A824 # 26

c. Generator Authorized Agent Name (Print)	d. Signature	e. Date
Shannon M Abdnour		1-17-23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	q. Date
Michelle Petrea	Michelle Petrea	1/17/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:

d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

MODERN Corporation

1445 Pletcher Road
Model City, NY 14107
(716) 754-8226

Ticket: 1003279577
Date: 1/17/2023
Time: 15:08:05 - 15:08:32
Scale

Gross: 67600 POU In Scale 1-INBOI
Tare: 25180 POU P.T.
Net: 42420 POU

Truck: PARISO-26
Customer: 0005730123/OSC TONAWANDA COKE
Carrier: PARI-002/Pariso Hauling

Truck Type: TA
Route: BROKER/SUB OUT VARIOUS BRC
Profile: M21-3292/RIVERVIEW INNV.TECH. Manifest: 11188
PO: .

Generator: 0250310004/Modern Disposal Routes - N
Service Site:
Comment:

Origin	Materials & Services	Quantity	Unit
141600/Tonawanda, City Of	DC Industrial Waste - General	21.21	TON

Driver: _____

Weighmaster: Michelle Petrea

MODERN Landfill NON-HAZARDOUS WASTE & ASBESTOS WASTE SHIPMENT RECORDS

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

0019175

Section I GENERATOR (Generator completes Section I, a-q)

a: Generator's US EPA ID Number:	b: Manifest Document Number: 0019175
c: Generator's Name and Location: Riverview Innovation and Technology Campus 3875 River Road Tonawanda, New York 14150 d: Generators Phone: 716-560-3006	e: Generator's Mailing Address: Riverview Innovation and Technology Campus 3875 River Road Tonawanda, New York 14150 f: Phone: 716-560-3006
If owner of the generating facility differs from the generator, provide: g. Owner's Name:	h. Owner's Phone:

i. Waste Profile #:	j. Exp. Date	k. Waste Shipping Name and Description	l. Containers No.	l. Containers Type	m. Total Quantity	n. Unit Wt/Vol
M22-3492	10/5/23	Soil/Breeze Debris pump house sump	1	CM	5 EST	Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

o. Generator Authorized Agent Name (Print)	p. Signature	q. Date
Kirsten Colligan on behalf of RITC	KC on behalf of RITC	04/13/23

Section II TRANSPORTER (Generator completes Sec. II, a-b; Transporter completes Sec. II, c-e)

a: Transporter's Name and Address:
Modern Disposal Services
4746 Model City Road
Model City, New York 14107
b: Phone: 716-754-8226

c. Transporter Authorized Agent Name (Print)	d. Signature	e. Date
Kevin Swan	Kevin Swan	4-13-23

Section III DESTINATION (Generator completes Sec. III, a-c; Destination Site completes Sec. III, d-g)

a: Disposal Facility and Site Address: Modern Landfill, Inc. 1445 Pletcher Rd. Model City, NY 14107 b: Phone: 716-754-8226	c: US EPA Number	d: Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e: Authorized Agent Name (Print)	f. Signature	g. Date
Michelle Petrea	Michelle Petrea	4/13/23

Section IV ASBESTOS (Generator completes Sec. IV, a-d; Operator completes Sec. IV, e-g)

a: Operator's Name and Address: b: Phone:	c: Special Handling Instructions and Additional Information:
d: Friable, Non-Friable or Both:	e: Percentage Friable/NonFriable: 0% Friable and 0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Operator's Name and Title (Print)	f. Signature	g. Date

*Operator refers to the company which owns, leases, operates, controls or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

DESTINATION RETURN

Form Approved. OMB No. 2050-0039

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD 0 8 4 1 2 3 7 7	1	(877) 915-0387	001565135 VES

GENERATOR

5. Generator's Name and Mailing Address
RIVERVIEW INNOVATION & TECH
140 LEE STREET SUITE 200
BUFFALO, NY 14210
Generator's Phone: 716 571-6035

Generator's Site Address (if different than mailing address)
2875 RIVER ROAD
TONAWANDA, NY 14150

MAIL

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: N J D 0 5 5 1 2 5 5 2

7. Transporter 2 Company Name
FREEHOLD CARTAGE INC
U.S. EPA ID Number: N J D 0 5 4 1 2 5 5 6 4

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
U.S. EPA ID Number: N J D 9 8 0 5 3 6 9 9 3
Facility's Phone: 973 347-7111

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN3082, HAZARDOUS WASTE, LIQUID, n.o.s. (Oil, Benzene), 9, III	8	DM	4000	P	D018		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
EM Service Contracted by VEOLIA - Contract entered by generator number 5 CHRIST V5112795
agency authority as initial transporter to add or substitute additional transporters on generator's behalf.
CAMDEN

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Mark Reardon on behalf of RITC
Signature: Mark on behalf of RITC
Month: 10 Day: 25 Year: 22

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Cepilo Jaroncka
Signature:
Month: 10 Day: 28 Year: 22

Transporter 2 Printed/Typed Name: Hayden Hunt
Signature:
Month: 11 Day: 7 Year: 22

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: U.S. EPA ID Number
18b. Alternate Facility (or Generator)
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: James Christopher
Signature:
Month: 11 Day: 15 Year: 22

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

VEOLIA

Land Disposal Restriction Notification Form

Generator Name: RIVERVIEW INNOVATION & TECH

EPA ID Number: NYD088413077 Manifest: 001563135VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

This notice is also being provided in accordance with 6 NYCRR 376.1(g)(1).

Container Number: E1-40608700003-001 (1/ 1)

WIP / Approval Code:	1117750 / MARF3
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D018
Constituents (F001 - F005):	None
UHCs Present:	None
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

I hearby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature: X MG Reardon

Title: Superintendent Date: 10/28/22

Appendix H: Process Vessel Residual Quench Water

Process Vessel Residual Quench Water Analytical Results – Table 9

Table 6
Process Equipment Construction Completion Report
Process Vessel Quench Water
Riverview Innovation & Technology Campus Inc.,
Tonawanda, New York

ANALYTE	SAMPLE ID:	QUENCH BOX-09192022	
	LAB ID:	L2251188-01	
	COLLECTION DATE:	9/19/2022	
	SAMPLE MATRIX:	WATER	
	NY-AWQS (ug/l)	Process Vessel Quench Water	
VOLATILE ORGANICS BY GC/MS			
1,1,1-Trichloroethane	5	<29	U
1,1,2,2-Tetrachloroethane	5	<20	U
1,1,2-Trichloroethane	1	<34	U
1,1-Dichloroethane	5	<40	U
1,1-Dichloroethene	5	<31	U
1,2-Dichlorobenzene	3	<28	U
1,2-Dichloroethane	0.6	<47	U
1,2-Dichloropropane	1	<46	U
1,3-Dichlorobenzene	3	<27	U
1,4-Dichlorobenzene	3	<29	U
2-Butanone	50	<100	U
2-Chloroethylvinyl ether		<35	U
2-Hexanone	50	<55	U
4-Methyl-2-pentanone		<19	U
Acetone	50	<240	U
Acrolein	5	<180	U
Acrylonitrile	5	<33	U
Benzene	1	**1000**	
Bromodichloromethane	50	<28	U
Bromoform	50	<22	U
Bromomethane	5	<120	U
Carbon disulfide	60	<28	U
Carbon tetrachloride	5	<24	U
Chlorobenzene	5	<30	U
Chloroethane	5	<37	U
Chloroform	7	<38	U
Chloromethane		<100	U
cis-1,2-Dichloroethene	5	<17	U
cis-1,3-Dichloropropene	0.4	<34	U
Dibromochloromethane	50	<27	U
Dibromomethane	5	<23	U
Ethylbenzene	5	<28	U
Methylene chloride	5	<56	U
o-xylene	5	**84**	J
p/m-Xylene	5	**230**	
Styrene	5	**87**	J
Tetrachloroethene	5	<26	U
Toluene	5	**700**	
trans-1,2-Dichloroethene	5	<33	U
trans-1,3-Dichloropropene	0.4	<31	U
Trichloroethene	5	<33	U
Trichlorofluoromethane	5	<28	U
Vinyl acetate		<41	U
Vinyl chloride	2	<38	U
Xylenes, Total		**310**	J
Total VOCs		**2101**	-

Table 6
Process Equipment Construction Completion Report
Process Vessel Quench Water
Riverview Innovation & Technology Campus Inc.,
Tonawanda, New York

ANALYTE	SAMPLE ID:	QUENCH BOX-09192022	
	LAB ID:	L2251188-01	
	COLLECTION DATE:	9/19/2022	
	SAMPLE MATRIX:	WATER	
	NY-AWQS (ug/l)	Process Vessel Quench Water	
SEMIVOLATILE ORGANICS BY GC/MS			
1,2,4-Trichlorobenzene	5	<29.8	U
2,4,5-Trichlorophenol		<12.7	U
2,4,6-Trichlorophenol		<12.1	U
2,4-Dichlorophenol	1	<11.1	U
2,4-Dimethylphenol	50	**930**	
2,4-Dinitrophenol	10	<24.2	U
2,4-Dinitrotoluene	5	<12.7	U
2,6-Dinitrotoluene	5	<12.6	U
2-Chloronaphthalene	10	<6.38	U
2-Chlorophenol		<10.3	U
2-Methylnaphthalene		**1650**	
2-Methylphenol		**2160**	
2-Nitrophenol		<12.1	U
3,3'-Dichlorobenzidine	5	<9.14	U
3-Methylphenol/4-Methylphenol		**1640**	
4,6-Dinitro-o-cresol		<24	U
4-Bromophenyl phenyl ether		<8.94	U
4-Chloroaniline	5	<15.8	U
4-Chlorophenyl phenyl ether		<7.42	U
4-Nitrophenol		<16.7	U
Acenaphthene	20	**37**	J
Acenaphthylene		**646**	
Anthracene	50	**221**	
Azobenzene	5	<17.8	U
Benzidine	5	<242	U
Benzo(a)anthracene	0.002	**178**	
Benzo(a)pyrene	0	**100**	
Benzo(b)fluoranthene	0.002	**131**	
Benzo(ghi)perylene		**38.5**	J
Benzo(k)fluoranthene	0.002	**50.7**	
Benzoic Acid		<23.4	U
Benzyl Alcohol		**75.4**	
Bis(2-chloroethoxy)methane	5	<11.7	U
Bis(2-chloroethyl)ether	1	<12	U
Bis(2-chloroisopropyl)ether	5	<16.4	U
Bis(2-ethylhexyl)phthalate	5	<34	U
Butyl benzyl phthalate	50	<13.4	U
Chrysene	0.002	**186**	
Di-n-butylphthalate	50	<12.6	U
Di-n-octylphthalate	50	<12.7	U
Dibenzo(a,h)anthracene		**19.3**	J
Dibenzofuran		**266**	
Diethyl phthalate	50	<14.3	U
Dimethyl phthalate	50	<28	U

Table 6
Process Equipment Construction Completion Report
Process Vessel Quench Water
Riverview Innovation & Technology Campus Inc.,
Tonawanda, New York

ANALYTE	SAMPLE ID:	QUENCH BOX-09192022	
	LAB ID:	L2251188-01	
	COLLECTION DATE:	9/19/2022	
	SAMPLE MATRIX:	WATER	
	NY-AWQS (ug/l)	Process Vessel Quench Water	
Fluoranthene	50	**380**	
Fluorene	50	**335**	
Hexachlorobenzene	0.04	<19	U
Hexachlorobutadiene	0.5	<18.4	U
Hexachlorocyclopentadiene	5	<27.2	U
Hexachloroethane	5	<19.5	U
Indeno(1,2,3-cd)pyrene	0.002	**48.9**	
Isophorone	50	<10.9	U
n-Nitrosodi-n-propylamine		<12.6	U
n-Nitrosodimethylamine		<8.14	U
Naphthalene	10	**19300**	
NDPA/DPA	50	<15.7	U
Nitrobenzene	0.4	<15.8	U
p-Chloro-m-cresol		<10.7	U
Pentachlorophenol	1	<12.4	U
Phenanthrene	50	**694**	
Phenol	1	**500**	
Pyrene	50	**253**	
Total SVOCs		**29839.8**	-
POLYCHLORINATED BIPHENYLS BY GC			
Aroclor 1016	0.09	<0.008	U
Aroclor 1221	0.09	<0.011	U
Aroclor 1232	0.09	<0.023	U
Aroclor 1242	0.09	<0.018	U
Aroclor 1248	0.09	<0.023	U
Aroclor 1254	0.09	<0.008	U
Aroclor 1260	0.09	<0.017	U
PCBs, Total		<0.008	U
TOTAL METALS			
Aluminum, Total		**366**	
Antimony, Total	3	<7.1	U
Arsenic, Total	25	**2.6**	J
Barium, Total	1000	**105**	
Beryllium, Total	3	<0.9	U
Cadmium, Total	5	<1	U
Calcium, Total		**174000**	
Chromium, Total	50	**4.4**	J
Cobalt, Total		**8.6**	J
Copper, Total	200	**9.2**	J
Iron, Total	300	**17600**	
Lead, Total	25	**14.1**	
Magnesium, Total	35000	**13600**	
Manganese, Total	300	**5030**	
Mercury, Total	0.7	**3.57**	

Table 6
Process Equipment Construction Completion Report
Process Vessel Quench Water
Riverview Innovation & Technology Campus Inc.,
Tonawanda, New York

ANALYTE	SAMPLE ID:	QUENCH BOX-09192022	
	LAB ID:	L2251188-01	
	COLLECTION DATE:	9/19/2022	
	SAMPLE MATRIX:	WATER	
	NY-AWQS (ug/l)	Process Vessel Quench Water	
Nickel, Total	100	**15.9**	J
Potassium, Total		**19700**	
Selenium, Total	10	<3.5	U
Silver, Total	50	<2.8	U
Sodium, Total	20000	**20400**	
Thallium, Total	0.5	<2.5	U
Vanadium, Total		**7.9**	J
Zinc, Total	2000	**82.6**	
GENERAL CHEMISTRY			
BOD, 5 day		**160000**	
Cyanide, Total	200	**1160**	
Nitrogen, Ammonia		**196000**	
Phosphorus, Total		**217**	
Solids, Total Suspended		**54000**	
TPH, SGT-HEM		**3680**	
NY-AWQS: New York TOGS 111 Ambient Water Quality Standards & Guidance Values Criter			

Process Vessel Residual Quench Water Laboratory Report



ANALYTICAL REPORT

Lab Number:	L2251188
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	QUENCH BOX
Report Date:	10/10/22

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2251188-01	QUENCH BOX-09192022	WATER	3875 RIVER ROAD, TONAWANDA	09/19/22 08:00	09/19/22

Project Name:	RITC	**Lab Number:**	L2251188
Project Number:	QUENCH BOX	**Report Date:**	10/10/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: RITC **Lab Number:** L2251188
Project Number: QUENCH BOX **Report Date:** 10/10/22

Case Narrative (continued)

Report Submission
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of Total Phenols was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Volatile Organics by Method 624
L2251188-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.
The WG1689706-3 LCS recovery, associated with L2251188-01D, is above the acceptance criteria for vinyl acetate (142%); however, the associated samples are non-detect to the RL for this target analyte. The results of the original analysis are reported.
The WG1689706-5/-6 MS/MSD recoveries, performed on L2251188-01, are above the acceptance criteria for vinyl acetate (150%/158%); the associated LCS recovery is also outside the acceptance criteria. However, the associated sample is non-detect to the RL. The results of the original analysis are reported.
The WG1689706-6 MSD recovery, performed on L2251188-01, is above the acceptance criteria for 2-butanone (144%); however, the associated LCS recovery is within overall method allowances.

Semivolatile Organics by Method 625
L2251188-01D: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

BOD, 5 day
The WG1689911-2 LCS recovery for BOD, 5 day (116%), associated with L2251188-01, is outside the

Project Name:	RITC	**Lab Number:**	L2251188
Project Number:	QUENCH BOX	**Report Date:**	10/10/22

Case Narrative (continued)

acceptance criteria. Due to the expiration of the method required holding time, no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 10/10/22

ORGANICS

VOLATILES

Project Name: RITC **Lab Number:** L2251188

Project Number: QUENCH BOX **Report Date:** 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 09/20/22 13:16
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	100	56.	100
1,1-Dichloroethane	ND		ug/l	150	40.	100
Chloroform	ND		ug/l	100	38.	100
Carbon tetrachloride	ND		ug/l	100	24.	100
1,2-Dichloropropane	ND		ug/l	350	46.	100
Dibromochloromethane	ND		ug/l	100	27.	100
1,1,2-Trichloroethane	ND		ug/l	150	34.	100
2-Chloroethylvinyl ether	ND		ug/l	1000	35.	100
Tetrachloroethene	ND		ug/l	100	26.	100
Chlorobenzene	ND		ug/l	350	30.	100
Trichlorofluoromethane	ND		ug/l	500	28.	100
1,2-Dichloroethane	ND		ug/l	150	47.	100
1,1,1-Trichloroethane	ND		ug/l	200	29.	100
Bromodichloromethane	ND		ug/l	100	28.	100
trans-1,3-Dichloropropene	ND		ug/l	150	31.	100
cis-1,3-Dichloropropene	ND		ug/l	150	34.	100
Bromoform	ND		ug/l	100	22.	100
1,1,2,2-Tetrachloroethane	ND		ug/l	100	20.	100
Benzene	1000		ug/l	100	38.	100
Toluene	700		ug/l	100	31.	100
Ethylbenzene	ND		ug/l	100	28.	100
Chloromethane	ND		ug/l	500	100	100
Bromomethane	ND		ug/l	500	120	100
Vinyl chloride	ND		ug/l	100	38.	100
Chloroethane	ND		ug/l	200	37.	100
1,1-Dichloroethene	ND		ug/l	100	31.	100
trans-1,2-Dichloroethene	ND		ug/l	150	33.	100
cis-1,2-Dichloroethene	ND		ug/l	100	17.	100

Project Name: RITC **Lab Number:** L2251188

Project Number: QUENCH BOX **Report Date:** 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	100	33.	100
1,2-Dichlorobenzene	ND		ug/l	500	28.	100
1,3-Dichlorobenzene	ND		ug/l	500	27.	100
1,4-Dichlorobenzene	ND		ug/l	500	29.	100
p/m-Xylene	230		ug/l	200	30.	100
o-xylene	84	J	ug/l	100	34.	100
Xylenes, Total	310	J	ug/l	100	30.	100
Styrene	87	J	ug/l	100	37.	100
Acetone	ND		ug/l	1000	240	100
Carbon disulfide	ND		ug/l	500	28.	100
2-Butanone	ND		ug/l	1000	100	100
Vinyl acetate	ND		ug/l	1000	41.	100
4-Methyl-2-pentanone	ND		ug/l	1000	19.	100
2-Hexanone	ND		ug/l	1000	55.	100
Acrolein	ND		ug/l	800	180	100
Acrylonitrile	ND		ug/l	1000	33.	100
Dibromomethane	ND		ug/l	100	23.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	80		60-140
Fluorobenzene	95		60-140
4-Bromofluorobenzene	82		60-140

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 09/20/22 10:41
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689706-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
Trichlorofluoromethane	ND		ug/l	5.0	0.28
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17
Trichloroethene	ND		ug/l	1.0	0.33

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 09/20/22 10:41
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1689706-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
p/m-Xylene	ND		ug/l	2.0	0.30
o-xylene	ND		ug/l	1.0	0.34
Xylenes, Total	ND		ug/l	1.0	0.30
Styrene	ND		ug/l	1.0	0.37
Acetone	ND		ug/l	10	2.4
Carbon disulfide	ND		ug/l	5.0	0.28
2-Butanone	ND		ug/l	10	1.0
Vinyl acetate	ND		ug/l	10	0.41
4-Methyl-2-pentanone	ND		ug/l	10	0.19
2-Hexanone	ND		ug/l	10	0.55
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33
Dibromomethane	ND		ug/l	1.0	0.23

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	91		60-140
Fluorobenzene	95		60-140
4-Bromofluorobenzene	84		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689706-3								
Methylene chloride	115		-		60-140	-		28
1,1-Dichloroethane	110		-		50-150	-		49
Chloroform	100		-		70-135	-		54
Carbon tetrachloride	105		-		70-130	-		41
1,2-Dichloropropane	100		-		35-165	-		55
Dibromochloromethane	90		-		70-135	-		50
1,1,2-Trichloroethane	100		-		70-130	-		45
2-Chloroethylvinyl ether	110		-		1-225	-		71
Tetrachloroethene	75		-		70-130	-		39
Chlorobenzene	90		-		65-135	-		53
Trichlorofluoromethane	110		-		50-150	-		84
1,2-Dichloroethane	100		-		70-130	-		49
1,1,1-Trichloroethane	100		-		70-130	-		36
Bromodichloromethane	110		-		65-135	-		56
trans-1,3-Dichloropropene	110		-		50-150	-		86
cis-1,3-Dichloropropene	115		-		25-175	-		58
Bromoform	100		-		70-130	-		42
1,1,2,2-Tetrachloroethane	100		-		60-140	-		61
Benzene	95		-		65-135	-		61
Toluene	100		-		70-130	-		41
Ethylbenzene	100		-		60-140	-		63
Chloromethane	120		-		1-205	-		60
Bromomethane	75		-		15-185	-		61

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689706-3								
Vinyl chloride	115		-		5-195	-		66
Chloroethane	120		-		40-160	-		78
1,1-Dichloroethene	105		-		50-150	-		32
trans-1,2-Dichloroethene	95		-		70-130	-		45
cis-1,2-Dichloroethene	90		-		60-140	-		30
Trichloroethene	80		-		65-135	-		48
1,2-Dichlorobenzene	80		-		65-135	-		57
1,3-Dichlorobenzene	80		-		70-130	-		43
1,4-Dichlorobenzene	90		-		65-135	-		57
p/m-Xylene	92		-		60-140	-		30
o-xylene	85		-		60-140	-		30
Styrene	90		-		60-140	-		30
Acetone	102		-		40-160	-		30
Carbon disulfide	110		-		60-140	-		30
2-Butanone	114		-		60-140	-		30
Vinyl acetate	**142**	Q	-		60-140	-		30
4-Methyl-2-pentanone	124		-		60-140	-		30
2-Hexanone	128		-		60-140	-		30
Acrolein	120		-		60-140	-		30
Acrylonitrile	118		-		60-140	-		60
Dibromomethane	85		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1689706-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	94				60-140
Fluorobenzene	87				60-140
4-Bromofluorobenzene	85				60-140

Matrix Spike Analysis

Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689706-5 WG1689706-6 QC Sample: L2251188-01 Client ID: QUENCH BOX-09192022												
Methylene chloride	ND	2000	2400	120		2400	120		1-221	0		28
1,1-Dichloroethane	ND	2000	2600	130		2700	135		59-155	4		49
Chloroform	ND	2000	2100	105		2200	110		51-138	5		54
Carbon tetrachloride	ND	2000	2000	100		2100	105		70-140	5		41
1,2-Dichloropropane	ND	2000	2100	105		2200	110		1-210	5		55
Dibromochloromethane	ND	2000	1500	75		1600	80		53-149	6		50
1,1,2-Trichloroethane	ND	2000	1800	90		1900	95		52-150	5		45
2-Chloroethylvinyl ether	ND	2000	1800	90		2000	100		1-305	11		71
Tetrachloroethene	ND	2000	1300	65		1300	65		64-148	0		39
Chlorobenzene	ND	2000	1400	70		1500	75		37-160	7		53
Trichlorofluoromethane	ND	2000	2800	140		2600	130		17-181	7		84
1,2-Dichloroethane	ND	2000	2300	115		2400	120		49-155	4		49
1,1,1-Trichloroethane	ND	2000	2000	100		2000	100		52-162	0		36
Bromodichloromethane	ND	2000	1800	90		1800	90		35-155	0		56
trans-1,3-Dichloropropene	ND	2000	1600	80		1700	85		17-183	6		86
cis-1,3-Dichloropropene	ND	2000	1600	80		1900	95		1-227	17		58
Bromoform	ND	2000	1600	80		1600	80		45-169	0		42
1,1,2,2-Tetrachloroethane	ND	2000	1900	95		1900	95		45-157	0		61
Benzene	1000	2000	3100	105		3100	105		37-151	0		61
Toluene	700	2000	2500	90		2600	95		47-150	4		41
Ethylbenzene	ND	2000	1800	90		1800	90		37-162	0		63
Chloromethane	ND	2000	2800	140		2800	140		1-273	0		60
Bromomethane	ND	2000	1600	80		1600	80		1-242	0		61

Matrix Spike Analysis

Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689706-5 WG1689706-6 QC Sample: L2251188-01 Client ID: QUENCH BOX-09192022												
Vinyl chloride	ND	2000	3000	150		2900	145		1-251	3		66
Chloroethane	ND	2000	2900	145		2900	145		14-230	0		78
1,1-Dichloroethene	ND	2000	2200	110		2300	115		1-234	4		32
trans-1,2-Dichloroethene	ND	2000	1900	95		2000	100		54-156	5		45
cis-1,2-Dichloroethene	ND	2000	1800	90		1900	95		60-140	5		30
Trichloroethene	ND	2000	1500	75		1500	75		70-157	0		48
1,2-Dichlorobenzene	ND	2000	1400	70		1400	70		18-190	0		57
1,3-Dichlorobenzene	ND	2000	1400	70		1400	70		59-156	0		43
1,4-Dichlorobenzene	ND	2000	1400	70		1400	70		18-190	0		57
p/m-Xylene	230	4000	4000	94		3800	89		60-140	5		30
o-xylene	84J	2000	1700	85		1700	85		60-140	0		30
Styrene	87J	2000	1900	95		1900	95		60-140	0		30
Acetone	ND	5000	6200	124		6900	138		40-160	11		30
Carbon disulfide	ND	2000	2300	115		2300	115		60-140	0		30
2-Butanone	ND	5000	6400	128		7200	**144**	Q	60-140	12		30
Vinyl acetate	ND	4000	6000	**150**	Q	6300	**158**	Q	60-140	5		30
4-Methyl-2-pentanone	ND	5000	5100	102		5600	112		60-140	9		30
2-Hexanone	ND	5000	4900	98		5400	108		60-140	10		30
Acrolein	ND	4000	4200	105		4500	113		40-160	7		30
Acrylonitrile	ND	4000	5200	130		5600	140		40-160	7		60
Dibromomethane	ND	2000	1700	85		1800	90		70-130	6		30

Matrix Spike Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689706-5 WG1689706-6 QC Sample: L2251188-01 Client ID: QUENCH BOX-09192022												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
4-Bromofluorobenzene	84		86		60-140
Fluorobenzene	95		98		60-140
Pentafluorobenzene	85		91		60-140

SEMIVOLATILES

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D2
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 09/28/22 16:55
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/23/22 16:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	19300		ug/l	400	179.	200

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 09/28/22 15:20
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/23/22 16:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	37.0	J	ug/l	40.0	8.14	20
Benzidine[1]	ND		ug/l	400	242.	20
1,2,4-Trichlorobenzene	ND		ug/l	100	29.8	20
Hexachlorobenzene	ND		ug/l	40.0	19.0	20
Bis(2-chloroethyl)ether	ND		ug/l	40.0	12.0	20
2-Chloronaphthalene	ND		ug/l	40.0	6.38	20
3,3'-Dichlorobenzidine	ND		ug/l	100	9.14	20
2,4-Dinitrotoluene	ND		ug/l	100	12.7	20
2,6-Dinitrotoluene	ND		ug/l	100	12.6	20
Azobenzene[1]	ND		ug/l	40.0	17.8	20
Fluoranthene	380		ug/l	40.0	14.7	20
4-Chlorophenyl phenyl ether	ND		ug/l	40.0	7.42	20
4-Bromophenyl phenyl ether	ND		ug/l	40.0	8.94	20
Bis(2-chloroisopropyl)ether	ND		ug/l	40.0	16.4	20
Bis(2-chloroethoxy)methane	ND		ug/l	100	11.7	20
Hexachlorobutadiene	ND		ug/l	40.0	18.4	20
Hexachlorocyclopentadiene[1]	ND		ug/l	200	27.2	20
Hexachloroethane	ND		ug/l	40.0	19.5	20
Isophorone	ND		ug/l	100	10.9	20
Naphthalene	12700	E	ug/l	40.0	17.9	20
Nitrobenzene	ND		ug/l	40.0	15.8	20
NDPA/DPA[1]	ND		ug/l	40.0	15.7	20
n-Nitrosodi-n-propylamine	ND		ug/l	100	12.6	20
Bis(2-ethylhexyl)phthalate	ND		ug/l	44.0	34.0	20
Butyl benzyl phthalate	ND		ug/l	100	13.4	20
Di-n-butylphthalate	ND		ug/l	100	12.6	20
Di-n-octylphthalate	ND		ug/l	100	12.7	20
Diethyl phthalate	ND		ug/l	100	14.3	20

Project Name: RITC **Lab Number:** L2251188

Project Number: QUENCH BOX **Report Date:** 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dimethyl phthalate	ND		ug/l	100	28.0	20
Benzo(a)anthracene	178		ug/l	40.0	13.3	20
Benzo(a)pyrene	100		ug/l	40.0	12.2	20
Benzo(b)fluoranthene	131		ug/l	40.0	14.8	20
Benzo(k)fluoranthene	50.7		ug/l	40.0	14.8	20
Chrysene	186		ug/l	40.0	13.4	20
Acenaphthylene	646		ug/l	40.0	18.6	20
Anthracene	221		ug/l	40.0	15.8	20
Benzo(ghi)perylene	38.5	J	ug/l	40.0	13.4	20
Fluorene	335		ug/l	40.0	18.5	20
Phenanthrene	694		ug/l	40.0	16.4	20
Dibenzo(a,h)anthracene	19.3	J	ug/l	40.0	13.7	20
Indeno(1,2,3-cd)pyrene	48.9		ug/l	40.0	12.7	20
Pyrene	253		ug/l	40.0	14.6	20
4-Chloroaniline[1]	ND		ug/l	100	15.8	20
Dibenzofuran[1]	266		ug/l	40.0	7.46	20
2-Methylnaphthalene[1]	1650		ug/l	40.0	7.02	20
n-Nitrosodimethylamine[1]	ND		ug/l	40.0	8.14	20
2,4,6-Trichlorophenol	ND		ug/l	100	12.1	20
p-Chloro-m-cresol[1]	ND		ug/l	40.0	10.7	20
2-Chlorophenol	ND		ug/l	40.0	10.3	20
2,4-Dichlorophenol	ND		ug/l	100	11.1	20
2,4-Dimethylphenol	930		ug/l	100	17.0	20
2-Nitrophenol	ND		ug/l	100	12.1	20
4-Nitrophenol	ND		ug/l	200	16.7	20
2,4-Dinitrophenol	ND		ug/l	400	24.2	20
4,6-Dinitro-o-cresol	ND		ug/l	200	24.0	20
Pentachlorophenol	ND		ug/l	100	12.4	20
Phenol	500		ug/l	100	5.24	20
2-Methylphenol[1]	2160		ug/l	100	15.5	20
3-Methylphenol/4-Methylphenol[1]	1640		ug/l	100	10.2	20
2,4,5-Trichlorophenol[1]	ND		ug/l	100	12.7	20
Benzoic Acid[1]	ND		ug/l	1000	23.4	20
Benzyl Alcohol[1]	75.4		ug/l	40.0	9.80	20

Project Name: RITC **Lab Number:** L2251188

Project Number: QUENCH BOX **Report Date:** 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 D
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	25-87
Phenol-d6	**0**	Q	16-65
Nitrobenzene-d5	**0**	Q	42-122
2-Fluorobiphenyl	**0**	Q	46-121
2,4,6-Tribromophenol	**0**	Q	45-128
4-Terphenyl-d14	**0**	Q	47-138

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/23/22 20:27
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/23/22 04:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691046-1					
Acenaphthene	ND		ug/l	2.00	0.407
Benzidine[1]	ND		ug/l	20.0	12.1
1,2,4-Trichlorobenzene	ND		ug/l	5.00	1.49
Hexachlorobenzene	ND		ug/l	2.00	0.952
Bis(2-chloroethyl)ether	ND		ug/l	2.00	0.600
2-Chloronaphthalene	ND		ug/l	2.00	0.319
3,3'-Dichlorobenzidine	ND		ug/l	5.00	0.457
2,4-Dinitrotoluene	ND		ug/l	5.00	0.636
2,6-Dinitrotoluene	ND		ug/l	5.00	0.631
Azobenzene[1]	ND		ug/l	2.00	0.889
Fluoranthene	ND		ug/l	2.00	0.736
4-Chlorophenyl phenyl ether	ND		ug/l	2.00	0.371
4-Bromophenyl phenyl ether	ND		ug/l	2.00	0.447
Bis(2-chloroisopropyl)ether	ND		ug/l	2.00	0.822
Bis(2-chloroethoxy)methane	ND		ug/l	5.00	0.585
Hexachlorobutadiene	ND		ug/l	2.00	0.921
Hexachlorocyclopentadiene[1]	ND		ug/l	10.0	1.36
Hexachloroethane	ND		ug/l	2.00	0.973
Isophorone	ND		ug/l	5.00	0.546
Naphthalene	ND		ug/l	2.00	0.896
Nitrobenzene	ND		ug/l	2.00	0.788
NDPA/DPA[1]	ND		ug/l	2.00	0.783
n-Nitrosodi-n-propylamine	ND		ug/l	5.00	0.630
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	1.70
Butyl benzyl phthalate	ND		ug/l	5.00	0.670
Di-n-butylphthalate	ND		ug/l	5.00	0.631
Di-n-octylphthalate	ND		ug/l	5.00	0.633
Diethyl phthalate	ND		ug/l	5.00	0.717
Dimethyl phthalate	ND		ug/l	5.00	1.40

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/23/22 20:27
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/23/22 04:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691046-1					
Benzo(a)anthracene	ND		ug/l	2.00	0.665
Benzo(a)pyrene	ND		ug/l	2.00	0.610
Benzo(b)fluoranthene	ND		ug/l	2.00	0.741
Benzo(k)fluoranthene	ND		ug/l	2.00	0.739
Chrysene	ND		ug/l	2.00	0.668
Acenaphthylene	ND		ug/l	2.00	0.930
Anthracene	ND		ug/l	2.00	0.791
Benzo(ghi)perylene	ND		ug/l	2.00	0.672
Fluorene	ND		ug/l	2.00	0.927
Phenanthrene	ND		ug/l	2.00	0.818
Dibenzo(a,h)anthracene	ND		ug/l	2.00	0.687
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.00	0.633
Pyrene	ND		ug/l	2.00	0.728
4-Chloroaniline[1]	ND		ug/l	5.00	0.790
Dibenzofuran[1]	ND		ug/l	2.00	0.373
2-Methylnaphthalene[1]	ND		ug/l	2.00	0.351
n-Nitrosodimethylamine[1]	ND		ug/l	2.00	0.407
2,4,6-Trichlorophenol	ND		ug/l	5.00	0.607
p-Chloro-m-cresol[1]	ND		ug/l	2.00	0.533
2-Chlorophenol	ND		ug/l	2.00	0.513
2,4-Dichlorophenol	ND		ug/l	5.00	0.554
2,4-Dimethylphenol	ND		ug/l	5.00	0.851
2-Nitrophenol	ND		ug/l	5.00	0.604
4-Nitrophenol	ND		ug/l	10.0	0.834
2,4-Dinitrophenol	ND		ug/l	20.0	1.21
4,6-Dinitro-o-cresol	ND		ug/l	10.0	1.20
Pentachlorophenol	ND		ug/l	5.00	0.622
Phenol	ND		ug/l	5.00	0.262
2-Methylphenol[1]	ND		ug/l	5.00	0.773

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/23/22 20:27
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/23/22 04:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691046-1					
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.00	0.511
2,4,5-Trichlorophenol[1]	ND		ug/l	5.00	0.637
Benzoic Acid[1]	ND		ug/l	50.0	1.17
Benzyl Alcohol[1]	ND		ug/l	2.00	0.490

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		25-87
Phenol-d6	32		16-65
Nitrobenzene-d5	71		42-122
2-Fluorobiphenyl	74		46-121
2,4,6-Tribromophenol	77		45-128
4-Terphenyl-d14	83		47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1691046-2								
Acenaphthene	87		-		60-132	-		48
Benzidine[1]	56		-		0-70	-		30
1,2,4-Trichlorobenzene	77		-		57-130	-		50
Hexachlorobenzene	87		-		8-142	-		55
Bis(2-chloroethyl)ether	83		-		43-126	-		108
2-Chloronaphthalene	86		-		65-120	-		24
3,3'-Dichlorobenzidine	43		-		8-213	-		108
2,4-Dinitrotoluene	90		-		48-127	-		42
2,6-Dinitrotoluene	92		-		68-137	-		48
Azobenzene[1]	92		-		44-115	-		23
Fluoranthene	94		-		43-121	-		66
4-Chlorophenyl phenyl ether	86		-		38-145	-		61
4-Bromophenyl phenyl ether	89		-		65-120	-		43
Bis(2-chloroisopropyl)ether	86		-		63-139	-		76
Bis(2-chloroethoxy)methane	89		-		49-165	-		54
Hexachlorobutadiene	68		-		38-120	-		62
Hexachlorocyclopentadiene[1]	50		-		7-118	-		35
Hexachloroethane	72		-		55-120	-		52
Isophorone	86		-		47-180	-		93
Naphthalene	84		-		36-120	-		65
Nitrobenzene	86		-		54-158	-		62
NDPA/DPA[1]	92		-		45-112	-		36
n-Nitrosodi-n-propylamine	87		-		14-198	-		87

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1691046-2								
Bis(2-ethylhexyl)phthalate	104		-		29-137	-		82
Butyl benzyl phthalate	96		-		1-140	-		60
Di-n-butylphthalate	100		-		8-120	-		47
Di-n-octylphthalate	105		-		19-132	-		69
Diethyl phthalate	93		-		1-120	-		100
Dimethyl phthalate	93		-		1-120	-		183
Benzo(a)anthracene	91		-		42-133	-		53
Benzo(a)pyrene	91		-		32-148	-		72
Benzo(b)fluoranthene	90		-		42-140	-		71
Benzo(k)fluoranthene	97		-		25-146	-		63
Chrysene	93		-		44-140	-		87
Acenaphthylene	90		-		54-126	-		74
Anthracene	96		-		43-120	-		66
Benzo(ghi)perylene	92		-		1-195	-		97
Fluorene	91		-		70-120	-		38
Phenanthrene	91		-		65-120	-		39
Dibenzo(a,h)anthracene	93		-		1-200	-		126
Indeno(1,2,3-cd)pyrene	98		-		1-151	-		99
Pyrene	94		-		70-120	-		49
4-Chloroaniline[1]	79		-		10-100	-		53
Dibenzofuran[1]	89		-		23-126	-		22
2-Methylnaphthalene[1]	86		-		40-109	-		18
n-Nitrosodimethylamine[1]	52		-		15-68	-		17

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1691046-2								
2,4,6-Trichlorophenol	92		-		52-129	-		58
p-Chloro-m-cresol[1]	87		-		68-130	-		73
2-Chlorophenol	80		-		36-120	-		61
2,4-Dichlorophenol	89		-		53-122	-		50
2,4-Dimethylphenol	95		-		42-120	-		58
2-Nitrophenol	82		-		45-167	-		55
4-Nitrophenol	52		-		13-129	-		131
2,4-Dinitrophenol	81		-		1-173	-		132
4,6-Dinitro-o-cresol	90		-		56-130	-		203
Pentachlorophenol	89		-		38-152	-		86
Phenol	40		-		17-120	-		64
2-Methylphenol[1]	74		-		38-102	-		23
3-Methylphenol/4-Methylphenol[1]	67		-		35-103	-		26
2,4,5-Trichlorophenol[1]	95		-		47-126	-		28
Benzoic Acid[1]	32		-		2-55	-		27
Benzyl Alcohol[1]	75		-		31-103	-		23

Lab Control Sample Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1691046-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	57				25-87
Phenol-d6	41				16-65
Nitrobenzene-d5	86				42-122
2-Fluorobiphenyl	89				46-121
2,4,6-Tribromophenol	92				45-128
4-Terphenyl-d14	95				47-138

PCBS

Project Name: RITC
Project Number: QUENCH BOX
Lab Number: L2251188
Report Date: 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 127,608.3
Analytical Date: 10/10/22 07:07
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 10/09/22 13:42
Cleanup Method: EPA 3665A
Cleanup Date: 10/10/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/10/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.050	0.008	1	A
Aroclor 1221	ND		ug/l	0.050	0.011	1	A
Aroclor 1232	ND		ug/l	0.050	0.023	1	A
Aroclor 1242	ND		ug/l	0.050	0.018	1	A
Aroclor 1248	ND		ug/l	0.050	0.023	1	A
Aroclor 1254	ND		ug/l	0.050	0.008	1	A
Aroclor 1260	ND		ug/l	0.050	0.017	1	A
PCBs, Total	ND		ug/l	0.050	0.008	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		37-123	A
Decachlorobiphenyl	40		38-114	A
2,4,5,6-Tetrachloro-m-xylene	65		37-123	B
Decachlorobiphenyl	51		38-114	B

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 10/10/22 06:50
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 10/09/22 13:42
Cleanup Method: EPA 3665A
Cleanup Date: 10/10/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/10/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1697269-1						
Aroclor 1016	ND		ug/l	0.050	0.008	A
Aroclor 1221	ND		ug/l	0.050	0.011	A
Aroclor 1232	ND		ug/l	0.050	0.023	A
Aroclor 1242	ND		ug/l	0.050	0.018	A
Aroclor 1248	ND		ug/l	0.050	0.023	A
Aroclor 1254	ND		ug/l	0.050	0.008	A
Aroclor 1260	ND		ug/l	0.050	0.017	A
PCBs, Total	ND		ug/l	0.050	0.008	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		37-123	A
Decachlorobiphenyl	105		38-114	A
2,4,5,6-Tetrachloro-m-xylene	87		37-123	B
Decachlorobiphenyl	101		38-114	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1697269-2									
Aroclor 1016	100		-		50-140	-		36	A
Aroclor 1260	104		-		8-140	-		38	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87				37-123	A
Decachlorobiphenyl	**120**	Q			38-114	A
2,4,5,6-Tetrachloro-m-xylene	88				37-123	B
Decachlorobiphenyl	**116**	Q			38-114	B

METALS

Project Name: RITC **Lab Number:** L2251188

Project Number: QUENCH BOX **Report Date:** 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01 Date Collected: 09/19/22 08:00

Client ID: QUENCH BOX-09192022 Date Received: 09/19/22

Sample Location: 3875 RIVER ROAD, TONAWANDA Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.366		mg/l	0.100	0.0318	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Antimony, Total	ND		mg/l	0.0500	0.0071	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Arsenic, Total	0.0026	J	mg/l	0.0050	0.0019	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Barium, Total	0.105		mg/l	0.0100	0.0021	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Beryllium, Total	ND		mg/l	0.0050	0.0009	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Cadmium, Total	ND		mg/l	0.0050	0.0010	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Calcium, Total	174.		mg/l	0.100	0.0350	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Chromium, Total	0.0044	J	mg/l	0.0100	0.0021	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Cobalt, Total	0.0086	J	mg/l	0.0200	0.0017	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Copper, Total	0.0092	J	mg/l	0.0100	0.0022	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Iron, Total	17.6		mg/l	0.0500	0.0090	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Lead, Total	0.0141		mg/l	0.0100	0.0027	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Magnesium, Total	13.6		mg/l	0.100	0.0153	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Manganese, Total	5.03		mg/l	0.0100	0.0016	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Mercury, Total	0.00357		mg/l	0.00020	0.00009	1	09/22/22 07:00	09/22/22 20:00	EPA 245.1	3,245.1	DR
Nickel, Total	0.0159	J	mg/l	0.0250	0.0024	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Potassium, Total	19.7		mg/l	2.50	0.237	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Selenium, Total	ND		mg/l	0.0100	0.0035	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Silver, Total	ND		mg/l	0.0070	0.0028	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Sodium, Total	20.4		mg/l	2.00	0.120	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Thallium, Total	ND		mg/l	0.0200	0.0025	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Vanadium, Total	0.0079	J	mg/l	0.0100	0.0020	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW
Zinc, Total	0.0826		mg/l	0.0500	0.0021	1	09/21/22 14:31	10/10/22 10:09	EPA 3005A	19,200.7	EW

Project Name: RITC
Project Number: QUENCH BOX
Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1690213-1										
Aluminum, Total	ND		mg/l	0.100	0.0318	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Antimony, Total	ND		mg/l	0.0500	0.0071	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Arsenic, Total	0.0020	J	mg/l	0.0050	0.0019	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Barium, Total	ND		mg/l	0.0100	0.0021	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Beryllium, Total	ND		mg/l	0.0050	0.0009	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Cadmium, Total	ND		mg/l	0.0050	0.0010	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Calcium, Total	ND		mg/l	0.100	0.0350	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Chromium, Total	ND		mg/l	0.0100	0.0021	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Cobalt, Total	ND		mg/l	0.0200	0.0017	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Copper, Total	ND		mg/l	0.0100	0.0022	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Iron, Total	ND		mg/l	0.0500	0.0090	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Lead, Total	ND		mg/l	0.0100	0.0027	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Magnesium, Total	ND		mg/l	0.100	0.0153	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Manganese, Total	ND		mg/l	0.0100	0.0016	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Nickel, Total	ND		mg/l	0.0250	0.0024	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Potassium, Total	ND		mg/l	2.50	0.237	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Selenium, Total	ND		mg/l	0.0100	0.0035	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Silver, Total	ND		mg/l	0.0070	0.0028	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Sodium, Total	ND		mg/l	2.00	0.120	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Thallium, Total	ND		mg/l	0.0200	0.0025	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Vanadium, Total	ND		mg/l	0.0100	0.0020	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV
Zinc, Total	ND		mg/l	0.0500	0.0021	1	09/21/22 14:31	09/27/22 16:38	19,200.7	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1690528-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/22/22 07:00	09/22/22 19:16	3,245.1	DR

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1690213-2								
Aluminum, Total	102		-		85-115	-		
Antimony, Total	102		-		85-115	-		
Arsenic, Total	111		-		85-115	-		
Barium, Total	100		-		85-115	-		
Beryllium, Total	105		-		85-115	-		
Cadmium, Total	104		-		85-115	-		
Calcium, Total	106		-		85-115	-		
Chromium, Total	101		-		85-115	-		
Cobalt, Total	100		-		85-115	-		
Copper, Total	100		-		85-115	-		
Iron, Total	102		-		85-115	-		
Lead, Total	101		-		85-115	-		
Magnesium, Total	106		-		85-115	-		
Manganese, Total	98		-		85-115	-		
Nickel, Total	97		-		85-115	-		
Potassium, Total	105		-		85-115	-		
Selenium, Total	111		-		85-115	-		
Silver, Total	101		-		85-115	-		
Sodium, Total	105		-		85-115	-		
Thallium, Total	104		-		85-115	-		
Vanadium, Total	101		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: QUENCH BOX

Lab Number: L2251188

Report Date: 10/10/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1690213-2					
Zinc, Total	100	-	85-115	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1690528-2					
Mercury, Total	89	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-3 QC Sample: L2251477-01 Client ID: MS Sample												
Aluminum, Total	9.73	2	12.3	**128**	Q	-	-		75-125	-		20
Antimony, Total	ND	0.5	0.391	78		-	-		75-125	-		20
Arsenic, Total	0.058	0.12	0.178	100		-	-		75-125	-		20
Barium, Total	8.28	2	10.3	101		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.050	99		-	-		75-125	-		20
Cadmium, Total	ND	0.053	0.051	96		-	-		75-125	-		20
Calcium, Total	213	10	223	100		-	-		75-125	-		20
Chromium, Total	0.026	0.2	0.215	95		-	-		75-125	-		20
Cobalt, Total	0.015J	0.5	0.467	93		-	-		75-125	-		20
Copper, Total	0.018	0.25	0.260	97		-	-		75-125	-		20
Iron, Total	25.1	1	25.6	**50**	Q	-	-		75-125	-		20
Lead, Total	0.019	0.53	0.497	90		-	-		75-125	-		20
Magnesium, Total	28.3	10	37.7	94		-	-		75-125	-		20
Manganese, Total	11.5	0.5	12.0	100		-	-		75-125	-		20
Nickel, Total	0.038	0.5	0.469	86		-	-		75-125	-		20
Potassium, Total	46.2	10	56.3	101		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.094	78		-	-		75-125	-		20
Silver, Total	ND	0.05	0.051	102		-	-		75-125	-		20
Sodium, Total	346	10	357	110		-	-		75-125	-		20
Thallium, Total	0.013J	0.12	0.113	94		-	-		75-125	-		20
Vanadium, Total	0.014	0.5	0.498	97		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-3 QC Sample: L2251477-01 Client ID: MS Sample									
Zinc, Total	0.056	0.5	0.516	92	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-7 QC Sample: L2251477-02 Client ID: MS Sample										
Aluminum, Total	180	2	189	**450**	Q	-	-	75-125	-	20
Antimony, Total	0.031J	0.5	0.118	**24**	Q	-	-	75-125	-	20
Arsenic, Total	0.030	0.12	0.108	**65**	Q	-	-	75-125	-	20
Barium, Total	6.61	2	8.52	96		-	-	75-125	-	20
Beryllium, Total	0.013	0.05	0.0625	99		-	-	75-125	-	20
Cadmium, Total	0.009	0.053	0.0607	98		-	-	75-125	-	20
Calcium, Total	539.	10	550	110		-	-	75-125	-	20
Chromium, Total	0.316	0.2	0.506	95		-	-	75-125	-	20
Cobalt, Total	0.232	0.5	0.708	95		-	-	75-125	-	20
Copper, Total	0.308	0.25	0.556	99		-	-	75-125	-	20
Iron, Total	291.	1	305	**1400**	Q	-	-	75-125	-	20
Lead, Total	0.245	0.53	0.733	92		-	-	75-125	-	20
Magnesium, Total	111.	10	120	90		-	-	75-125	-	20
Manganese, Total	20.2	0.5	20.9	**140**	Q	-	-	75-125	-	20
Nickel, Total	0.362	0.5	0.825	93		-	-	75-125	-	20
Potassium, Total	24.3	10	34.0	97		-	-	75-125	-	20
Selenium, Total	ND	0.12	0.0397	**33**	Q	-	-	75-125	-	20
Silver, Total	ND	0.05	0.0455	91		-	-	75-125	-	20
Sodium, Total	32.5	10	43.4	109		-	-	75-125	-	20
Thallium, Total	0.004J	0.12	0.103	86		-	-	75-125	-	20
Vanadium, Total	0.195	0.5	0.646	90		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-7 QC Sample: L2251477-02 Client ID: MS Sample									
Zinc, Total	1.07	0.5	1.55	96	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690528-3 QC Sample: L2250686-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00394	79	-	-	70-130	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690528-5 QC Sample: L2250686-02 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00415	83	-	-	70-130	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-4 QC Sample: L2251477-01 Client ID: DUP Sample						
Calcium, Total	213	211	mg/l	1		20
Iron, Total	25.1	25.0	mg/l	0		20
Magnesium, Total	28.3	28.0	mg/l	1		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690213-8 QC Sample: L2251477-02 Client ID: DUP Sample						
Calcium, Total	539.	513	mg/l	5		20
Iron, Total	291.	326	mg/l	11		20
Magnesium, Total	111.	114	mg/l	3		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690528-4 QC Sample: L2250686-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1690528-6 QC Sample: L2250686-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

SAMPLE RESULTS

Lab ID: L2251188-01
Client ID: QUENCH BOX-09192022
Sample Location: 3875 RIVER ROAD, TONAWANDA

Date Collected: 09/19/22 08:00
Date Received: 09/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	54.		mg/l	1.0	NA	1	-	09/23/22 19:30	121,2540D	MDG
Cyanide, Total	1.16		mg/l	0.025	0.009	5	09/21/22 09:05	09/21/22 15:38	121,4500CN-CE	JR
Nitrogen, Ammonia	196.		mg/l	3.75	1.20	50	10/04/22 12:35	10/04/22 19:48	44,350.1	AT
Phosphorus, Total	0.217		mg/l	0.010	0.004	1	10/05/22 13:30	10/06/22 09:14	121,4500P-E	AAA
BOD, 5 day	160		mg/l	60	NA	30	09/21/22 00:23	09/25/22 18:29	121,5210B	SH
TPH, SGT-HEM	3.68		mg/l	3.60	1.12	.9	10/09/22 21:45	10/09/22 22:45	140,1664B	TL

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1689911-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	09/21/22 00:23	09/25/22 18:29	121,5210B	SH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1689918-1										
Cyanide, Total	ND		mg/l	0.005	0.002	1.15	09/21/22 09:05	09/21/22 15:11	121,4500CN-CE	JR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1691431-1										
Solids, Total Suspended	ND		mg/l	1.0	NA	1	-	09/23/22 19:30	121,2540D	MD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1695129-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	10/04/22 12:35	10/04/22 19:31	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1695641-1										
Phosphorus, Total	ND		mg/l	0.010	0.004	1	10/05/22 13:30	10/06/22 09:07	121,4500P-E	AA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1697294-1										
TPH, SGT-HEM	ND		mg/l	4.00	1.24	1	10/09/22 21:45	10/09/22 22:45	140,1664B	TL

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1689911-2								
BOD, 5 day	**116**	Q	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1689918-2								
Cyanide, Total	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1691431-2								
Solids, Total Suspended	102		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1695129-2								
Nitrogen, Ammonia	98		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1695641-2								
Phosphorus, Total	103		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1697294-2								
TPH	83		-		64-132	-		34

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689911-3 QC Sample: L2251141-06 Client ID: MS Sample												
BOD, 5 day	ND	100	130	130		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689918-3 QC Sample: L2251036-05 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.109	**54**	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695129-4 QC Sample: L2253447-03 Client ID: MS Sample												
Nitrogen, Ammonia	3.80	4	7.16	**84**	Q	-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695641-4 QC Sample: L2251082-01 Client ID: MS Sample												
Phosphorus, Total	0.127	0.5	0.602	95		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1697294-4 QC Sample: L2253197-01 Client ID: MS Sample												
TPH	ND	19.2	15.2	79		-	-		64-132	-		34

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689911-4 QC Sample: L2251141-06 Client ID: DUP Sample						
BOD, 5 day	ND	ND	mg/l	NC		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1689918-4 QC Sample: L2251036-06 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1691431-3 QC Sample: L2251279-01 Client ID: DUP Sample						
Solids, Total Suspended	960	1000	mg/l	4		32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695129-3 QC Sample: L2253447-03 Client ID: DUP Sample						
Nitrogen, Ammonia	3.80	3.68	mg/l	3		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695641-3 QC Sample: L2251082-01 Client ID: DUP Sample						
Phosphorus, Total	0.127	0.129	mg/l	2		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1697294-3 QC Sample: L2251381-02 Client ID: DUP Sample						
TPH	1.56J	ND	mg/l	NC		34

Project Name: RITC
Project Number: QUENCH BOX

Lab Number: L2251188
Report Date: 10/10/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2251188-01A	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2251188-01B	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2251188-01C	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(3)
L2251188-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		BA-UI(180),SB-UI(180),NI-UI(180),ZN-UI(180),CA-UI(180),AG-UI(180),CO-UI(180),K-UI(180),MG-UI(180),FE-UI(180),SE-UI(180),HG-U(28),CD-UI(180),AL-UI(180),BE-UI(180),CR-UI(180),NA-UI(180),MN-UI(180),V-UI(180),CU-UI(180),AS-UI(180),TL-UI(180),PB-UI(180)
L2251188-01E	Plastic 250ml NaOH preserved	A	>12	>12	3.4	Y	Absent		TCN-4500(14)
L2251188-01F	Plastic 500ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		TPHOS-4500(28),NH3-350(28)
L2251188-01G	Plastic 500ml unpreserved	A	7	7	3.4	Y	Absent		BOD-5210(2)
L2251188-01H	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSS-2540-LOW(7)
L2251188-01I	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPCB-608-2L(365)
L2251188-01J	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPCB-608-2L(365)
L2251188-01K	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPCB-608-2L(365)
L2251188-01L	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		NYPCB-608-2L(365)
L2251188-01M	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		625.1(7)
L2251188-01N	Amber 1000ml Na2S2O3	A	7	7	3.4	Y	Absent		625.1(7)
L2251188-01O	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		TPH-1664(28)
L2251188-01P	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		TPH-1664(28)
L2251188-01Q	Amber 1000ml H2SO4 preserved	A	<4	<4	3.4	Y	Absent		SUB-TPHENOL(28)

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2251188
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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

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Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

127 Method 608.3: Organochlorine Pesticides and PCBs by GC/HSD, EPA 821-R-16-009, December 2016.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.

140 Method 1664,Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/20/22

ALPHA Job #: L2251188

Client Information

Client: INVENTUM ENG
Address: 441 CARLISLE DR SUITE C, HERNDON VA 20170
Phone: 585-734-5255
Fax: john.black@inventumeng.com
Email: roxanne.birx@" "

Project Information

Project Name: RITC
Project Location: 3875 RIVER ROAD, TONAWANDA
Project # QUENCH BOX
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 624.1	TCL SVOCs 625.1	SGT-HEM 1664 TCN 4500	BOD 5200 TSS 2540	PHOS PHOROUS 4500	PHENOL 420.1	PCBs 608.3	AMMONIA 350.1	TAL METALS + Hg			Sample Specific Comments	Total Bottle
51188-01	QUENCH BOX-09192022	8:00 9/19/2022		WA	RB	✓	✓	✓	✓	✓	✓							

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type																		
Preservative																		

Relinquished By:	Date/Time	Received By:	Date/Time
RoxanneBirx	9/19/22 15:15	BZ ALC	9/19/22 15:10
BZ	9/19/22 15:10	Mikey Mooney	9/20/22 00:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

PHOENIX
Environmental Laboratories, Inc.

Tuesday, September 27, 2022

Attn: Candace Fox
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Project ID: **L2251188**
SDG ID: **GCM35922**
Sample ID#s: **CM35922**

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

SDG Comments

September 27, 2022

SDG I.D.: GCM35922

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.
Compounds that are detected above MDL but below RL are qualified with a J flag.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Sample Id Cross Reference

September 27, 2022

SDG I.D.: GCM35922

Project ID: L2251188

Client Id	Lab Id	Matrix
QUENCH BOX-09192022	CM35922	WATER

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

September 27, 2022

FOR: Attn: Candace Fox
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		09/19/22	8:00
Location Code:	ALPHA	Received by:	SW	09/20/22	13:38
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCM35922
Phoenix ID: CM35922

Project ID: L2251188
Client ID: QUENCH BOX-09192022

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Phenolics	5.44	0.300	0.100	mg/L	20	09/26/22	MSF	E420.4

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
September 27, 2022
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

September 27, 2022

QA/QC Data

SDG I.D.: GCM35922

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 643600 (mg/L), QC Sample No: CM37300 (CM35922)														
Phenolics	BRL	0.015	0.007 J	0.010 J	NC	101			88.8			90 - 110	20	m

m = This parameter is outside laboratory MS/MSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
September 27, 2022

Tuesday, September 27, 2022

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCM35922 - ALPHA

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

September 27, 2022

SDG I.D.: GCM35922

The samples in this delivery group were received at 2.6°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

5.1c 0002 1C

Subcontract Chain of Custody

Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040

Alpha Job Number
L2251188

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 716-427-5223 Email: cfox@alphalab.com	Project Location: NY Project Manager: Candace Fox **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: NYDOH Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2251188

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com Method 420.1, Report to the MDL

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
35922	QUENCH BOX-09192022	09-19-22 08:00	WATER	Total Phenols 1-1000ml Amber H2804	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	AAL	9/20/22 10:05	AAL	9-20-22 10:05
	AAL	9-20-22 1330		9/20/22 13:32
Form No: AL_subcoc				

Serial_No:10102216:51

Appendix I – K143 Pile

K143 Pile Analytical – Table 10

Table 10
Process Equipment Construction Completion Report
K143 Pile
Riverview Innovation & Technology Campus, Inc.,
Tonawanda, New York

Analytes	SAMPLE ID:	TARMOAT-08182022		TARMOAT-01-09122022		TARMOAT-02-09122022		TARMOAT-03-09122022		TARMOAT-04-09122022		TARMOAT-01-10062022		TARMOAT-02-10062022		TARMOAT-11172022-01		TARMOAT-11172022-02	
	COLLECTION DATE:	8/18/2022		9/12/2022								10/6/2022				11/17/2022			
	LAB REPORT:	L2244755		L2249696								L2256030				L2264930			
	WASTE CODE(S):	K143		K143								K143				K143			
	DESCRIPTION:	Residaul Pile with Sawdust		Residual Pile with Sawdust								Residual Pile with Sawdust				Residual Pile with Sawdust and LKD			
	UNITS																		
Total Mercury SW7471																			
Mercury	mg/kg	**0.798**		NS		NS		NS		NS		NS		NS		NS		NS	
TCLP Mercury SW7470																			
Mercury	mg/L	<0.0005	U	NS		NS		NS		NS		NS		NS		NS		NS	
Moisture D3173																			
Percent Moisture	%	**6.59**		**32.09**		**15.00**		**22.39**		**27.60**		**34.73**		**15.09**		**11.45**		**28.38**	
ASTM D5865-04 BTUS/High Heat Value																			
BTU (As Received)	BTU/lb	**12969**		**11691**		**11221**		**10832**		**11056**		**10476**		**10649**		NS		NS	
Notes:																			
NS = Not Sampled																			
U = Analyte not detected																			
J = Analyte detected below quantitation limit																			

ANALYTICAL REPORT

Lab Number:	L2244755
Client:	Inventum Engineering 441 Carlisle Drive Suite C Herndon, NY 20170
ATTN:	John Black
Phone:	(571) 752-6562
Project Name:	RITC
Project Number:	Not Specified
Report Date:	08/23/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2244755-01	TAR MOAT-08182022	SOLID	TONAWANDA	08/18/22 12:00	08/18/22

Project Name:	RITC	**Lab Number:**	L2244755
Project Number:	Not Specified	**Report Date:**	08/23/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analyses of BTU and Moisture were subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Steven Gniadek

Title: Technical Director/Representative Date: 08/23/22

METALS

Project Name: RITC
Project Number: Not Specified
Lab Number: L2244755
Report Date: 08/23/22

SAMPLE RESULTS

Lab ID: L2244755-01
Client ID: TAR MOAT-08182022
Sample Location: TONAWANDA
Sample Depth:
Matrix: Solid
Percent Solids: 71%

Date Collected: 08/18/22 12:00
Date Received: 08/18/22
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 08/20/22 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/22/22 09:35	08/22/22 15:00	EPA 7470A	1,7470A	ZK

Project Name: RITC
Project Number: Not Specified
Lab Number: L2244755
Report Date: 08/23/22

SAMPLE RESULTS

Lab ID: L2244755-01
Client ID: TAR MOAT-08182022
Sample Location: TONAWANDA
Date Collected: 08/18/22 12:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: 71%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Mercury, Total	0.798		mg/kg	0.104	0.068	1	08/19/22 16:00	08/23/22 09:20	EPA 7471B	1,7471B	DMB

Project Name: RITC
Project Number: Not Specified
Lab Number: L2244755
Report Date: 08/23/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1677353-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	08/19/22 16:00	08/23/22 08:13	1,7471B	DMB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1677783-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/22/22 09:35	08/22/22 13:45	1,7470A	ZK

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 08/19/22 19:38

Lab Control Sample Analysis

Batch Quality Control

Project Name: RITC

Project Number: Not Specified

Lab Number: L2244755

Report Date: 08/23/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1677353-2 SRM Lot Number: D113-540								
Mercury, Total	94		-		60-140	-		
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1677783-2								
Mercury, TCLP	89		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677353-3 QC Sample: L2244881-01 Client ID: MS Sample												
Mercury, Total	0.142	1.73	1.70	90		-	-		80-120	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677783-3 QC Sample: L2244759-01 Client ID: MS Sample												
Mercury, TCLP	ND	0.025	0.0233	93		-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677353-4 QC Sample: L2244881-01 Client ID: DUP Sample						
Mercury, Total	0.142	0.131	mg/kg	8		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1677783-4 QC Sample: L2244759-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

SAMPLE RESULTS

Lab ID: L2244755-01
Client ID: TAR MOAT-08182022
Sample Location: TONAWANDA

Date Collected: 08/18/22 12:00
Date Received: 08/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	71.0		%	0.100	NA	1	-	08/19/22 10:07	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: RITC

Project Number: Not Specified

Lab Number: L2244755

Report Date: 08/23/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1677205-1 QC Sample: L2244809-01 Client ID: DUP Sample						
Solids, Total	91.2	91.2	%	0		20

Project Name: RITC
Project Number: Not Specified

Lab Number: L2244755
Report Date: 08/23/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2244755-01A	Glass 120ml/4oz unpreserved	A	NA		3.6	Y	Absent		HG-T(28)
L2244755-01B	Glass 120ml/4oz unpreserved	A	NA		3.6	Y	Absent		SUB-MOISTURE()
L2244755-01C	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		SUB-BTU()
L2244755-01D	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		TS(7)
L2244755-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.6	Y	Absent		HG-C(28)
L2244755-01X9	Tumble Vessel	A	NA		3.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name:	RITC	**Lab Number:**	L2244755
Project Number:	Not Specified	**Report Date:**	08/23/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	RITC	**Lab Number:**	L2244755
Project Number:	Not Specified	**Report Date:**	08/23/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name: RITC **Lab Number:** L2244755

Project Number: Not Specified **Report Date:** 08/23/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	RITC	**Lab Number:**	L2244755
Project Number:	Not Specified	**Report Date:**	08/23/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/19/22

ALPHA Job #: L2244755

Client Information

Client: INVENTUM ENGINEERING
Address: 441 Carlisle Drive Suite C HERNDON VA
Phone: (716) 553-5129
Fax: roxanne.birx@inventumeng.com
Email: Peter.Zaffarano@inventumeng.com

Project Information

Project Name: RITC
Project Location: Tonawanda
Project #: TAR Moat
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☒ # of Days: 3 Day

Deliverables

☐ ASP-A ☐ ASP-B
☑ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☑ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☑ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☑ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please send BTU & MOISTURE to STERLING LAB

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ASTM D5865	ASTM D3173	Total Hg 7471	TCLP Hg 7471	Sample Specific Comments
44765-01	TAR MOAT-08182022	08/18/22	1200	TAR		X	X	X	X	Please Send BTU + Moisture to Sterling.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	G	G	G	G						
Preservative	A	A	A	A						

Relinquished By:	Date/Time	Received By:	Date/Time
	8/18/2022 12:19	Jocelyn Foley (AAL)	8/18/22 12:19
Jocelyn Foley (AAL)	8/18/22 12:19		8/19/22 0010

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date August 23, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Sample

Samples Analyzed

Enclosed are Report No(s): 77863

BTU reported "as received"

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

8/23/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Sample Analysis

Work Order 22-0884

Sample	Description	Source	Taken/Time	Received
77863	L2244755 Tar Moat	Alpha Analytical Lab	8/18/22 12:00	8/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	12,969	500.00	ASTM D5865	08/23/22	sjr
Moisture, %	6.59	0.10	ASTM D3173	08/22/22	sjr

(1) MA & CT do not certify this parameter

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date September 23, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Samples

Samples Analyzed

Enclosed are Report No(s): 78037 to 78046

BTU reported on dry basis.

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

9/23/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Sample	Description	Source	Taken/Time	Received
78037	L2249696 TAR MOAT-01	Alpha Analytical Lab	9/12/22 09:00	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	11,691	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	32.09	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78038	L2249696 TAR MOAT-02	Alpha Analytical Lab	9/12/22 09:05	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	11,221	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	15.00	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78039	L2249696 TAR MOAT-03	Alpha Analytical Lab	9/12/22 09:10	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,832	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	22.39	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78040	L2249696 TAR MOAT-04	Alpha Analytical Lab	9/12/22 09:15	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	11,056	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	27.60	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78041	L2249696 PT03-01	Alpha Analytical Lab	9/12/22 14:30	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	9,580	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	29.98	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78042	L2249696 PT03-02	Alpha Analytical Lab	9/12/22 14:35	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,389	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	32.31	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78043	L2249696 PT03-03	Alpha Analytical Lab	9/12/22 14:40	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	9,992	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	31.94	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78044	L2249696 PT03-04	Alpha Analytical Lab	9/12/22 14:45	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,163	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	34.59	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78045	L2249696 PT03-05	Alpha Analytical Lab	9/12/22 14:50	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,681	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	33.87	0.10	ASTM D3173	09/20/22	sjr

Sample	Description	Source	Taken/Time	Received
78046	L2249696 PT03-06	Alpha Analytical Lab	9/12/22 14:55	9/19/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	9,877	500.00	ASTM D5865	09/20/22	sjr
Moisture, %	33.02	0.10	ASTM D3173	09/20/22	sjr

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/14/22

ALPHA Job #: L2249696

Client Information

Client: INVENTUM ENG
Address: 441 Carlisle Drive Suite C
Herndon VA
Phone: 716-553-5129
Fax:
Email: Peter.Zaffanella@inventumeng.com

Project Information

Project Name: RiverView
Project Location: 3875 River Road Tonawanda NY
Project # Moisture + BTU
(Use Project name as Project #) ☐
Project Manager: John Black
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☑ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☑ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please Send to Sterling Labs

Please specify Metals or TAL.

ANALYSIS

ASTM D5865
ASTM D 3173

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ASTM D5865	ASTM D 3173	Sample Specific Comments
49696-01	TAR MoAT01-09122022	9/12/22	0900	TAR		X	X	
-02	TAR MoAT02-09122022	|	0905	|		X	X	
-03	TAR MoAT03-09122022	|	0910	|		X	X	
-04	TAR MoAT-04-09122022	|	0915	|		X	X	
-05	PT03-09122022-01	|	1430	|		X	X	
-06	PT03-09122022-02	|	1435	|		X	X	
-07	PT03-09122022-03	|	1440	|		X	X	
-08	PT03-09122022-04	|	1445	|		X	X	
-09	PT03-09122022-05	|	1450	|		X	X	
-10	PT03-09122022-06	9/12/22	1455	TAR		X	X	

Container Type: G G
Preservative: A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/13/22	AAL	9/13/22 1155
AAL	9/13/22 1225		9/14/22 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date October 18, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Samples

Samples Analyzed

Enclosed are Report No(s): 78248 to 78251

BTU reported on dry basis.

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

10/18/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
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Sample	Description	Source	Taken/Time	Received
78248	L2256030 ST23-01	Alpha Analytical Lab	10/6/22 16:00	10/11/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	8,860	500.00	ASTM D5865	10/13/22	sjr
Moisture, %	21.66	0.10	ASTM D3173	10/13/22	sjr

Sample	Description	Source	Taken/Time	Received
78249	L2256030 ST23-02	Alpha Analytical Lab	10/6/22 16:00	10/11/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	18,110	500.00	ASTM D5865	10/13/22	sjr
Moisture, %	26.24	0.10	ASTM D3173	10/13/22	sjr

Sample	Description	Source	Taken/Time	Received
78250	L2256030 Tar-Moat-01	Alpha Analytical Lab	10/6/22 15:45	10/11/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,476	500.00	ASTM D5865	10/13/22	sjr
Moisture, %	34.73	0.10	ASTM D3173	10/13/22	sjr

Sample	Description	Source	Taken/Time	Received
78251	L2256030 Tar-Moat-02	Alpha Analytical Lab	10/6/22 15:45	10/11/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
BTU/Lb	10,649	500.00	ASTM D5865	10/13/22	sjr
Moisture, %	15.09	0.10	ASTM D3173	10/13/22	sjr

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/8/22

ALPHA Job #: L2256030

Client Information
Client: INVENTUM ENGINEERING
Address: 441 CARLISLE DRIVE SUITE C HERNDON VA
Phone: 716 553-5129
Fax:
Email: Peter.Zaffanello@inventumeng.com

Project Information
Project Name: RIVERVIEW
Project Location: 3875 RIVER ROAD
Project # TAR Moisture.
(Use Project name as Project #) ☐
Project Manager: JOHN BLACK
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☒ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

PLEASE SEND TO STERLING LABS.

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RTV - DS865	Moisture - D3173	Total Bottle	Sample Specific Comments
56030-01	ST23-01-10062022	10/6/22	1600	TAR	DB	X	X		PLEASE SEND TO
-02	ST23-02-10062022	10/6/22	1600	TAR	DB	X	X		STERLING LABS.
-03	TAR MOAT-01-10062022	10/6/22	1545	TAR	DB	X	X		
-04	TAR MOAT-02-10062022	10/6/22	1545	TAR	DB	X	X		

Container Type: G G
Preservative: A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	10/7/22 1455		10/7/22 1455
	10/7/22 1455		10/8/22 0020

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date November 22, 2022

Customer	Contact	Laboratory Supervisor	eMail
Alpha Analytical Lab	C. Fox	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Solid Samples

Samples Analyzed

Enclosed are Report No(s): 77074, 77075

Thank you for your business

Dale Percoski

Dale Percoski, Laboratory Supervisor

11/22/2022

Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
This report may not be reproduced, except in full, without written approval from Sterling Analytical, Inc.

Sample	Description	Source	Taken/Time	Received
77074	L2264930 Tar Moat 01	Alpha Analytical Lab	11/17/22 12:00	11/18/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
Moisture, %	11.45	0.10	ASTM D3173	11/21/22	sjr

Sample	Description	Source	Taken/Time	Received
77075	L2264930 Tar Moat 02	Alpha Analytical Lab	11/17/22 12:05	11/18/22

Parameter	Results	RDL	Method	Analyzed/Time	Tech
Moisture, %	28.38	0.10	ASTM D3173	11/21/22	sjr

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 11/18/22

ALPHA Job #: L2264930

Client Information

Client: INVENTUM ENG
Address: 441 CARLISLE DRIVE SUITE C. HERNDON. VA
Phone: 716 553-5729
Fax:
Email: Peter.Zeffiro@inventumengr.com

Project Information

Project Name: RIVERVIEW
Project Location: 3875 River Road
Project #: TAR MOAT Moisture.
(Use Project name as Project #) ☐
Project Manager: JAMES EDWARDS.
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☑ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☑ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please Send to Sterling Analytical

Please specify Metals or TAL.

ANALYSIS

ASP A 8260 D3173

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ASP A 8260 D3173	Sample Specific Comments	Total Bottle
64930 -01	TAR MOAT-11172022-01	11/17/22	1200	P.2.	SD	X		
.02	TAR MOAT-11 17 2022-02	11 17 22	1205	P.2.	SD	X		

Container Type: 4
Preservative: A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	11/17/2022 1314	Jocelyn Flory (AAL)	11/17/22 13:19
Jocelyn Flory (AAL)	11/17/22 13:19		11/18/22 0105

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

K143 Pile Waste Manifests

E-4863

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYD008413877	2. Page 1 of 1	3. Emergency Response Phone CAN 751159 800-424-9300	4. Manifest Tracking Number 023894471 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14150 RP

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St. Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid NOS, 9, PG III (coal tar)	1	CM	35 EST	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
SECUR-T 0033198
1-EQ Northeast Inc. acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221122084710 #ERG 171# K-Listed WASTE

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Trbusich on behalf of RITC
Signature: on behalf of RITC
Month 11 Day 22 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☒ Export from U.S. Port of entry/exit: Lacolle, PQ
Transporter signature (for exports only): Date leaving U.S.: 11/22/22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Christian Rousseau
Signature
Month 11 Day 22 Year 22

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: JEAN-MICHEL GAGNON
Signature
Month 11 Day 23 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD009413577
2. Page 1 of: 1
3. Emergency Response Phone: CCN 161139 800-424-9300
4. Manifest Tracking Number: 023894472 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
860-410-3068
Generator's Phone:

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York ~~14151~~ 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St. Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9 ,PG III (coal tar)	1	CM	Est. 35	T	D018 K-143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1-EQ Northeast Inc., acting as the recognized trader arranging for export 2- AOC #032423E22004 SECURE-T 033360
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN #ERG 171# K-listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC
Signature: MR on behalf of RITC
Month: 11 Day: 28 Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☒ Export from U.S. Port of entry/exit: LACOLLE QC
Transporter signature (for exports only): Date leaving U.S.: Nov 29/22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: David Swiecki
Signature:
Month: 11 Day: 28 Year: 22
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Pierre Huot
Signature:
Month: 11 Day: 29 Year: 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD008413877	1	CCN-101139 800-424-9300	023894473 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environmental
80 rue des Mélèzes St, Ambroise QC G7P2N4
Facility's Phone: 418-695-3302

U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid NOS 9 ,PG III (coal tar)	1	CM	EST 35	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1-EQ Northeast Inc , acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221128318267 #ERG 171#
SECURET 0033199. K-143

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC
Signature: on behalf of RITC
Month: 11 Day: 28 Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☒ Export from U.S.
Transporter signature (for exports only): Carl Vowles
Port of entry/exit: Lacolle, QC
Date leaving U.S.: Nov 29/22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: CARL VOWLES
Signature
Month: 11 Day: 28 Year: 22
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Pierre Huot
Signature
Month: 11 Day: 29 Year: 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD008413877	1	CCN 101139 800-424-9300	023894474 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York ~~14151~~ 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St, Ambroise QC G7P2N4
Facility's Phone: 418-695-3302
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077, Environmentally hazardous substance, solid, NOS, 9, PG III (coal tar)	1	CM	Est 35	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1-EQ Northeast Inc, acting as the recognized trader arranging for export 2- AOC #032423E22004 Secure-T. 033359
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X2022112937203J #ERG 171# K-listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC
Signature: [signature] on behalf of RITC
Month 11 Day 28 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Lacolle QC
Transporter signature (for exports only): Date leaving U.S.: 22-11-22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Larry Blackburn
Signature: [signature]
Month 11 Day 28 Year 22
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. HOLD 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Mike Hunt
Signature: [signature]
Month 11 Day 30 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD008413877	1	CAN 101139 800-424-9300	023894475 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
860-410-3068
Generator's Phone:

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York ~~14151~~ 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC — U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St, Ambroise QC G7P2N4
418-695-3302
Facility's Phone:

U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9, PG III (coal tar)	1	CM	EST 35	T	D018	K143	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
SECURE-T. 0033358.
1-EQ Northeast Inc., acting as the recognized trader arranging for export. 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221129384369 #ERG 171# K LISTED Waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Matt Reardon on behalf of RITC	MER on behalf of RITC	11	29	22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Lacolle QC
Transporter signature (for exports only): Date leaving U.S.: 11-29-22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Tanner Blackburn		11	29	22
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month / Day / Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name	Signature	Month	Day	Year
	Pierre Huot	11	30	22

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD008413877	1	CCN 101139 800-424-9300	023894476 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York ~~14151~~ 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC — U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St. Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9 ,PG III (coal tar)	1	CM	35	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1-EQ Northeast Inc , acting as the recognized trader arranging for export 2- AOC #032423E22004 SECURE T 0033357
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221130455169 #ERG 171# K-LISTED WASTE

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Matt Reardon on behalf of RITC — Signature: MER on behalf of RITC — Month 11 Day 29 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Lacolle PQ
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Christian Renaud — Signature — Month 11 Day 29 Year 22

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Pierre Huot — Signature — Month 12 Day 01 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

E-7910

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD008413877
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: 023894477 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York ~~14151~~ 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St. Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid, NOS 9, PG III (coal tar)	1	CM	35 CST	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Secur-T 0033324
1-EQ Northeast Inc., acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN #ERG 171# K-listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC
Signature: K J on behalf of RITC
Month 12 Day 05 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☑ Export from U.S. Port of entry/exit: Lacolle, QC
Transporter signature (for exports only): Carl Vaules Date leaving U.S.: Dec. 5/22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Carl Vaules
Signature: Carl Vaules
Month 12 Day 05 Year 22
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: JEAN-MICHEL CAGNON
Signature:
Month 12 Day 06 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

E-7912

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD008413877
2. Page 1 of: 1
3. Emergency Response Phone: CCR Telisa 800-424-9300
4. Manifest Tracking Number: 023894478 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14851 14150

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St, Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9, PG III (coal tar)	1	CM	35 EST	T	D018 K143
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Secur - T 0033325
1-EQ Northeast Inc., acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221205738589 #ERG 171# K-listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Collican on behalf of RITC
Signature: K on behalf of RITC
Month 12 Day 5 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☒ Export from U.S. Port of entry/exit: Lacolle QC
Transporter signature (for exports only): Date leaving U.S.: 05-12-22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Edward Blackburn
Signature:
Month 12 Day 05 Year 22
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: JEAN MICHEL GAGNON
Signature:
Month 12 Day 06 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

E-7916

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD008413877	1	CCN 161135 800-424-9300	023894479 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14151

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC — U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St, Ambroise QC G7P2N4
418-695-3302
Facility's Phone:

U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9 PG III (coal tar)	1	CM	35 EST	T	D018	K143	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Secur-T 0033326
1-EQ Northeast Inc., acting as the recognized trader arranging for export. 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221206826454 #ERG 171 K-listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Colligan on behalf of RITC — Signature: on behalf of RITC — Month 12 Day 06 Year 22

INT'L

16. International Shipments ☐ Import to U.S. ☑ Export from U.S. Port of entry/exit: Lacolle QC
Transporter signature (for exports only): Date leaving U.S.: Dec 6th 2022.

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tanner Blackburn — Signature: — Month 12 Day 06 Year 22

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: SEAN MICHEL GAGNON — Signature: — Month 12 Day 07 Year 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

7537

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD008413877
2. Page 1 of: 1
3. Emergency Response Phone: CCN 1611139 800-424-9300
4. Manifest Tracking Number: 023894480 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14151

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St. Ambroise QC G7P2N4
418-695-3302
Facility's Phone:
U.S. EPA ID Number: 116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9 ,PG III (coal tar)	1	CM	35 EST	T	D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Secur-T 0033327
1-EQ Northeast Inc , acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221212149486 #ERG 171# K- listed waste

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Cellizzo on behalf of RITS
Signature: on behalf of RITS
Month: 12 Day: 12 Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☑ Export from U.S. Port of entry/exit: Lacolle Qc
Transporter signature (for exports only): Date leaving U.S.: 12.12.22.

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tanner Blackburn
Signature:
Month: 12 Day: 12 Year: 22

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Pierre Huot
Signature:
Month: 12 Day: 13 Year: 22

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD083413877
2. Page 1 of: 1
3. Emergency Response Phone: CCN 161139 800-424-9300
4. Manifest Tracking Number: 023894488 JJK

GENERATOR

5. Generator's Name and Mailing Address
Riverside Innovation & Technology Campus
140 Lee Street, Suite 200 Buffalo NY 14210
Generator's Phone: 860-410-3068

Generator's Site Address (if different than mailing address)
3875 River Road Tonawanda New York 14151

6. Transporter 1 Company Name: Laidlaw Carriers Bulk GP INC
U.S. EPA ID Number: MIK621327675

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
8439117 Canada INC /RSI Environnemental
80 rue des Mélèzes St, Ambroise QC G7P2N4
418-695-3302
Facility's Phone:

U.S. EPA ID Number
116 904 5474

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN 3077 Environmentally hazardous substance, solid, NOS, 9 ,PG III (coal tar)	1	CM	35 EST	T	D018	K143	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Secur - T 0033328
1-EQ Northeast Inc., acting as the recognized trader arranging for export 2- AOC #032423E22004
3- CDN Manifest 4- RSI TAG 5-Fedex AS 400
6-ITN X20221214305783 #ERG 171# K-listed waste / PTO4

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kirsten Collyer on behalf of RITC
Signature: KC on behalf of RITC
Month: 12 Day: 14 Year: 22

INT'L

16. International Shipments ☐ Import to U.S. ☒ Export from U.S. Port of entry/exit: Lacolle QC
Transporter signature (for exports only): Date leaving U.S.: 12/14/22

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Chris Rousseau
Signature:
Month: 12 Day: 14 Year: 22

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: JEAN-MICHEL GAGNON
Signature:
Month: 12 Day: 15 Year: 22

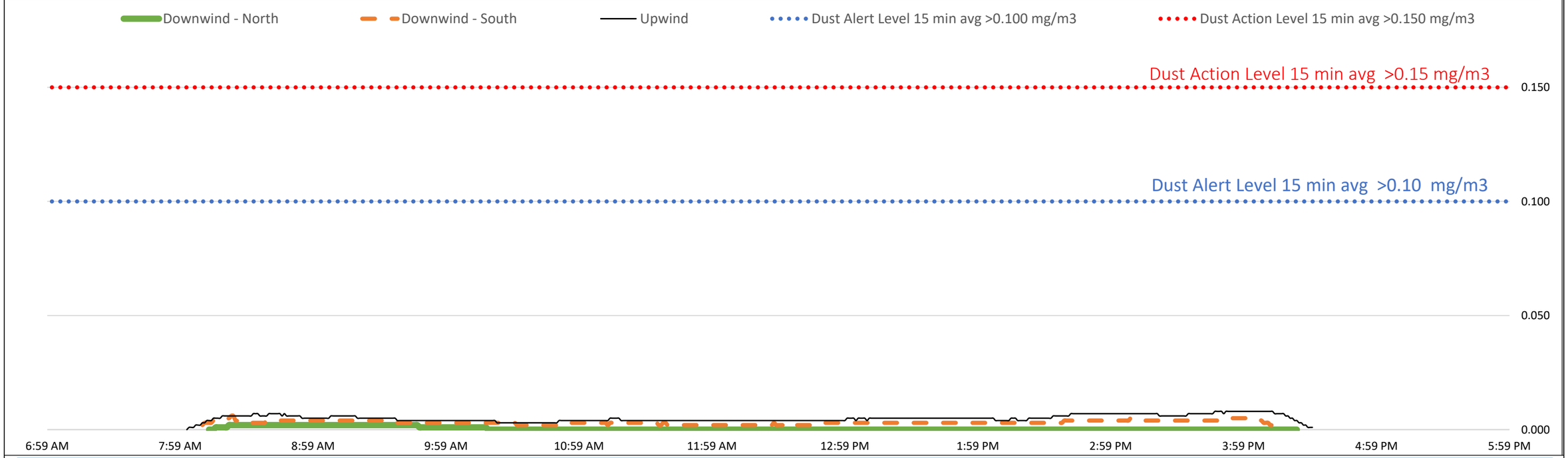
EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Appendix J – CAMP Data

Fixed Station Daily Air Monitoring - November 1, 2021

Dust (mg/m3) 15 min avg

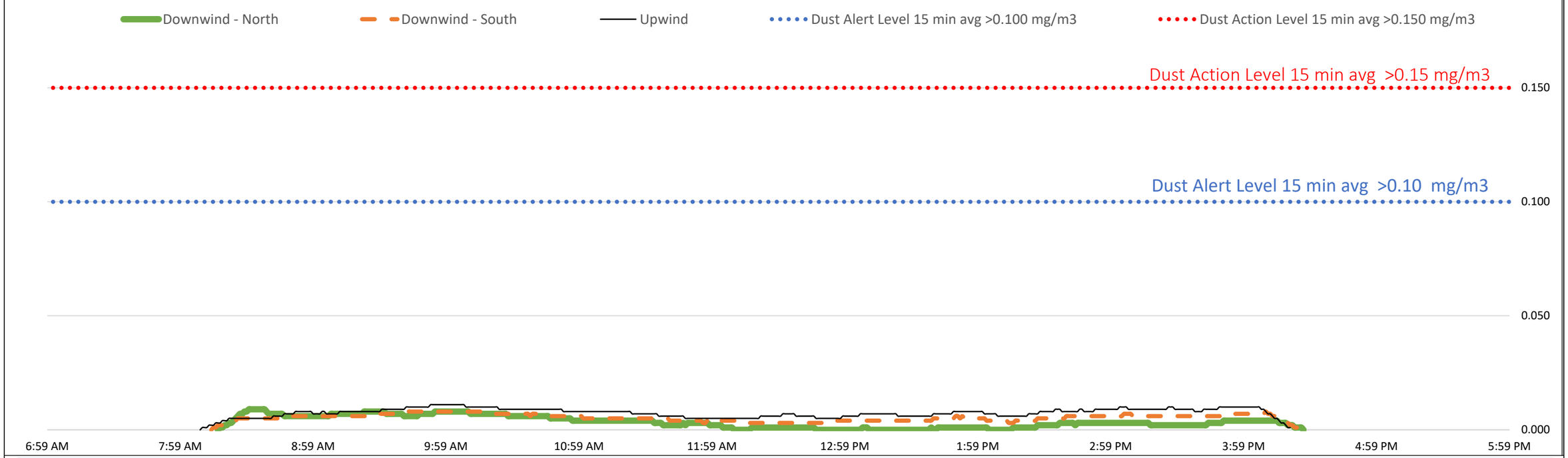


VOC (ppm) 15 min avg

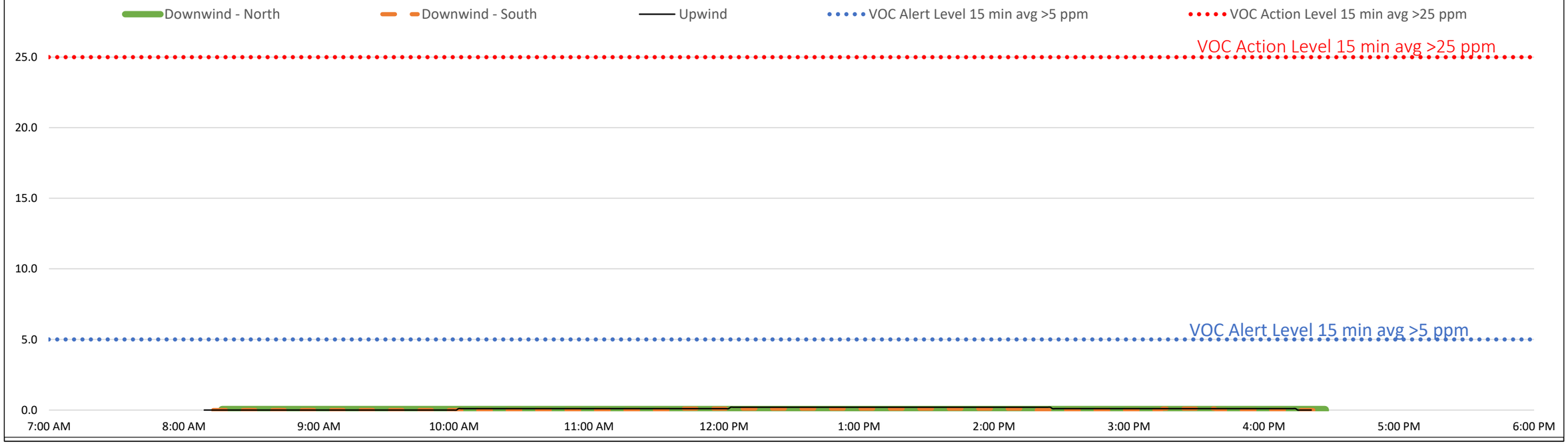


Fixed Station Daily Air Monitoring - November 2, 2021

Dust (mg/m3) 15 min avg

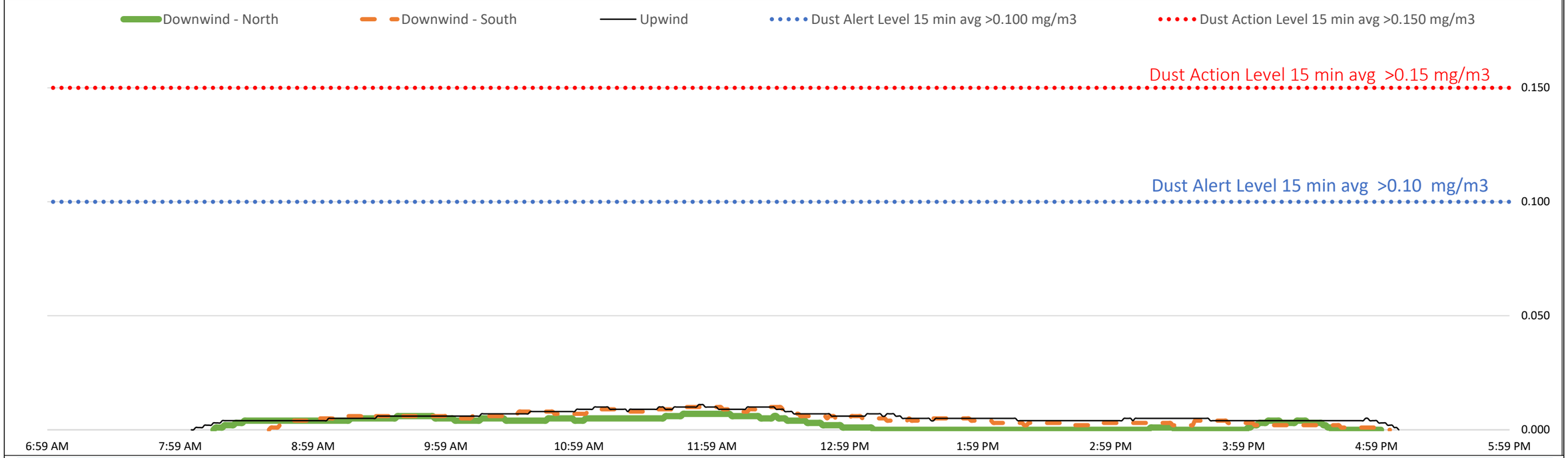


VOC (ppm) 15 min avg

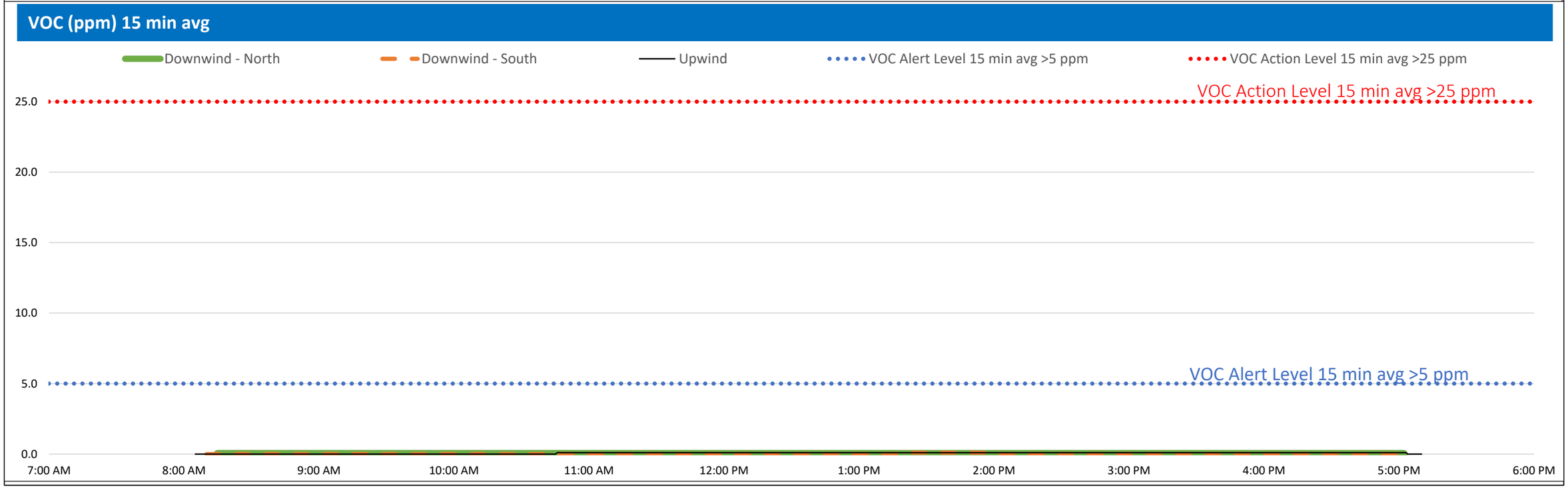


Fixed Station Daily Air Monitoring - November 3, 2021

Dust (mg/m3) 15 min avg

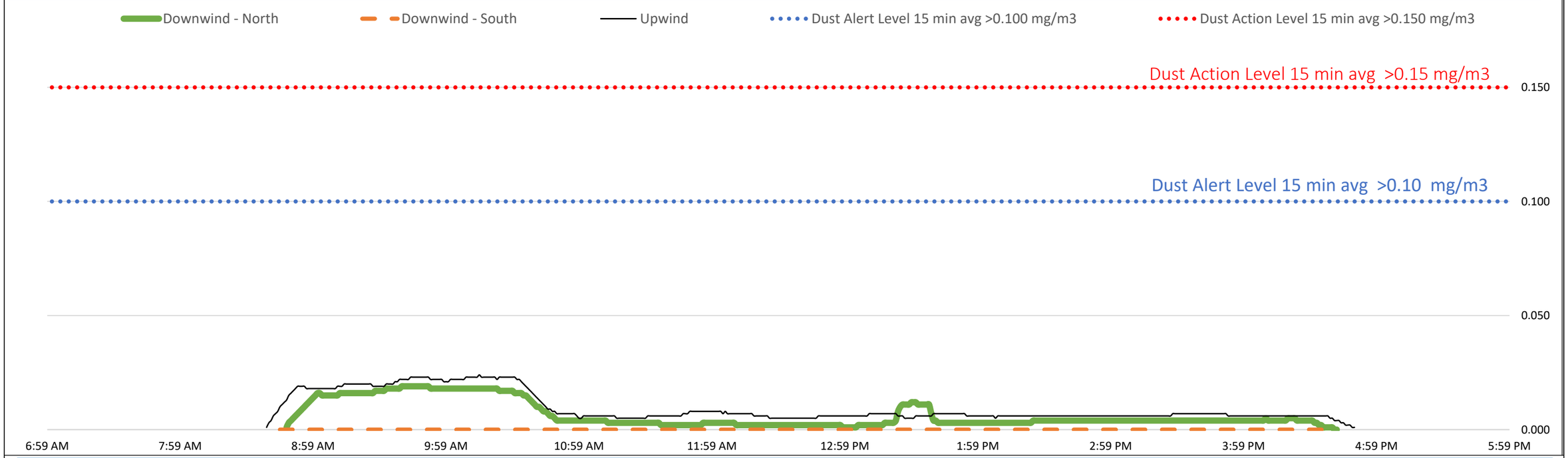


VOC (ppm) 15 min avg

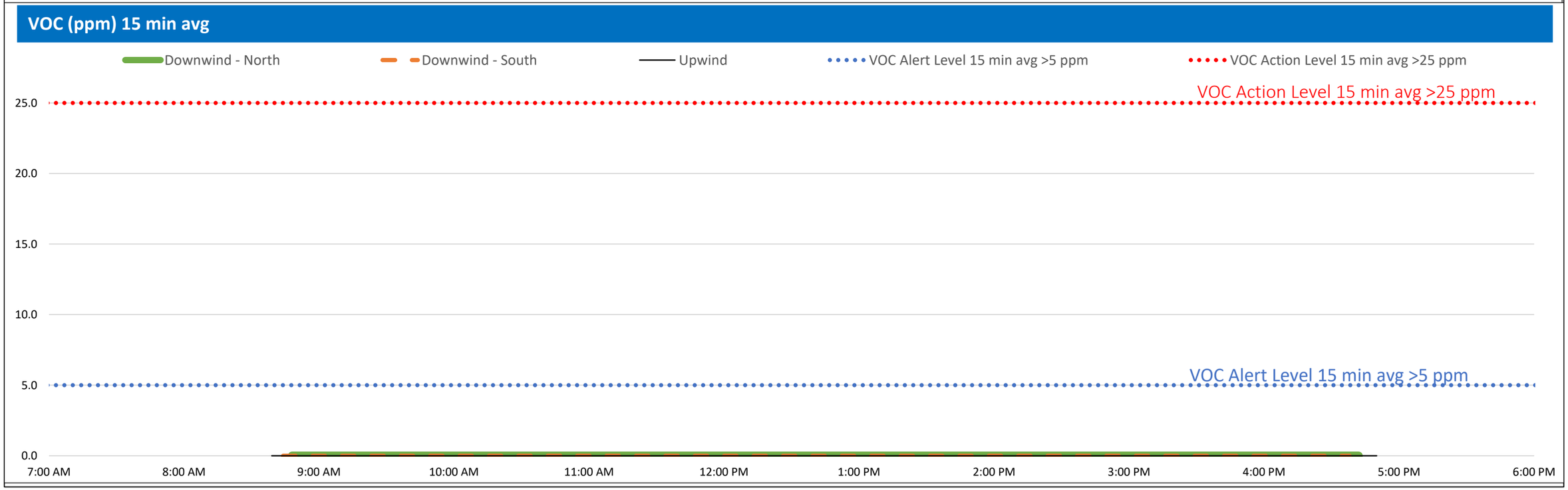


Fixed Station Daily Air Monitoring - November 4, 2021

Dust (mg/m3) 15 min avg

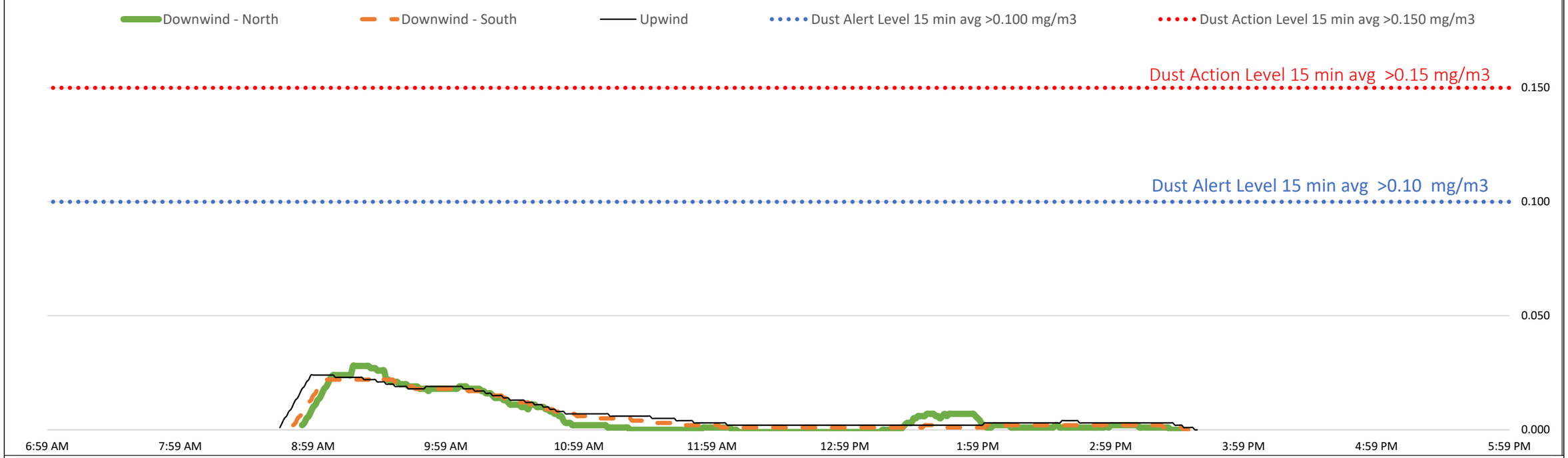


VOC (ppm) 15 min avg

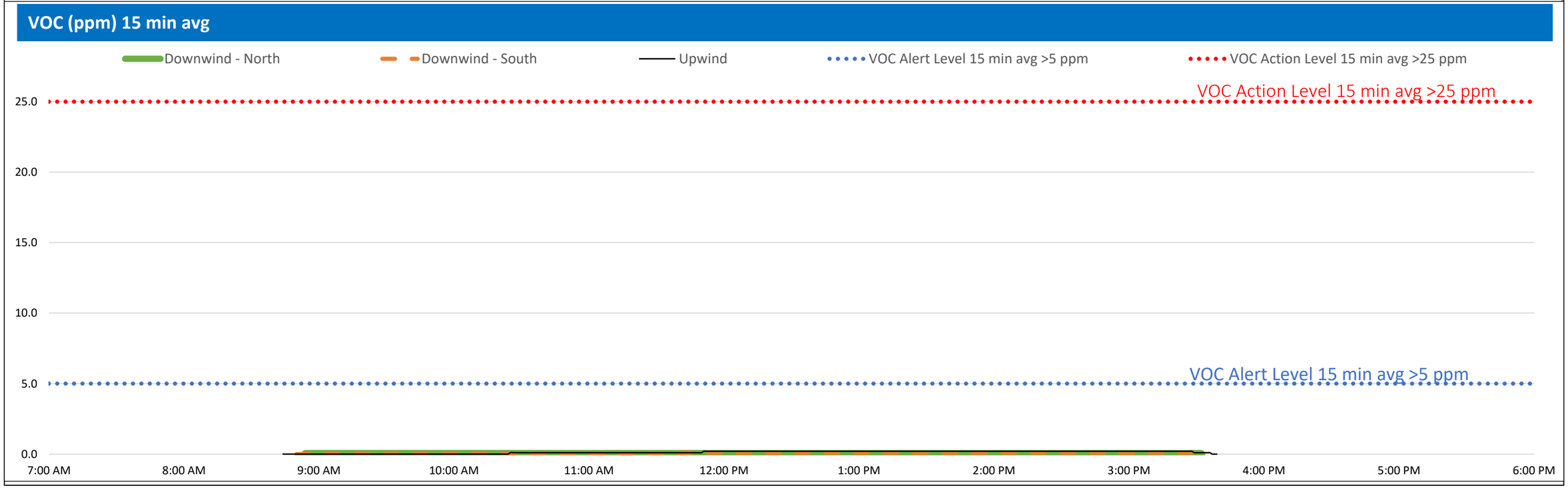


Fixed Station Daily Air Monitoring - November 5, 2021

Dust (mg/m3) 15 min avg

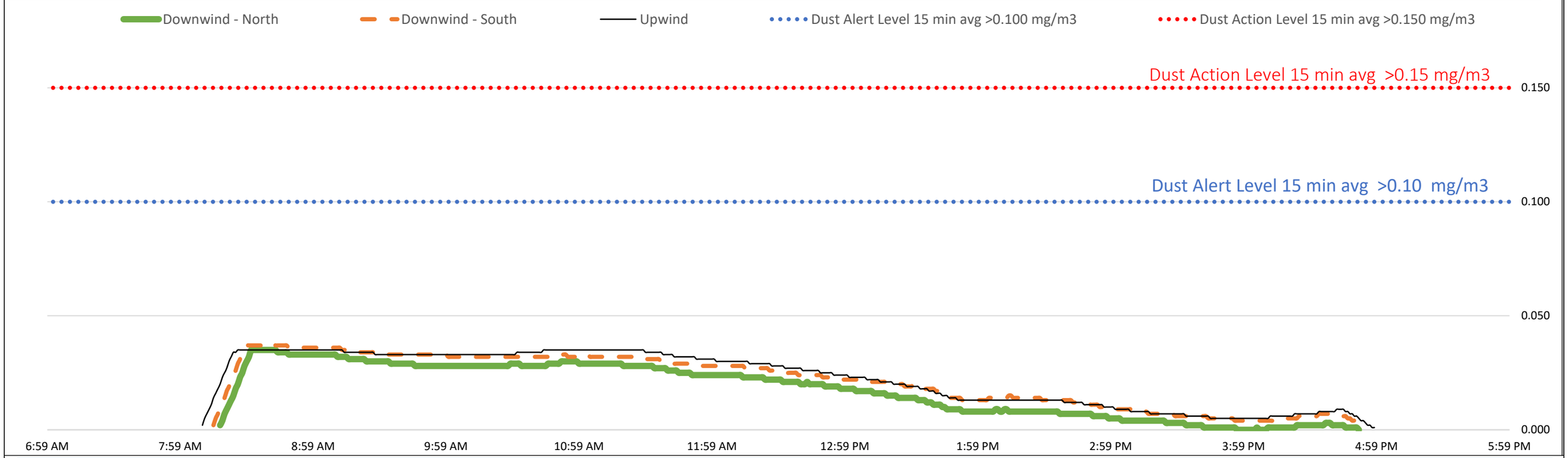


VOC (ppm) 15 min avg

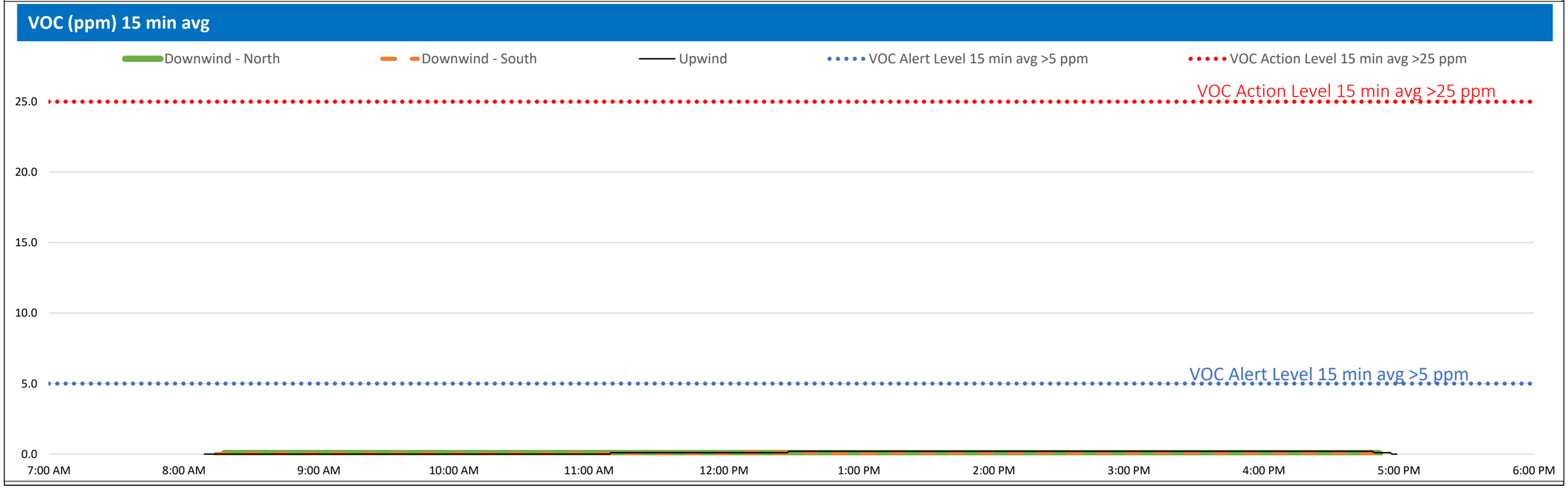


Fixed Station Daily Air Monitoring - November 8, 2021

Dust (mg/m3) 15 min avg

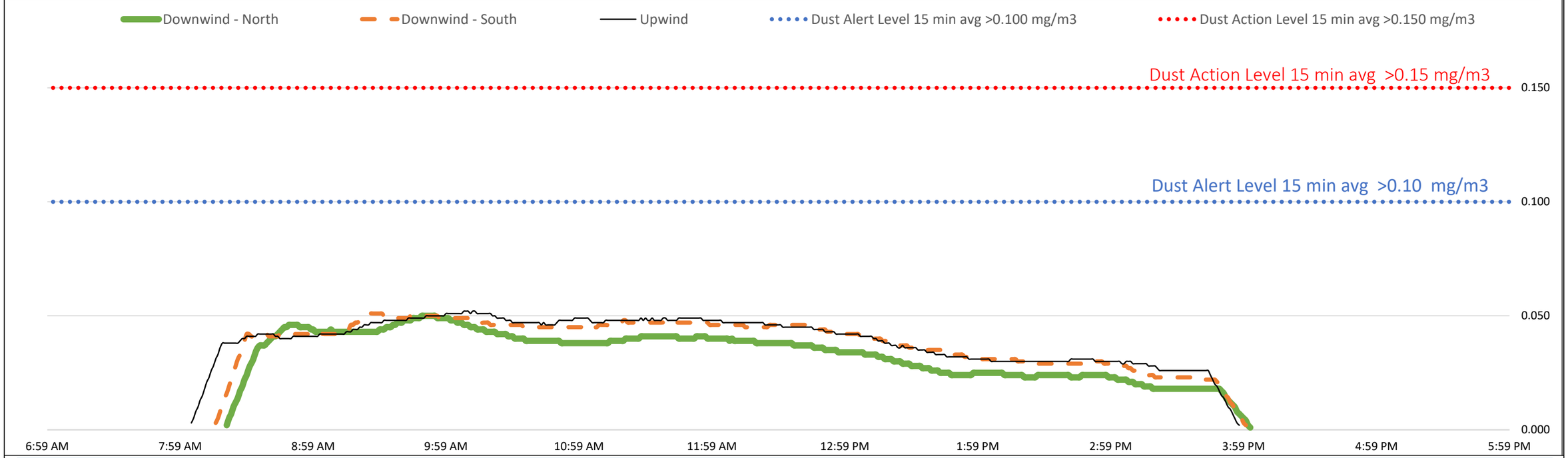


VOC (ppm) 15 min avg

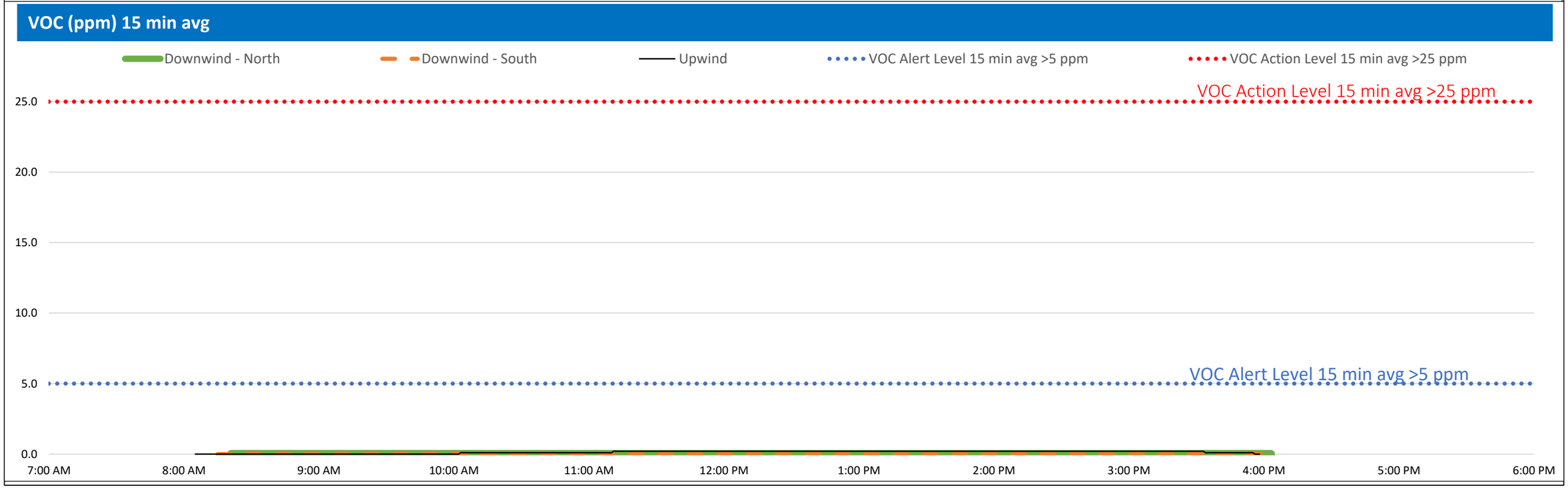


Fixed Station Daily Air Monitoring - November 9, 2021

Dust (mg/m3) 15 min avg

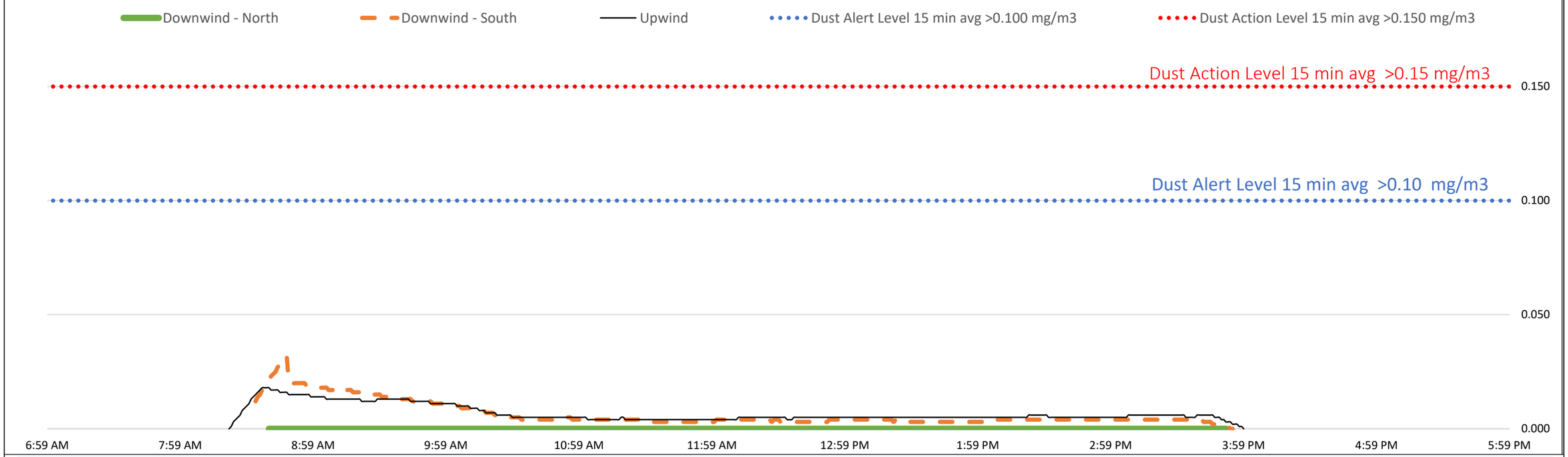


VOC (ppm) 15 min avg

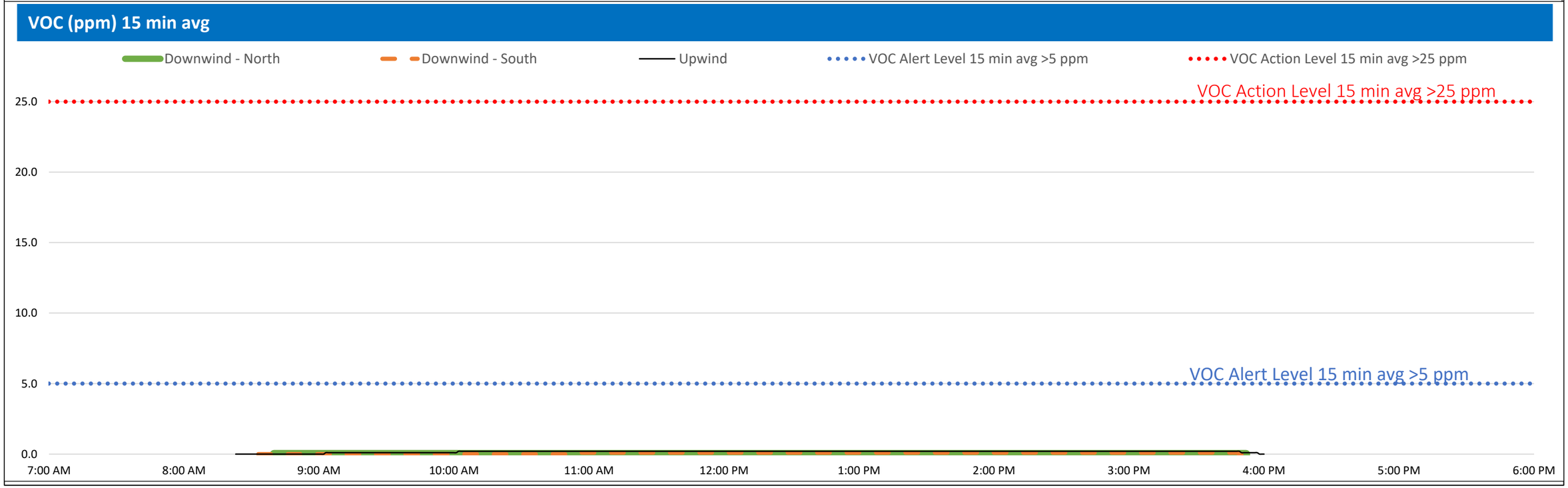


Fixed Station Daily Air Monitoring - November 10, 2021

Dust (mg/m3) 15 min avg

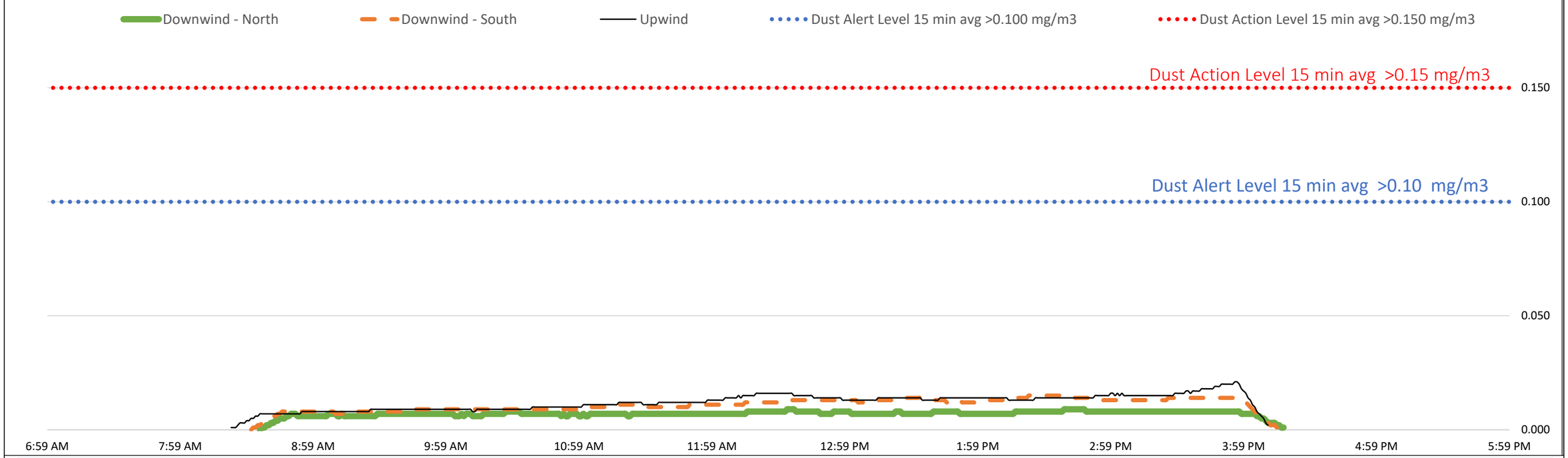


VOC (ppm) 15 min avg

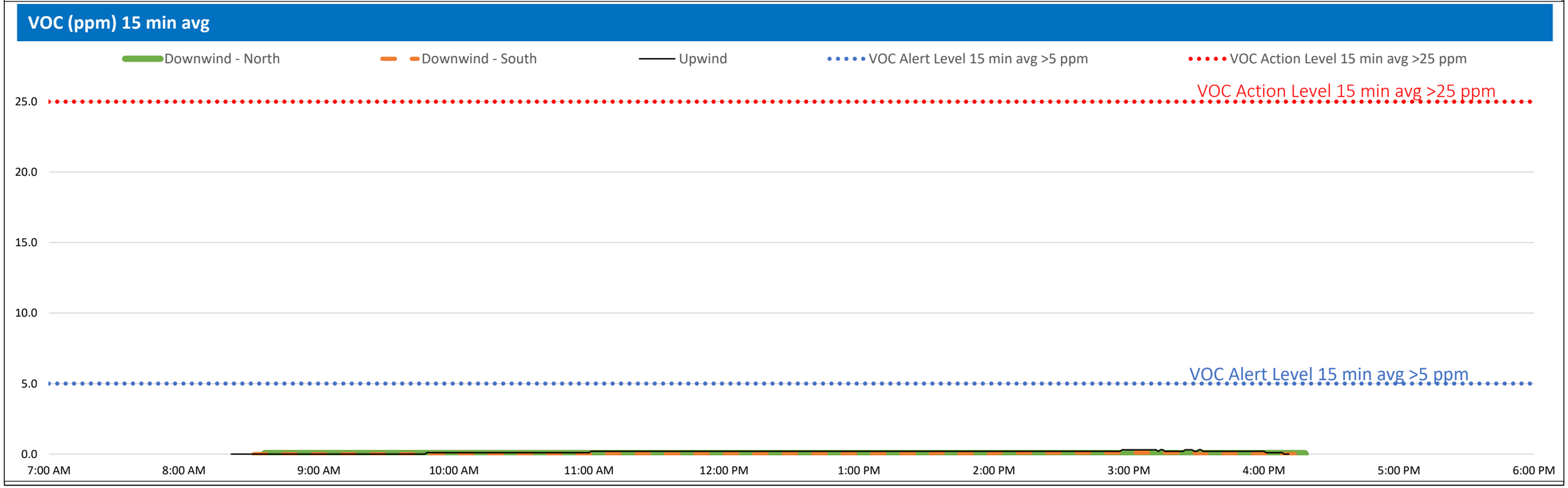


Fixed Station Daily Air Monitoring - November 11, 2021

Dust (mg/m3) 15 min avg

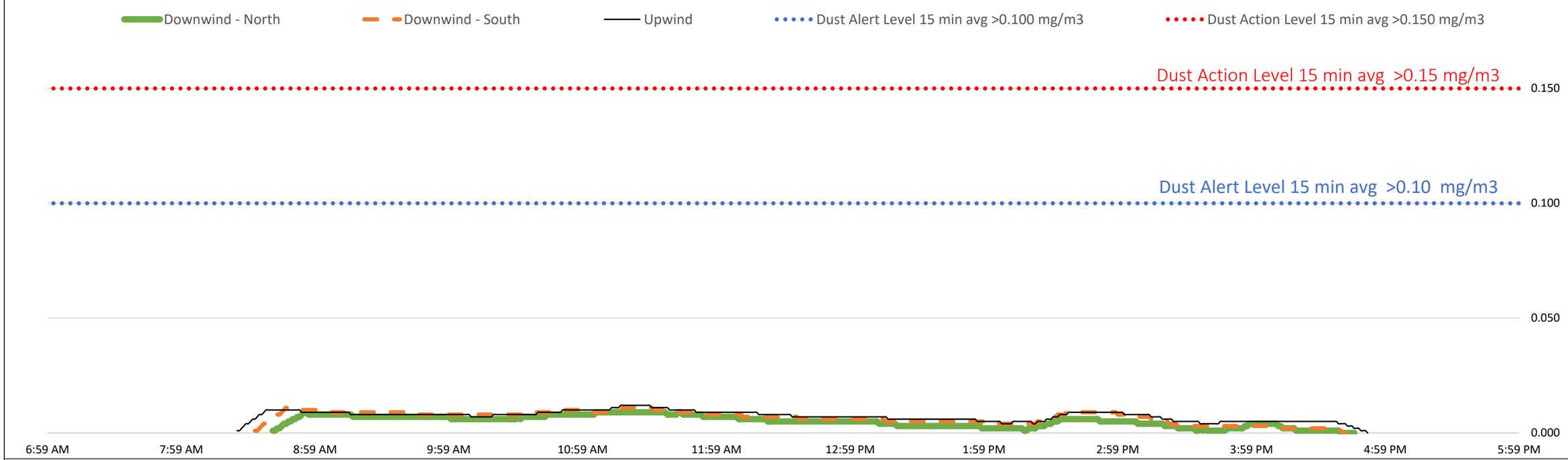


VOC (ppm) 15 min avg

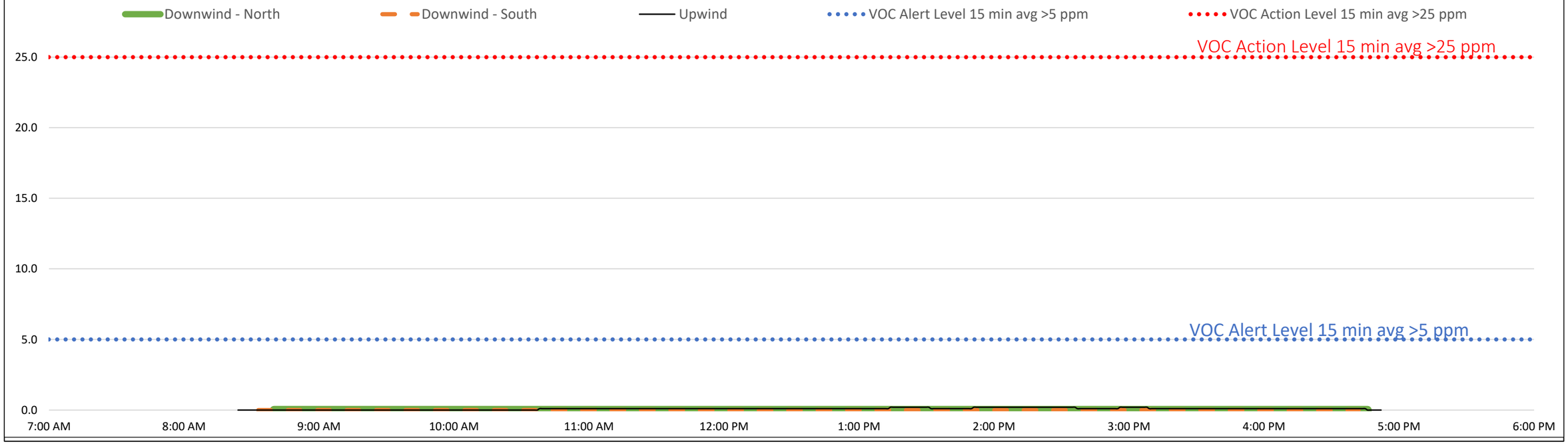


Fixed Station Daily Air Monitoring - November 15, 2021

Dust (mg/m3) 15 min avg

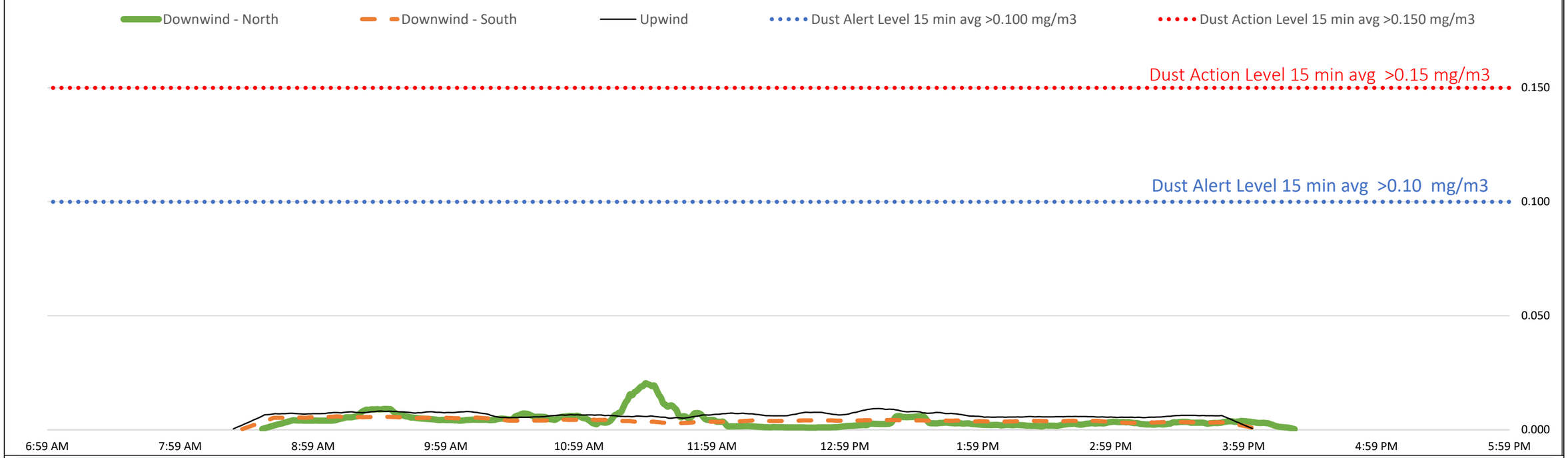


VOC (ppm) 15 min avg

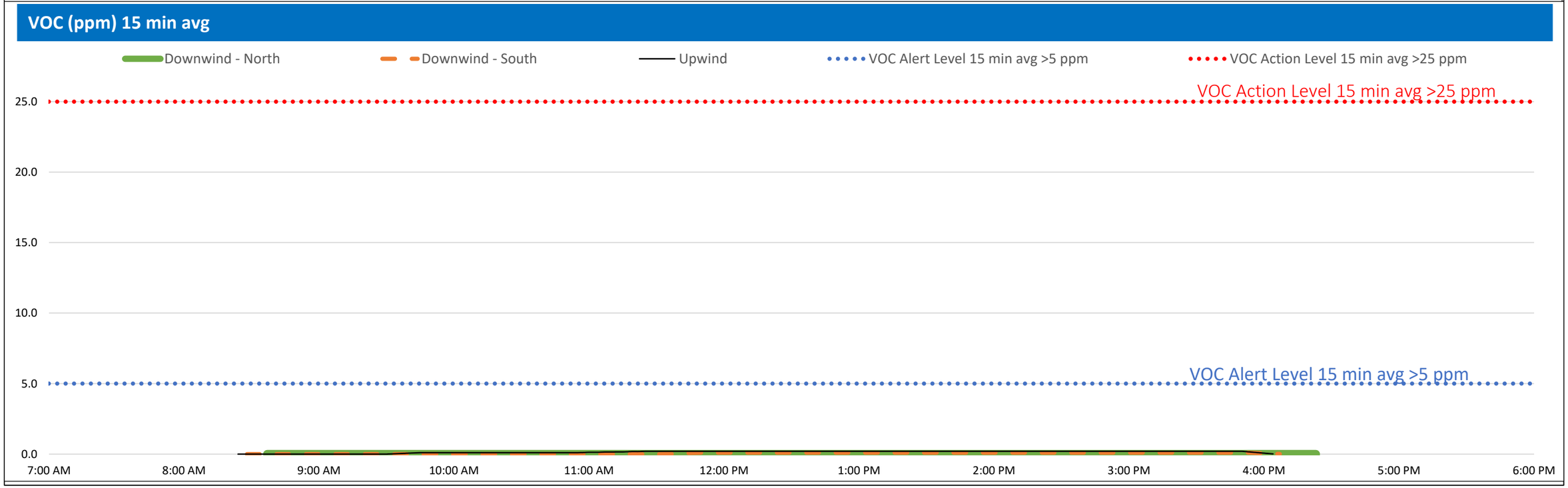


Fixed Station Daily Air Monitoring - November 16, 2021

Dust (mg/m3) 15 min avg

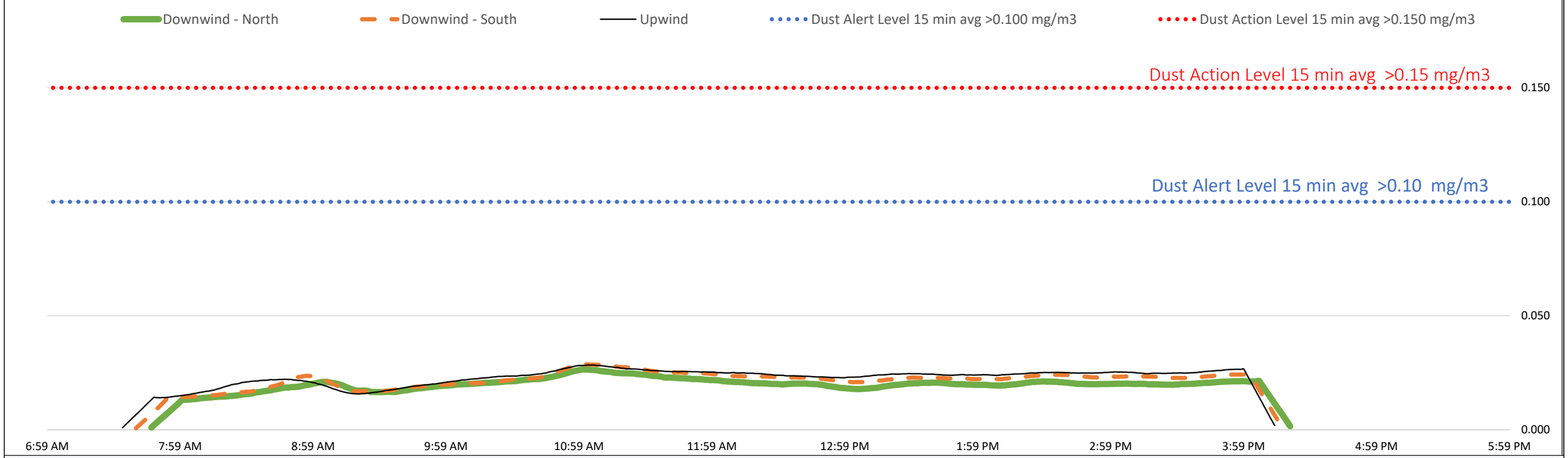


VOC (ppm) 15 min avg

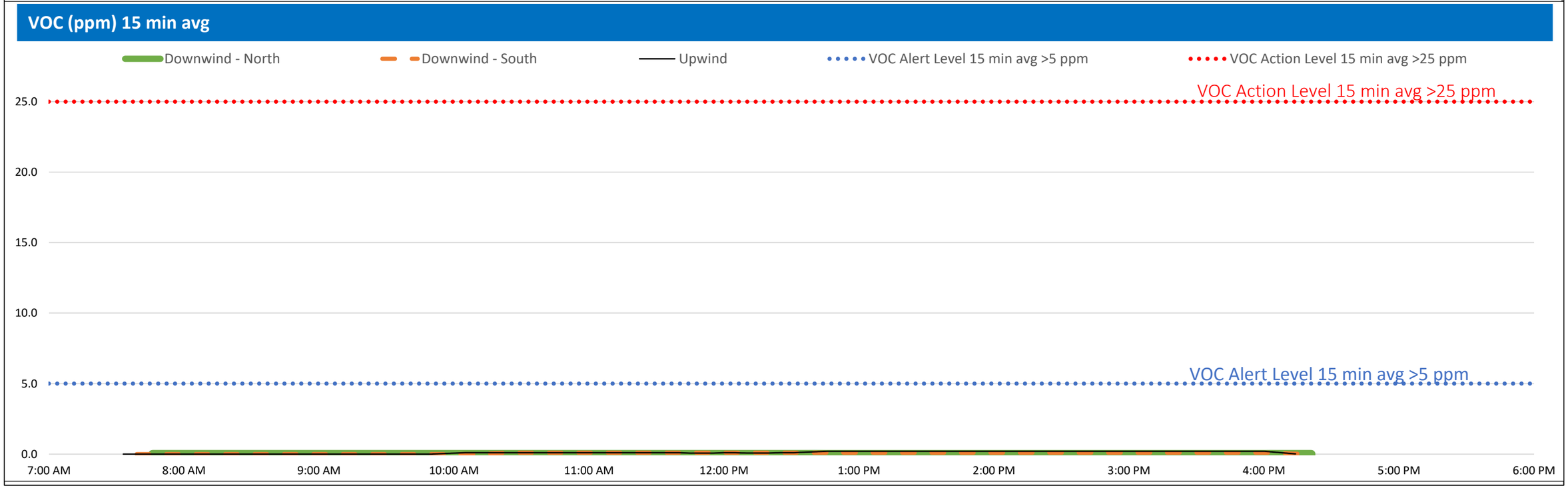


Fixed Station Daily Air Monitoring - November 17, 2021

Dust (mg/m3) 15 min avg

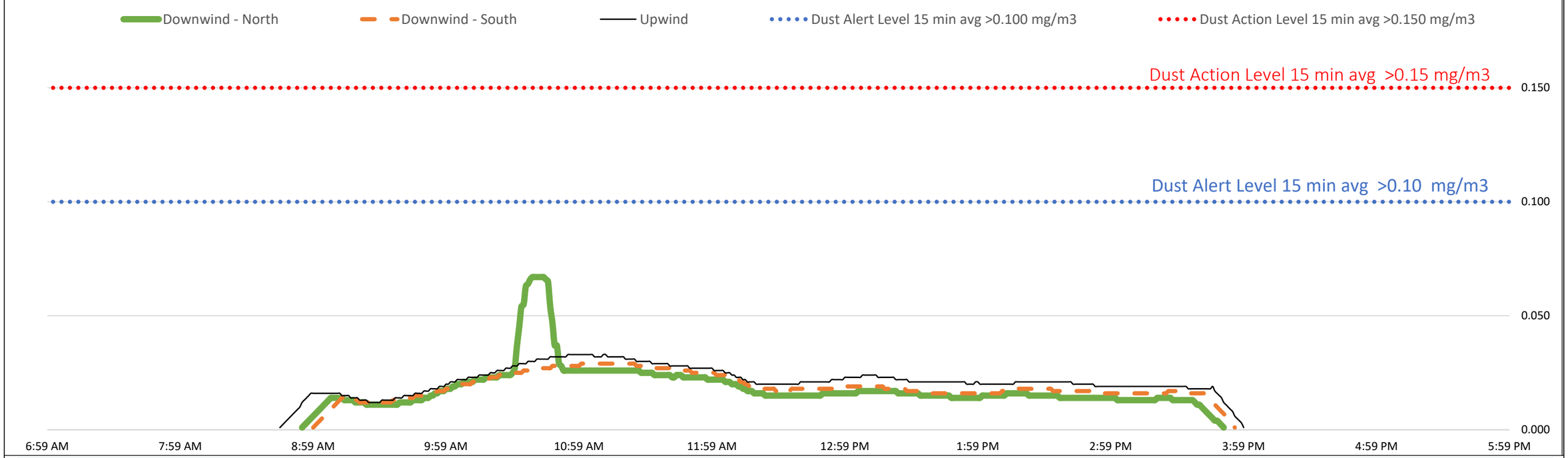


VOC (ppm) 15 min avg

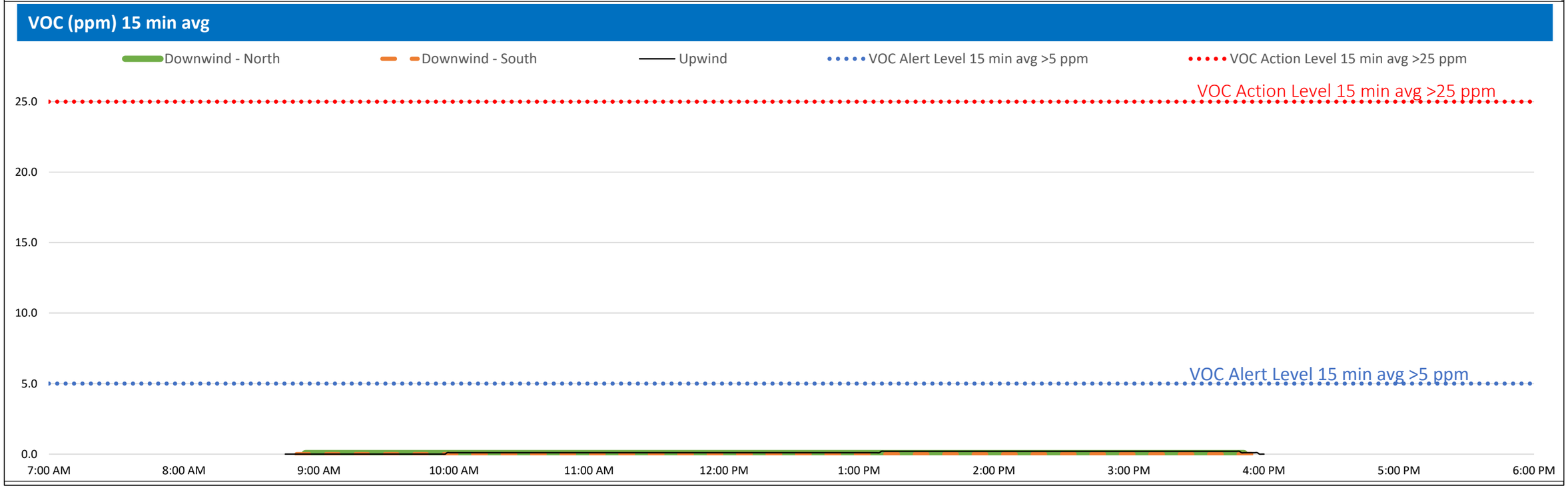


Fixed Station Daily Air Monitoring - November 18, 2021

Dust (mg/m3) 15 min avg

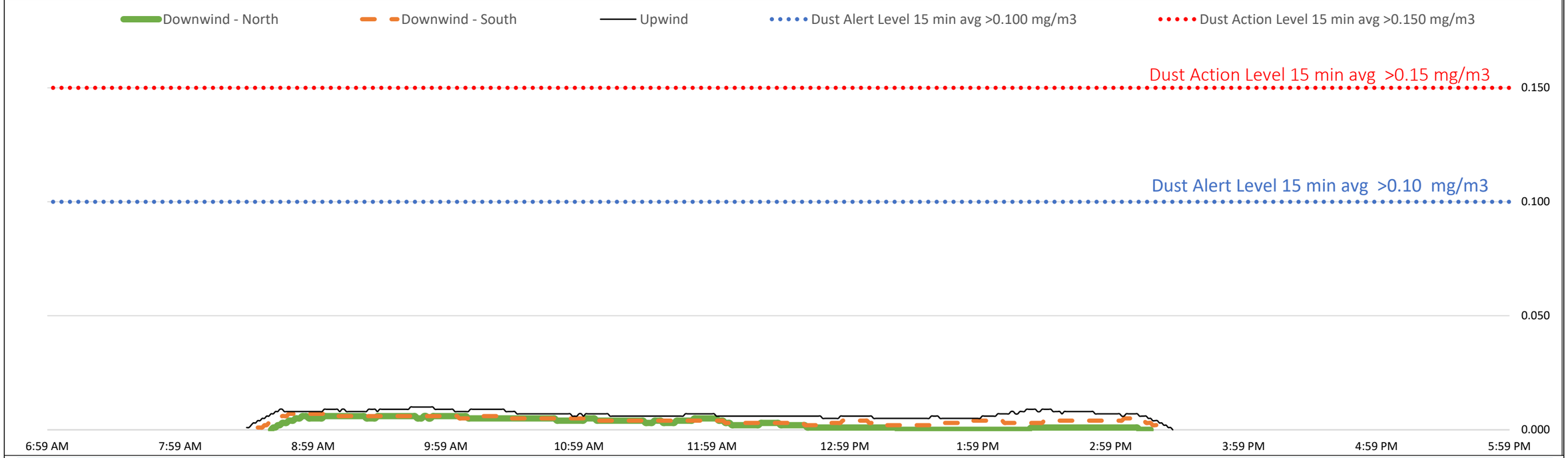


VOC (ppm) 15 min avg

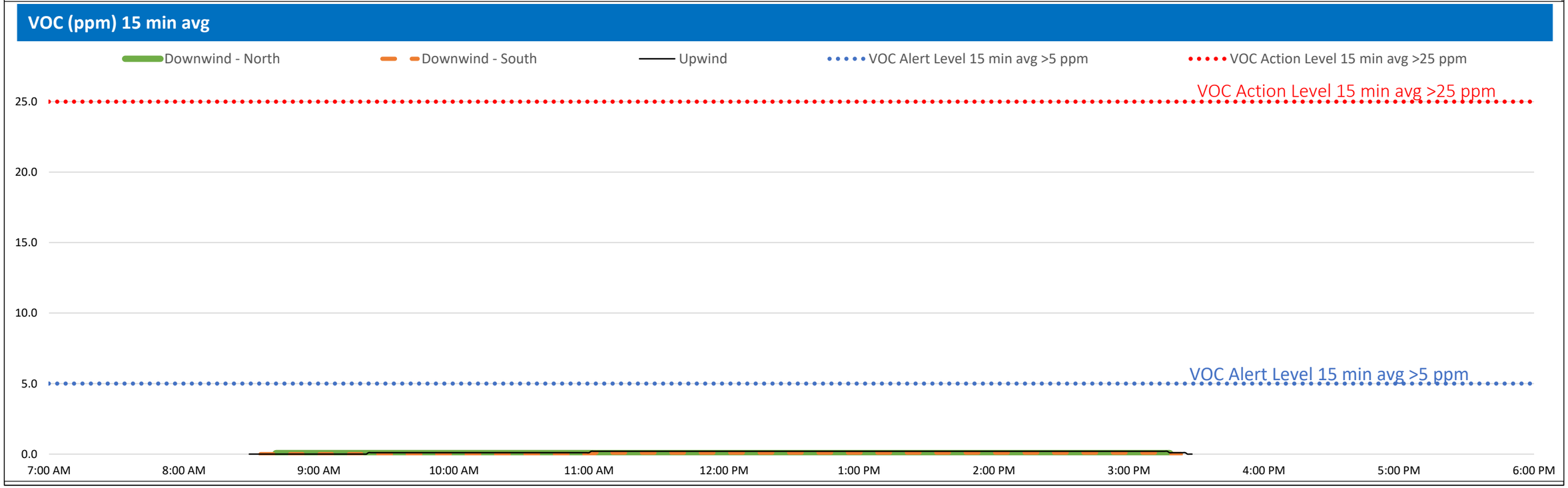


Fixed Station Daily Air Monitoring - November 19, 2021

Dust (mg/m3) 15 min avg

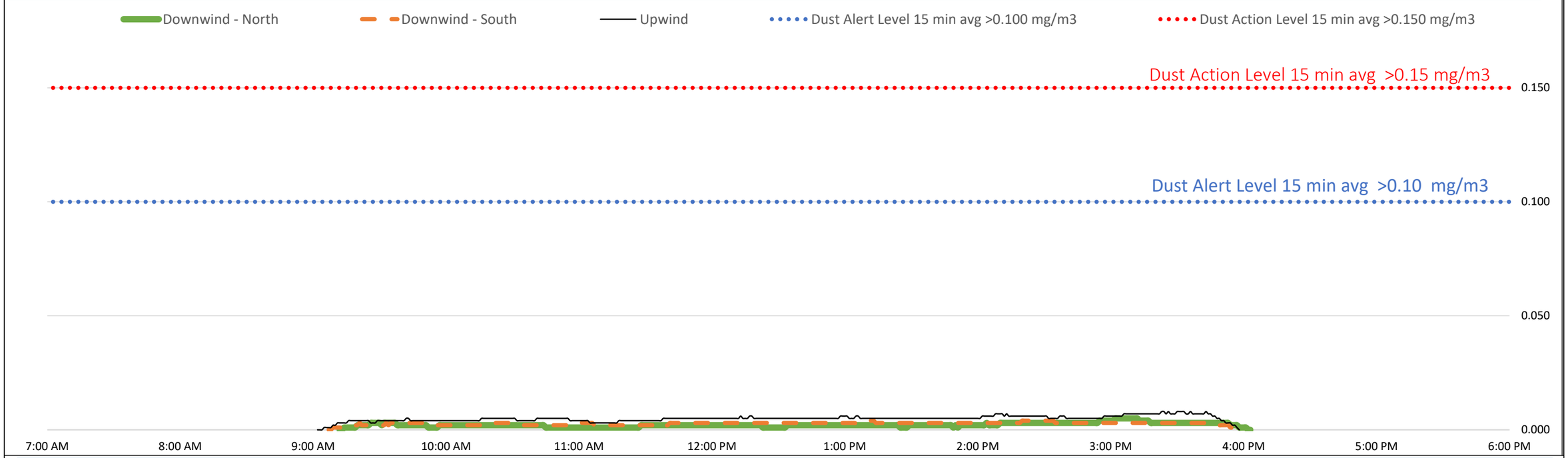


VOC (ppm) 15 min avg

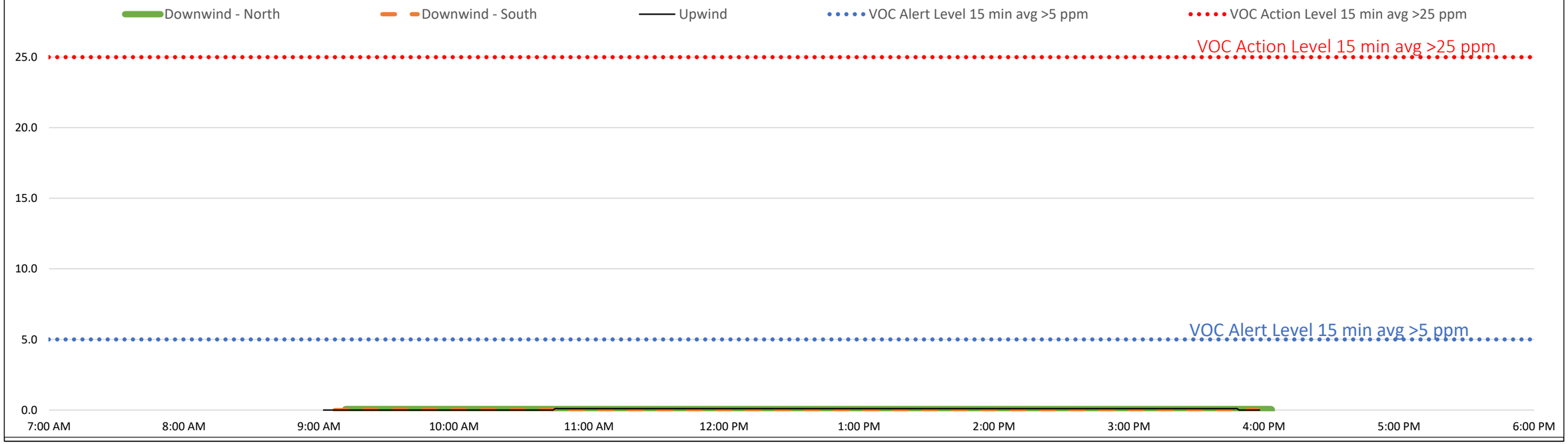


Fixed Station Daily Air Monitoring - November 22, 2021

Dust (mg/m3) 15 min avg

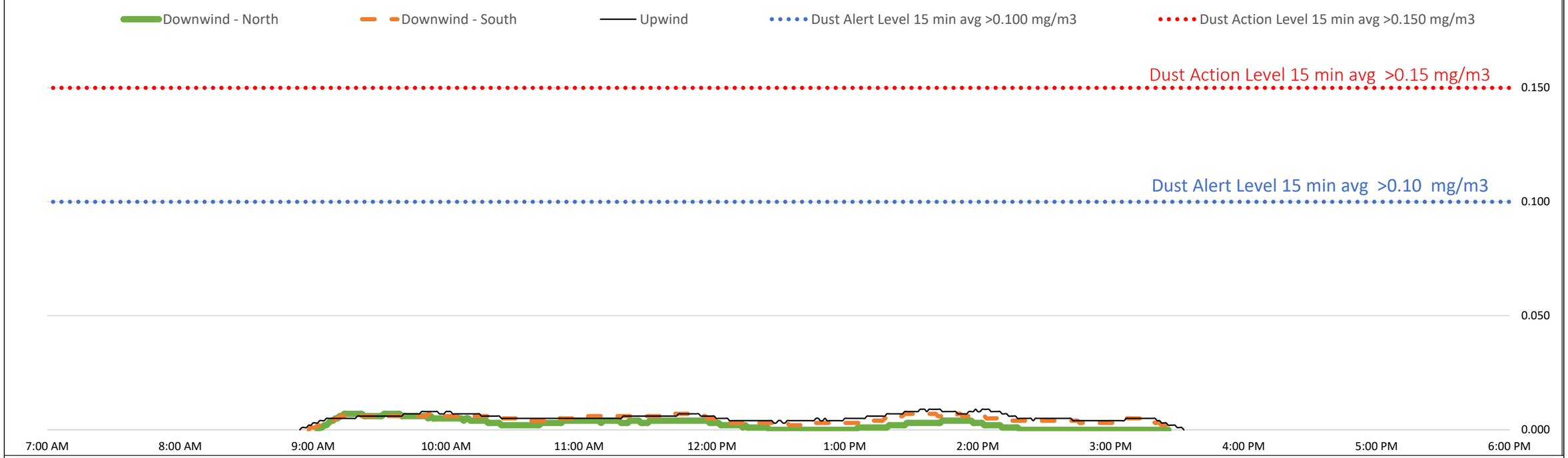


VOC (ppm) 15 min avg

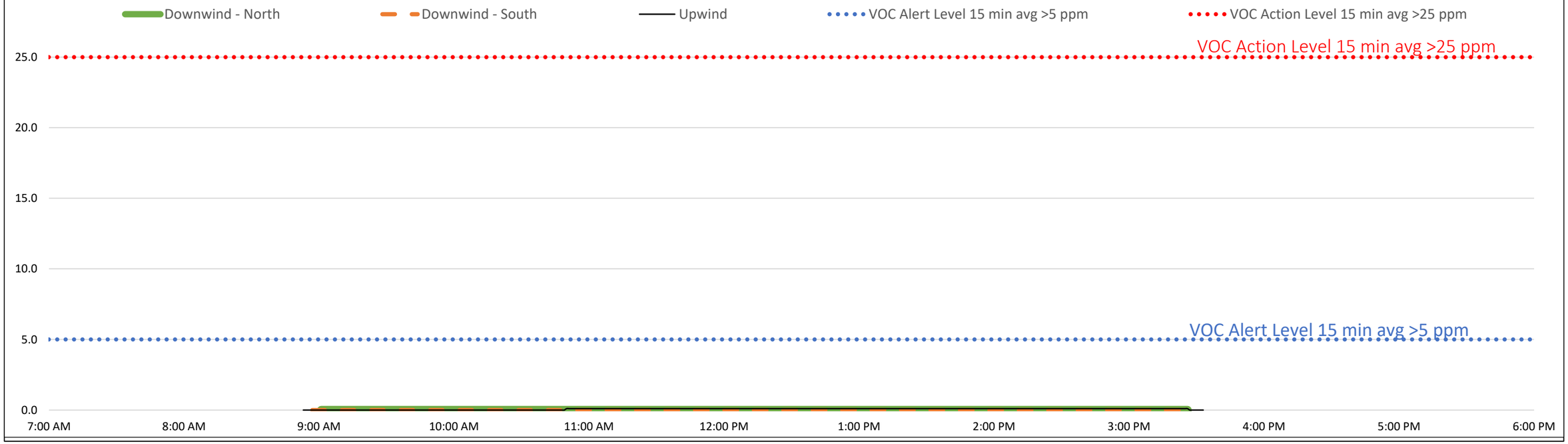


Fixed Station Daily Air Monitoring - November 23, 2021

Dust (mg/m3) 15 min avg

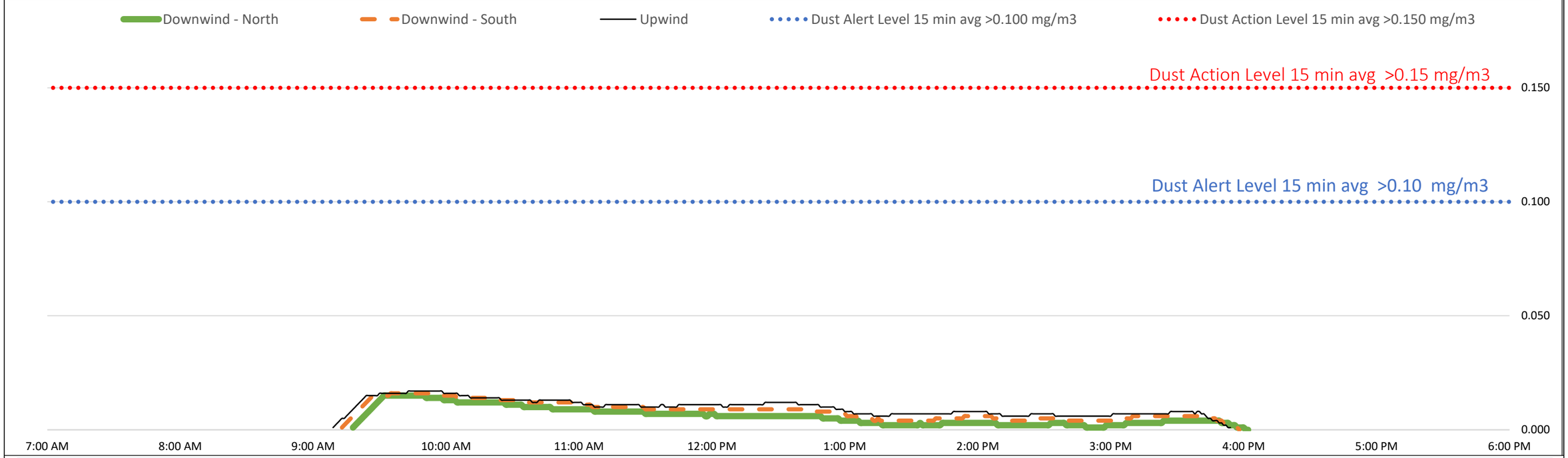


VOC (ppm) 15 min avg

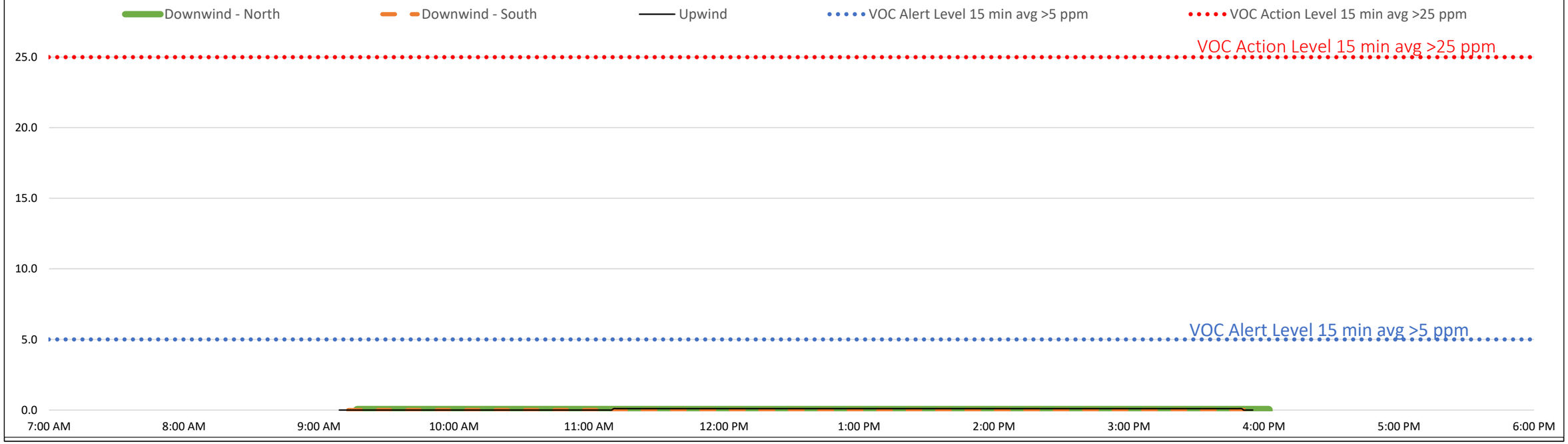


Fixed Station Daily Air Monitoring - November 29, 2021

Dust (mg/m3) 15 min avg

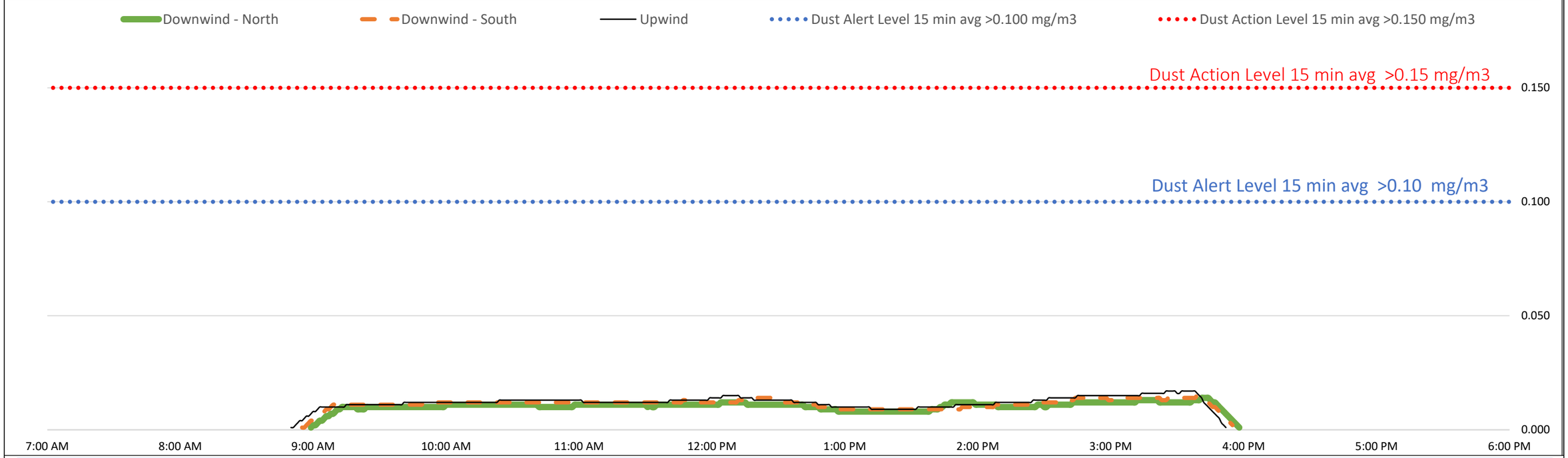


VOC (ppm) 15 min avg

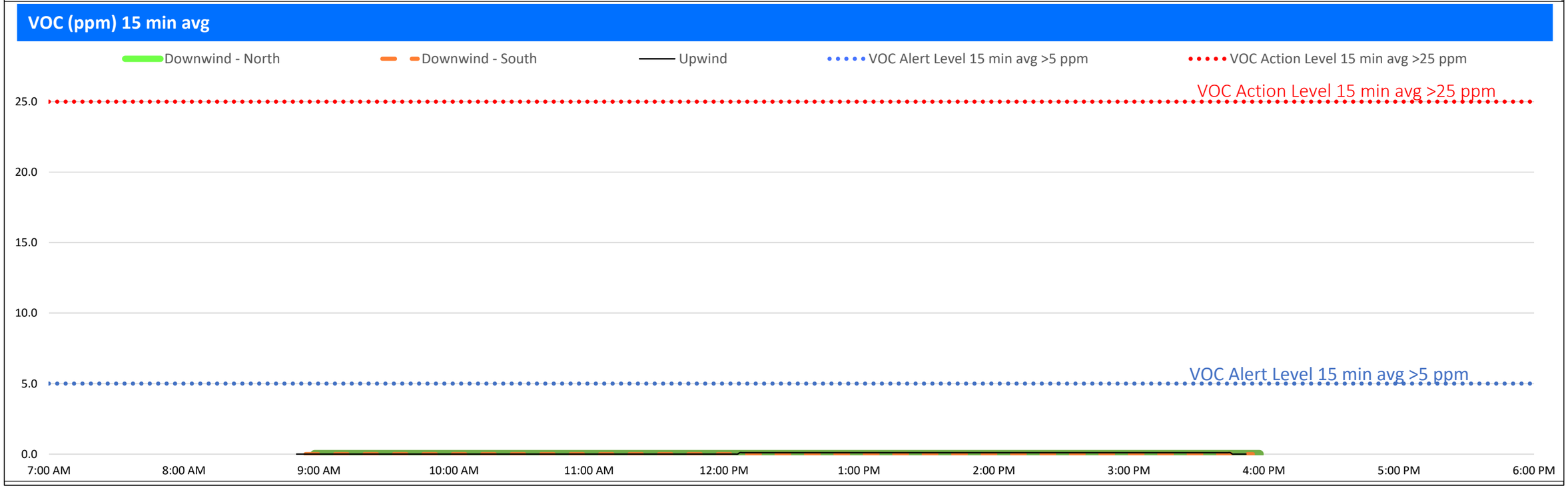


Fixed Station Daily Air Monitoring - November 30, 2021

Dust (mg/m3) 15 min avg

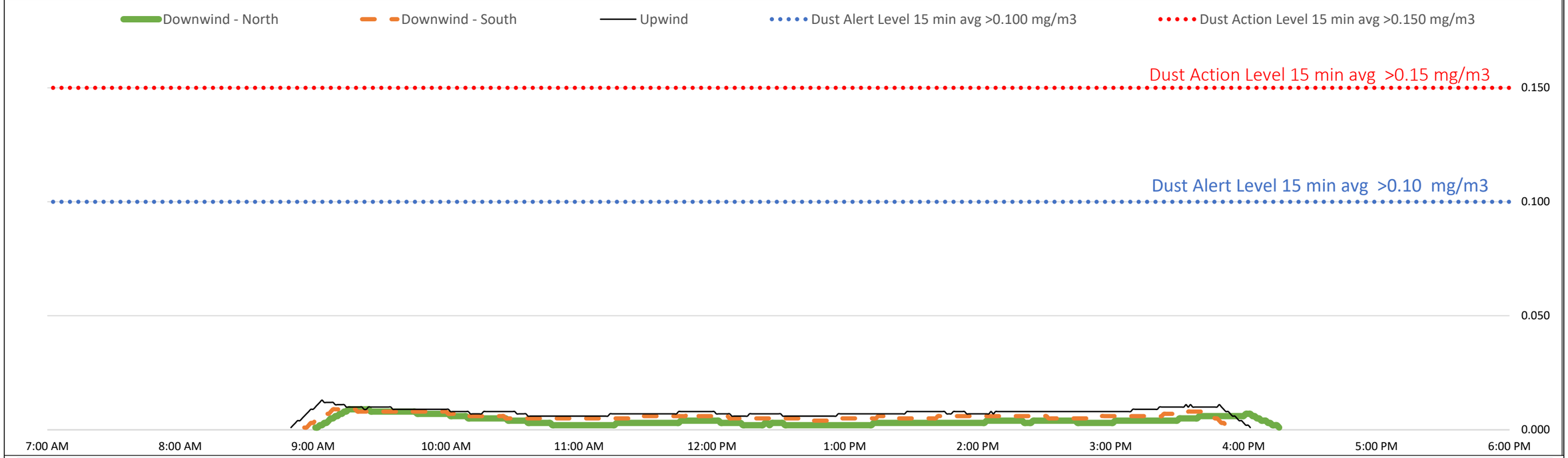


VOC (ppm) 15 min avg

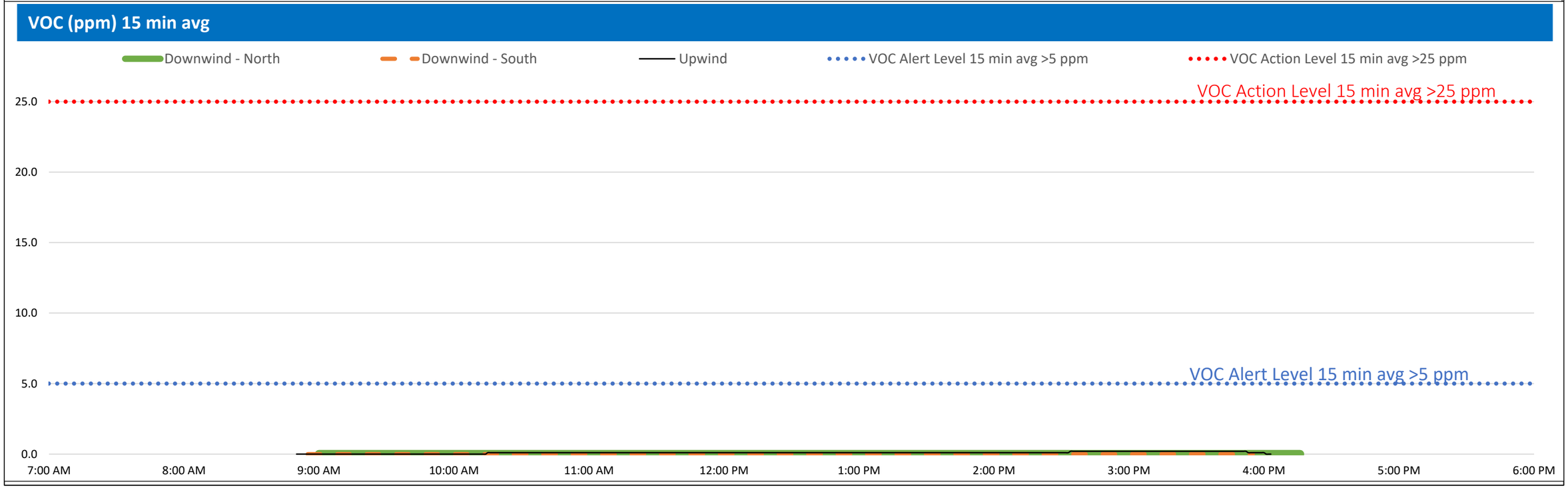


Fixed Station Daily Air Monitoring - December 1, 2021

Dust (mg/m3) 15 min avg

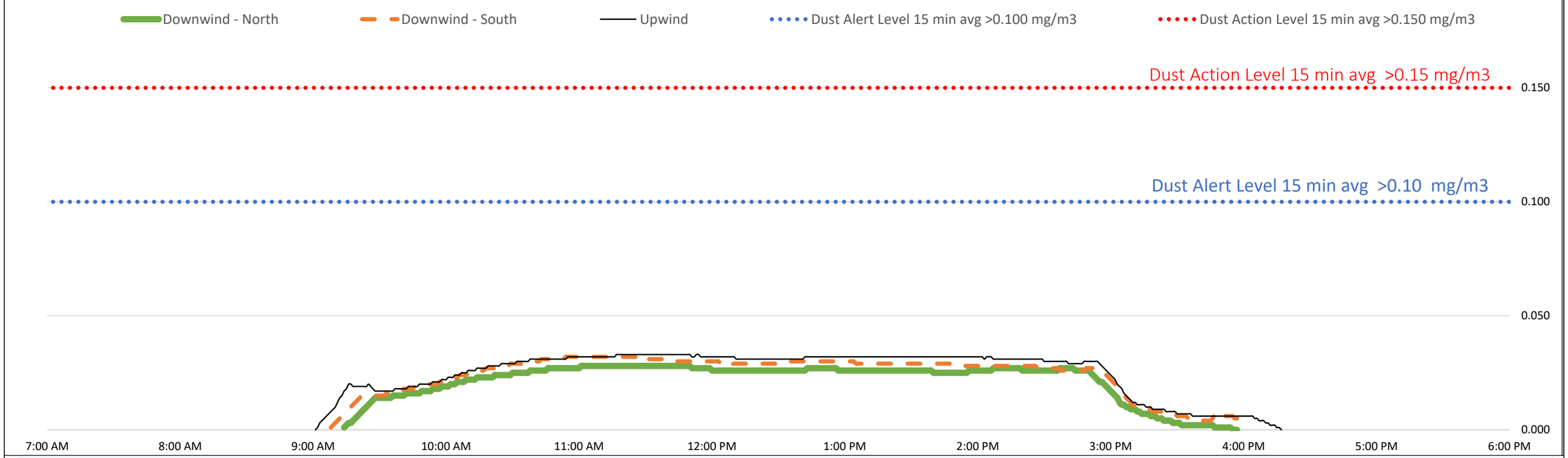


VOC (ppm) 15 min avg

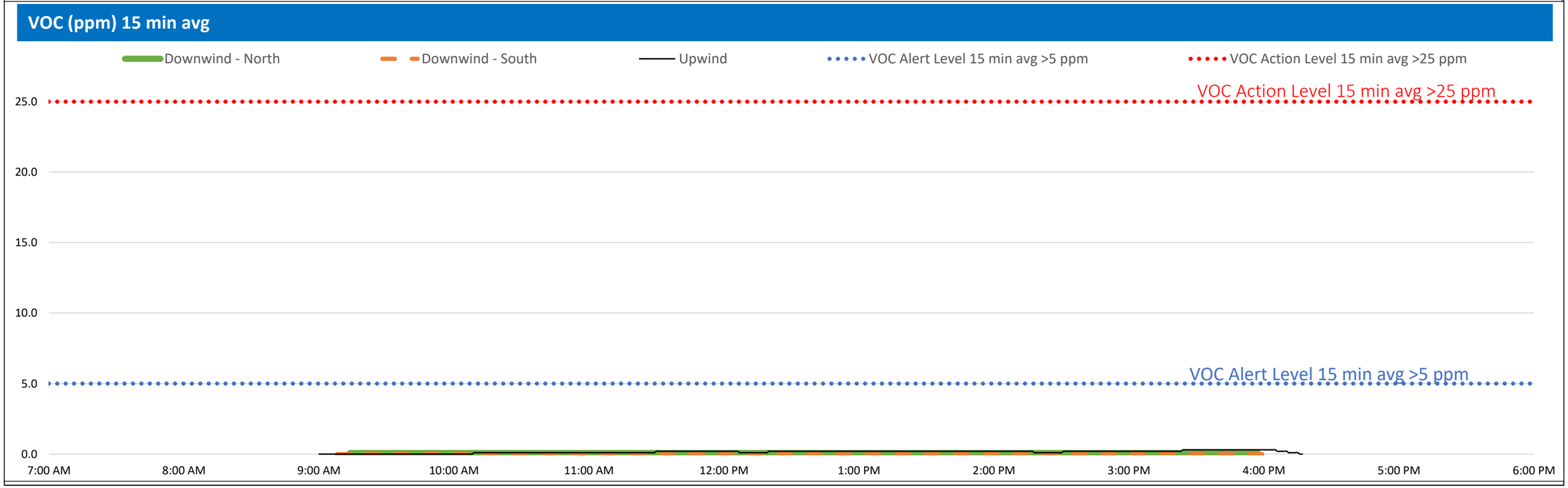


Fixed Station Daily Air Monitoring - December 2, 2021

Dust (mg/m3) 15 min avg

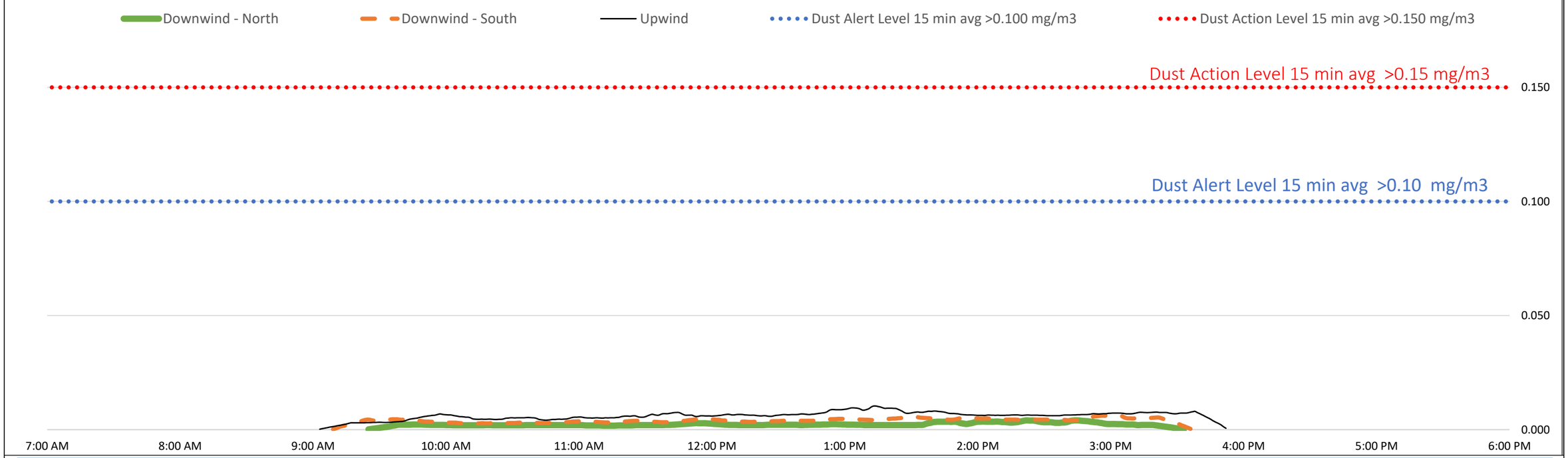


VOC (ppm) 15 min avg



Fixed Station Daily Air Monitoring - December 3, 2021

Dust (mg/m3) 15 min avg

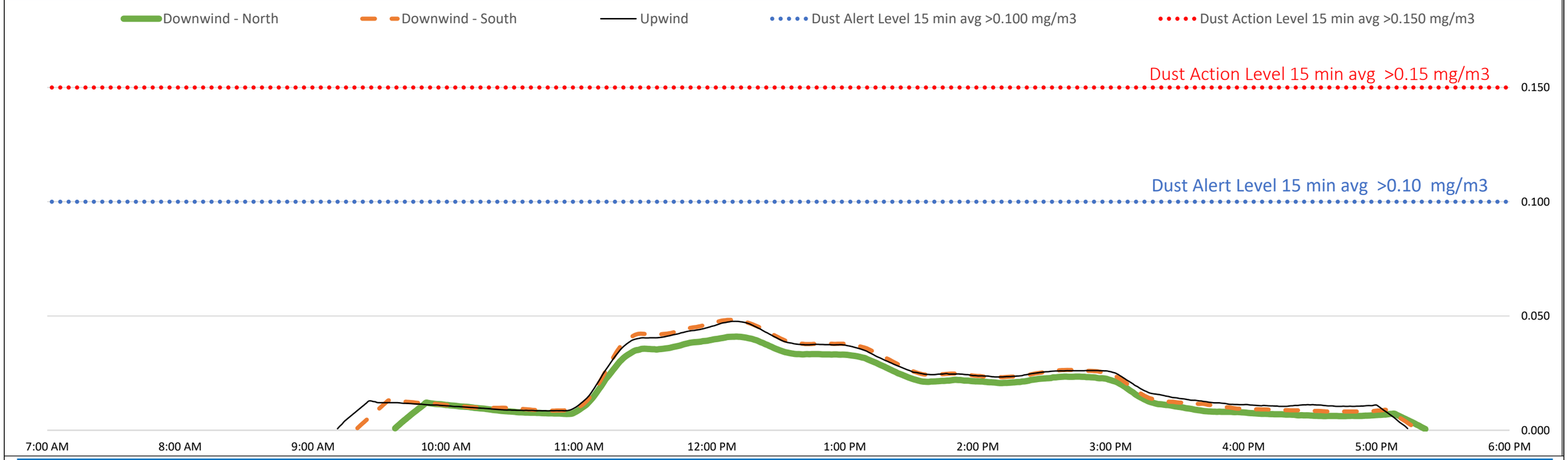


VOC (ppm) 15 min avg

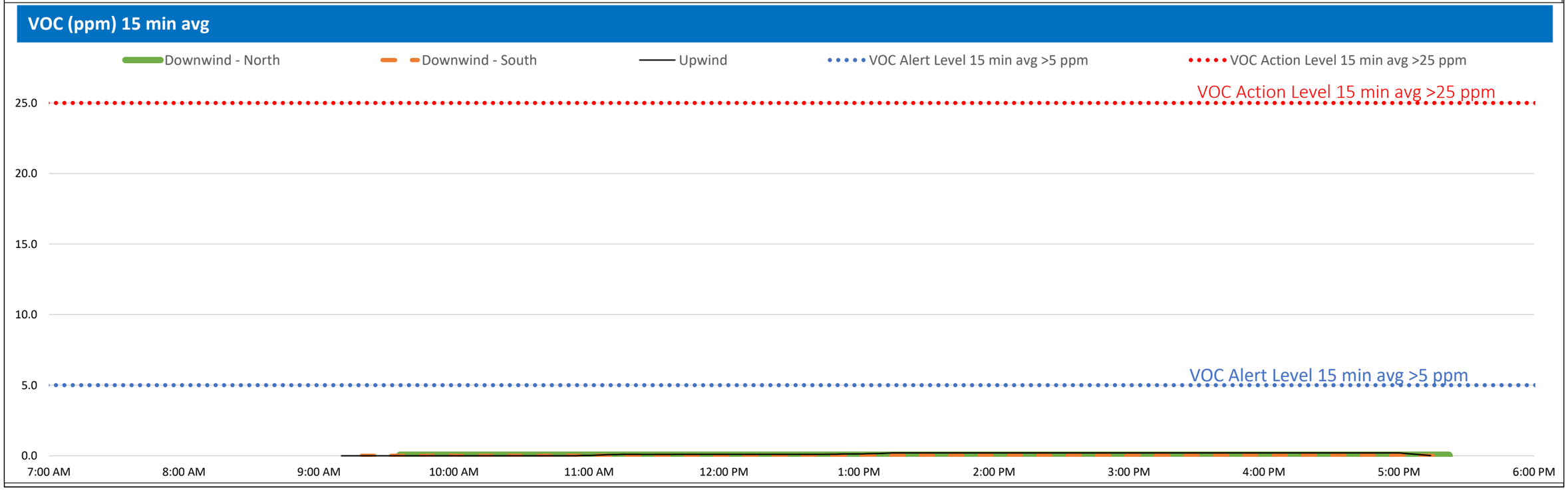


Fixed Station Daily Air Monitoring - December 6, 2021

Dust (mg/m3) 15 min avg

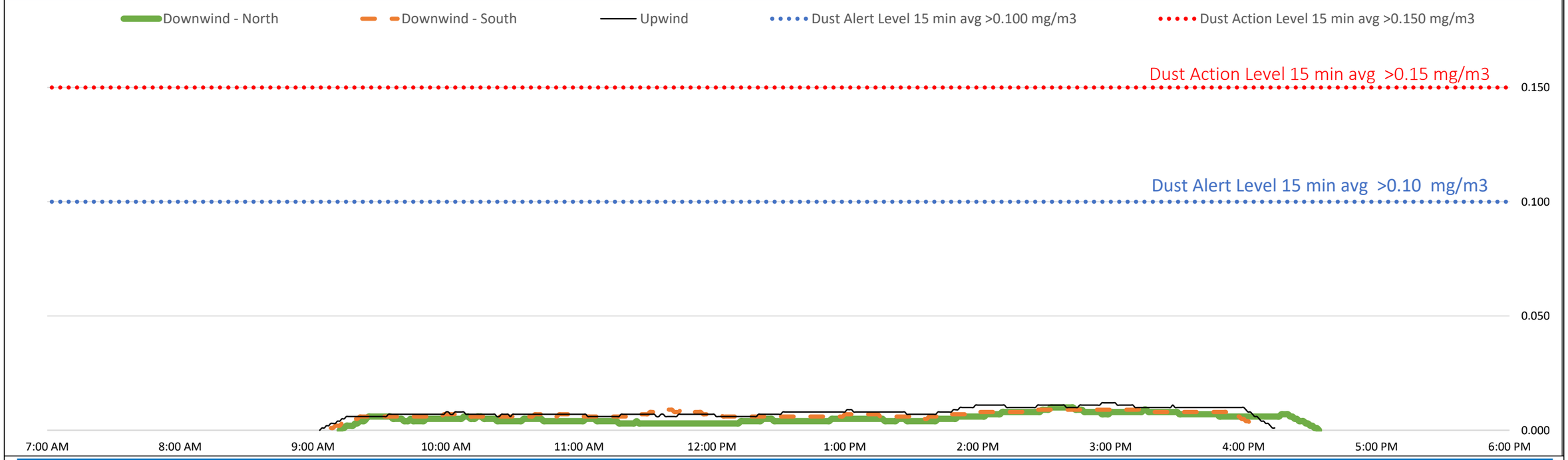


VOC (ppm) 15 min avg

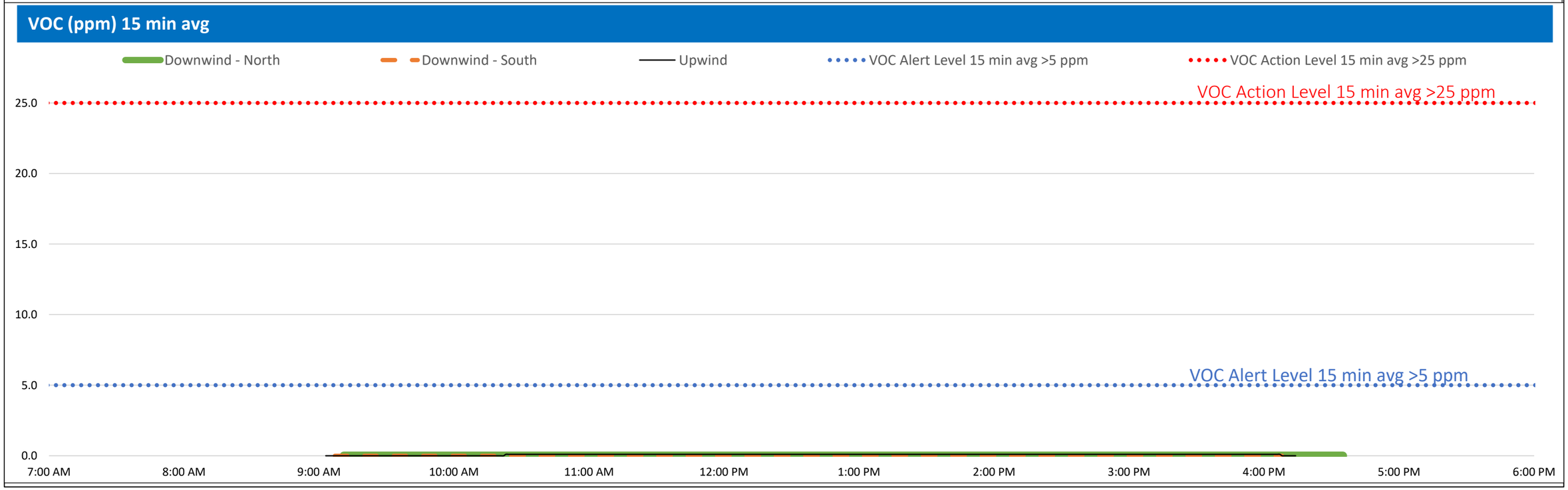


Fixed Station Daily Air Monitoring - December 7, 2021

Dust (mg/m3) 15 min avg

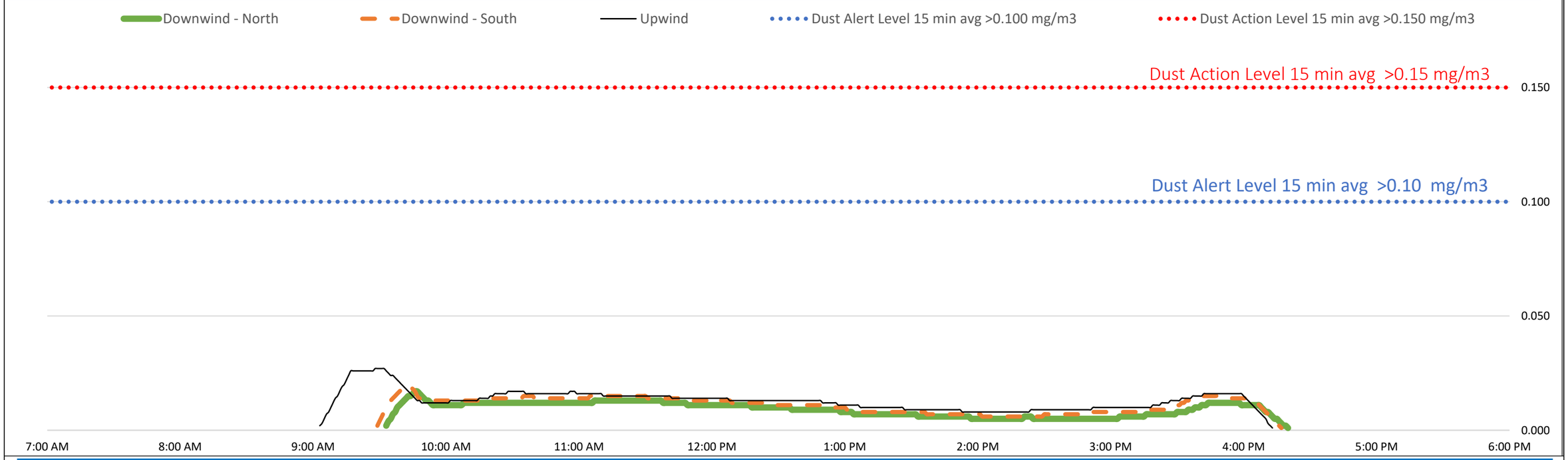


VOC (ppm) 15 min avg

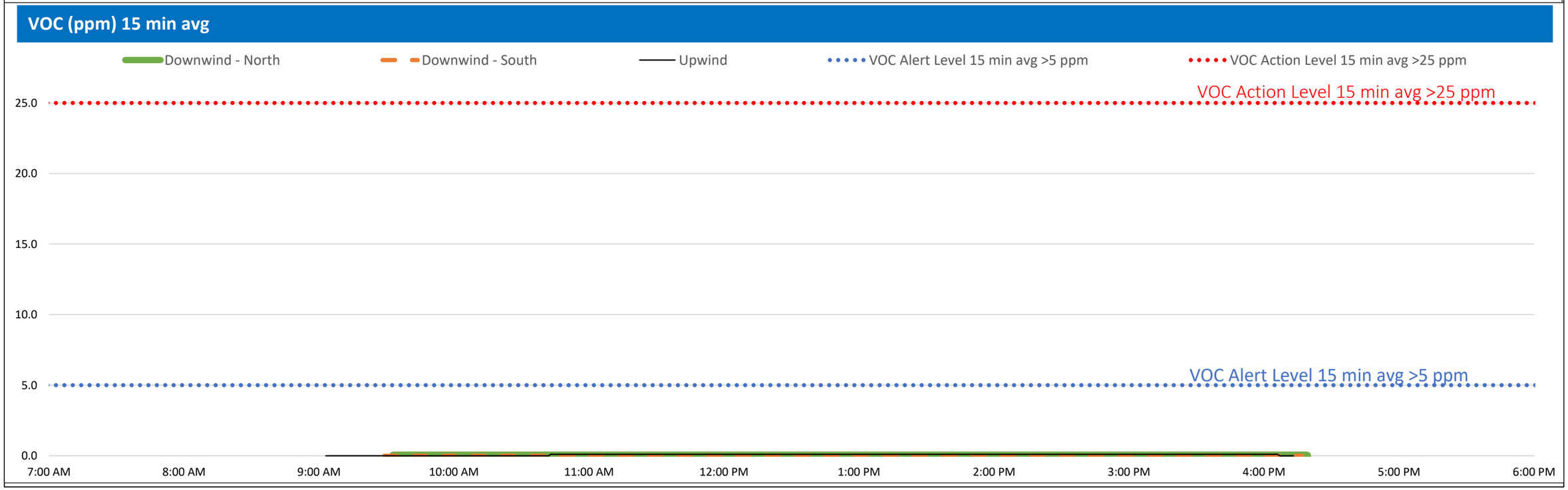


Fixed Station Daily Air Monitoring - December 8, 2021

Dust (mg/m3) 15 min avg

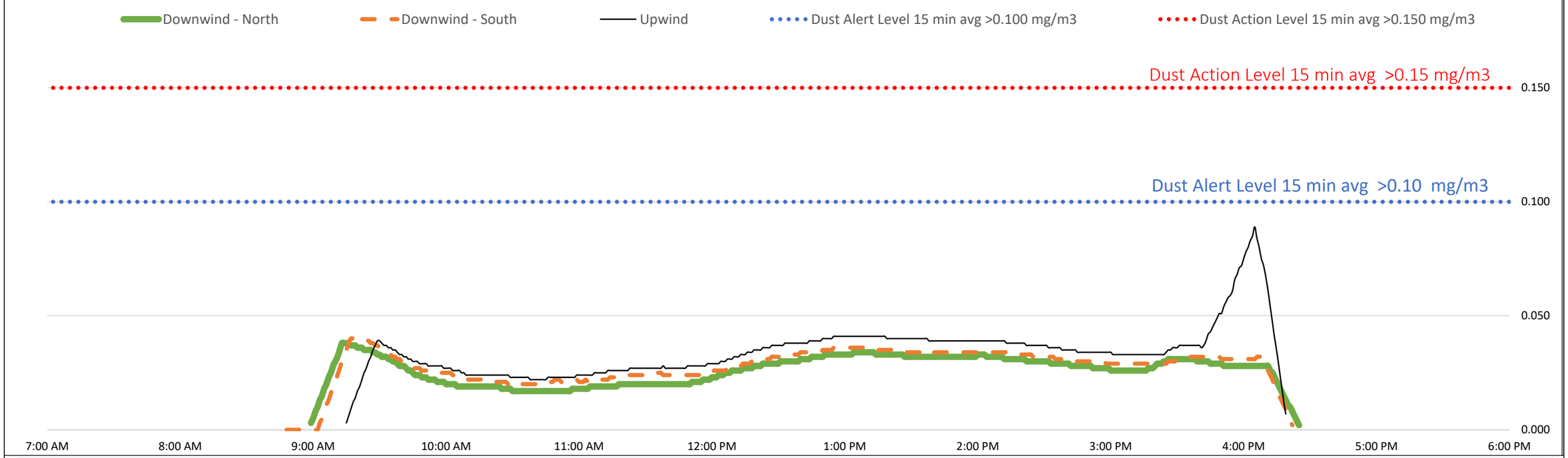


VOC (ppm) 15 min avg

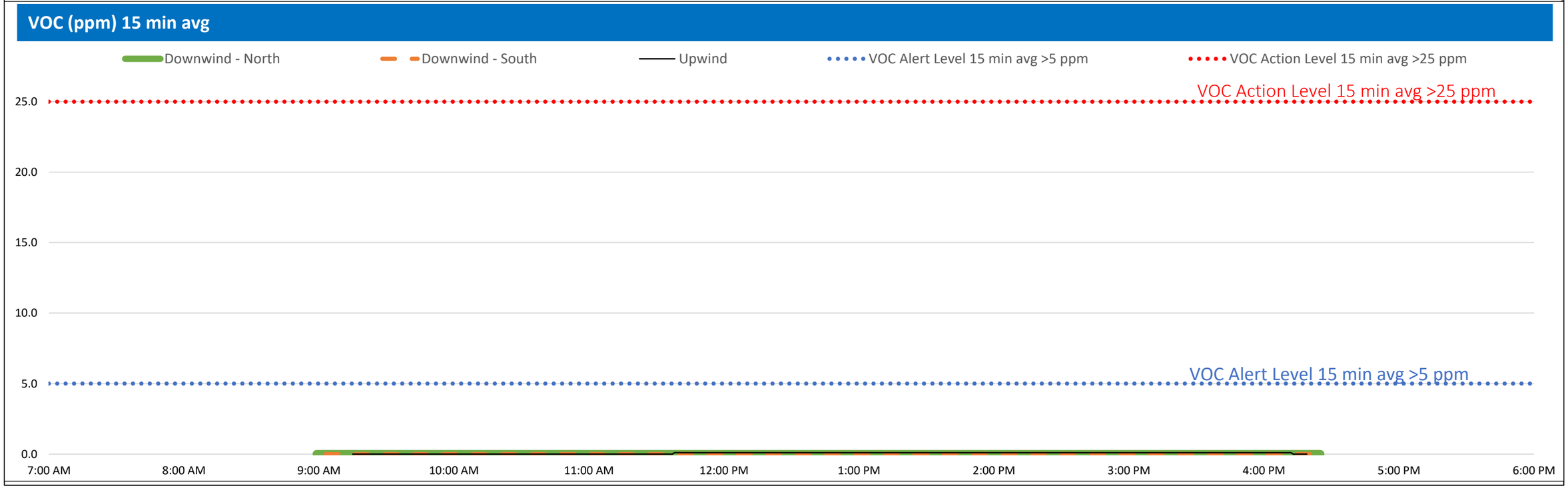


Fixed Station Daily Air Monitoring - December 9, 2021

Dust (mg/m3) 15 min avg

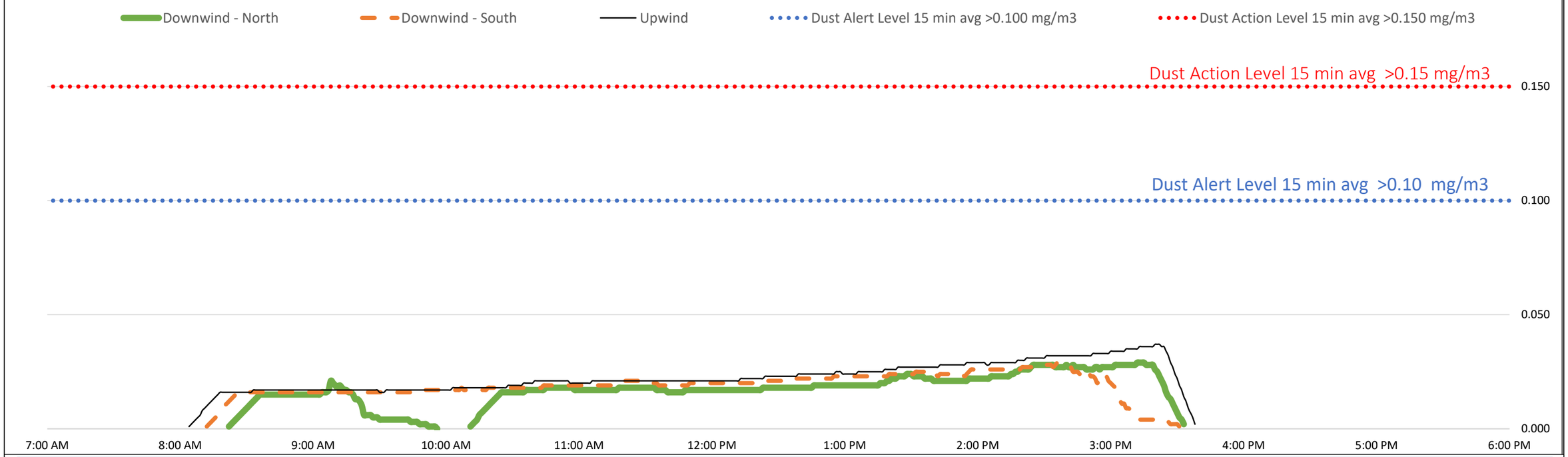


VOC (ppm) 15 min avg

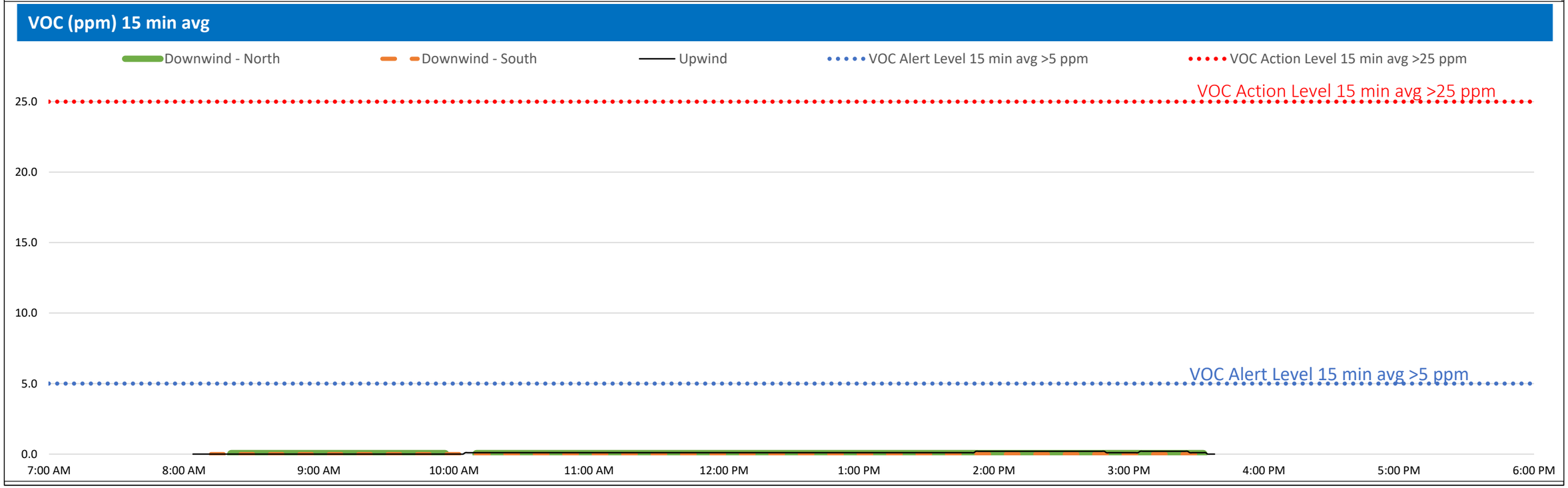


Fixed Station Daily Air Monitoring - December 10, 2021

Dust (mg/m3) 15 min avg

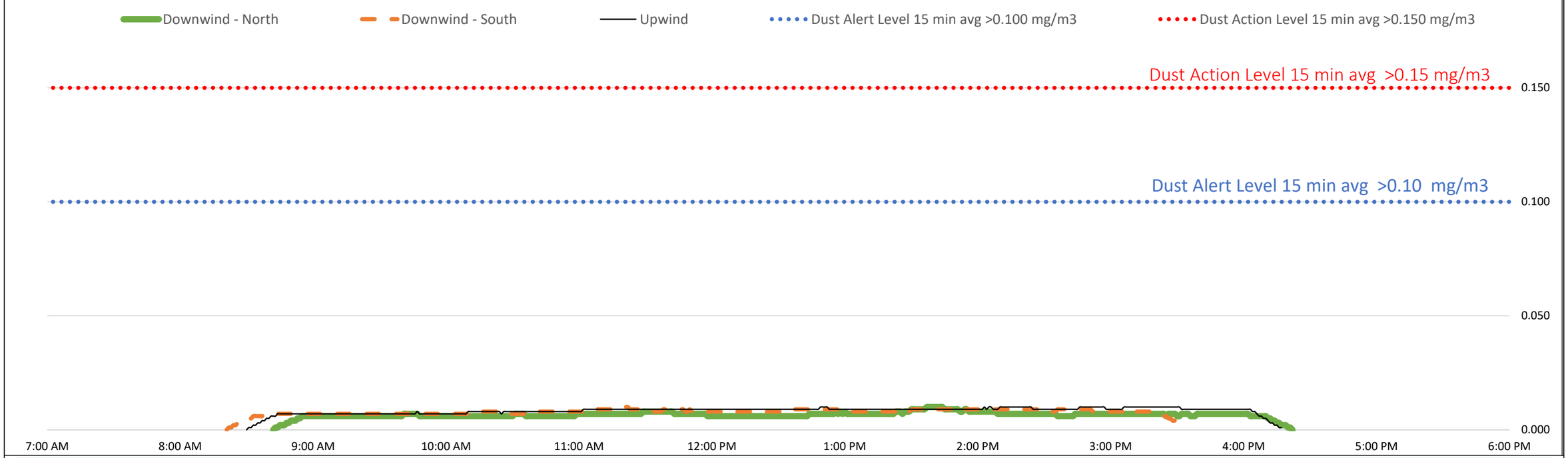


VOC (ppm) 15 min avg

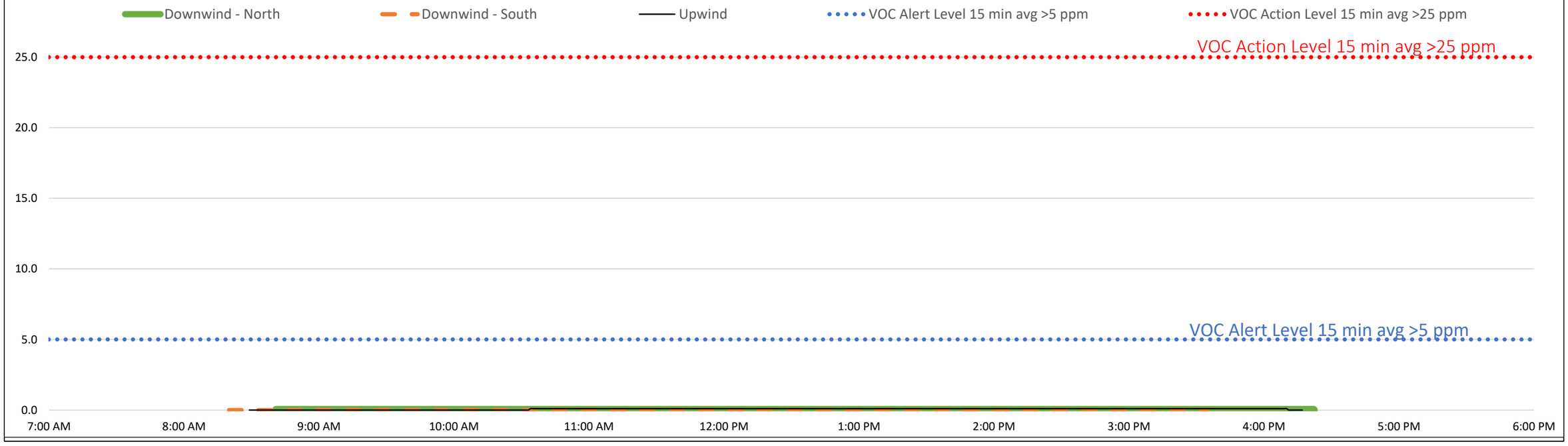


Fixed Station Daily Air Monitoring - December 13, 2021

Dust (mg/m3) 15 min avg

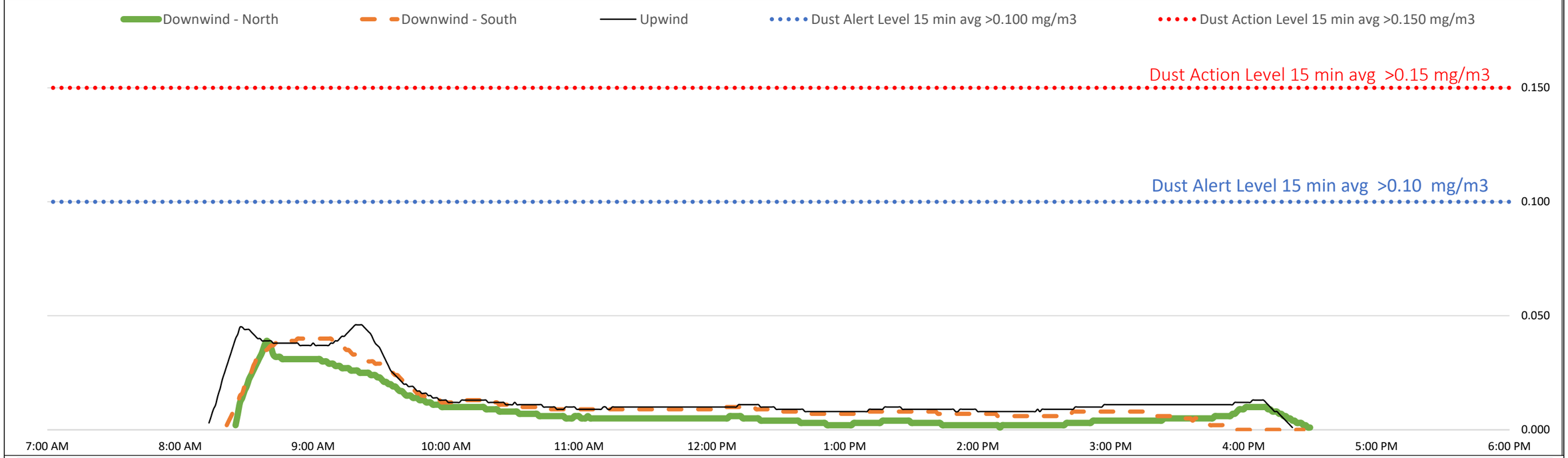


VOC (ppm) 15 min avg

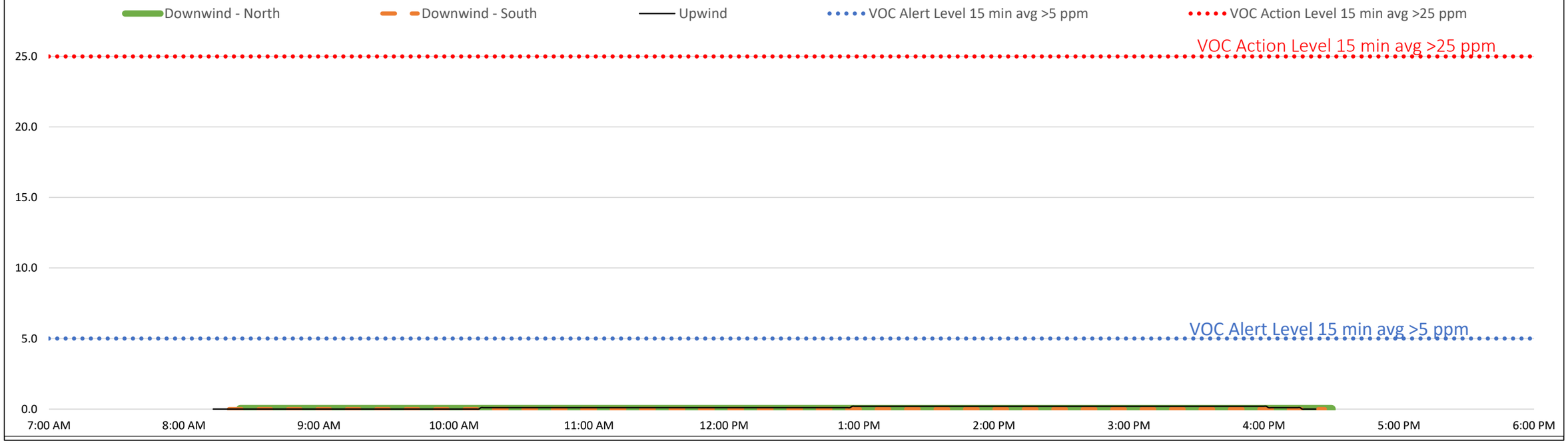


Fixed Station Daily Air Monitoring - December 14, 2021

Dust (mg/m3) 15 min avg

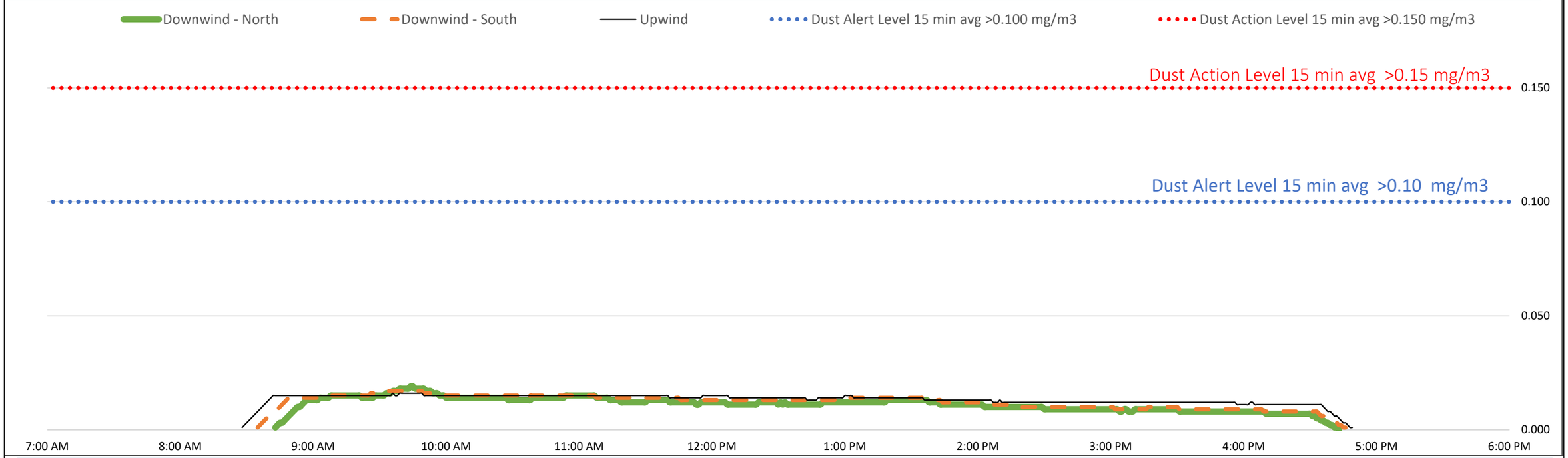


VOC (ppm) 15 min avg

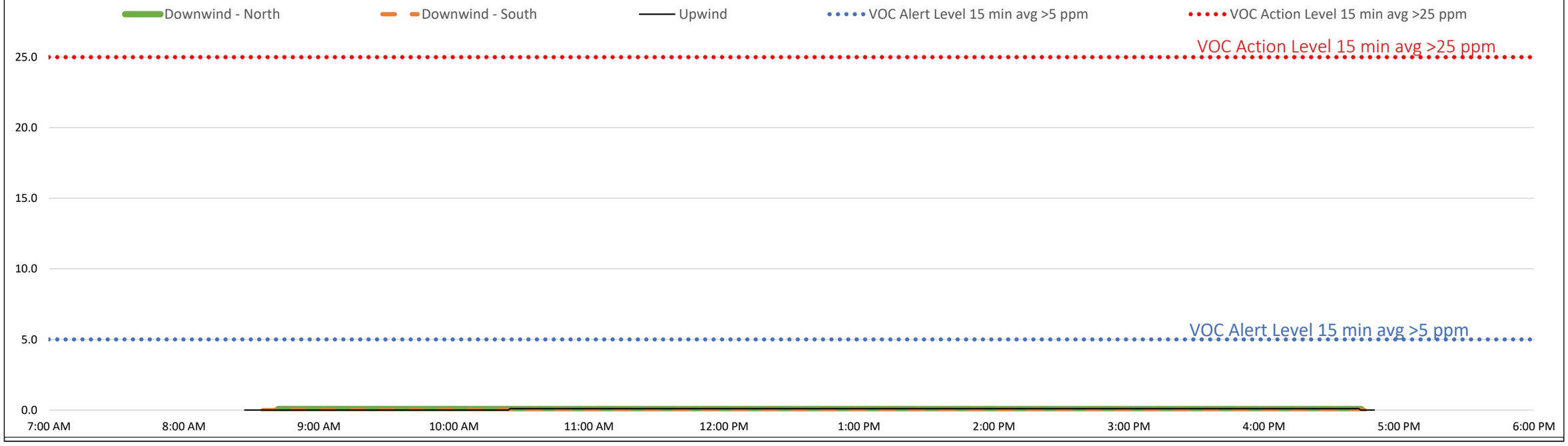


Fixed Station Daily Air Monitoring - December 15, 2021

Dust (mg/m3) 15 min avg

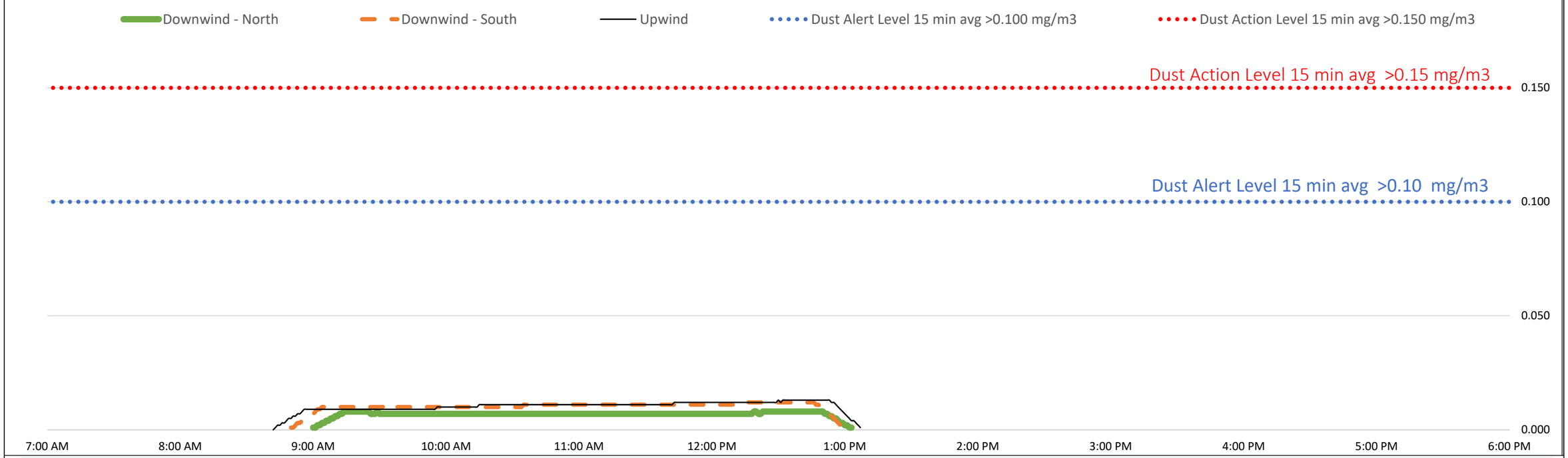


VOC (ppm) 15 min avg

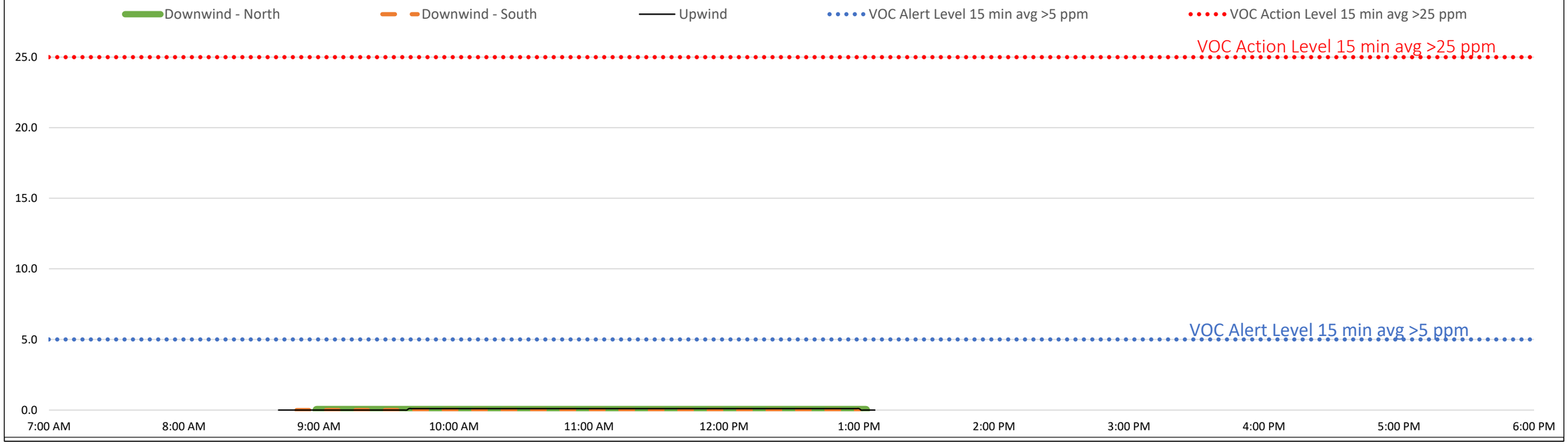


Fixed Station Daily Air Monitoring - December 16, 2021

Dust (mg/m3) 15 min avg

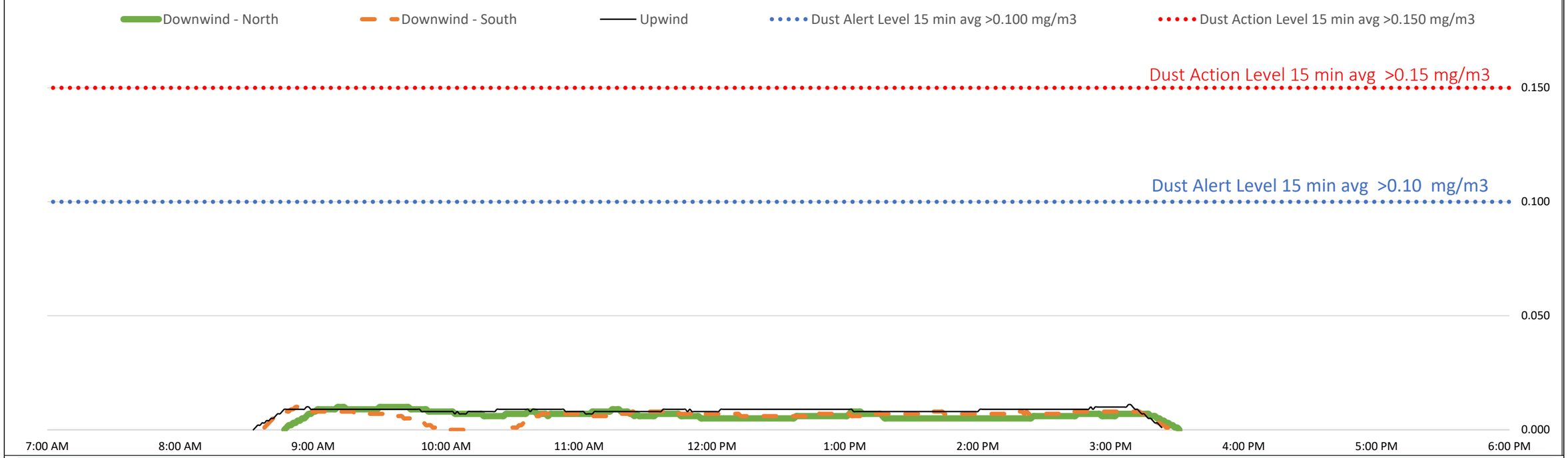


VOC (ppm) 15 min avg

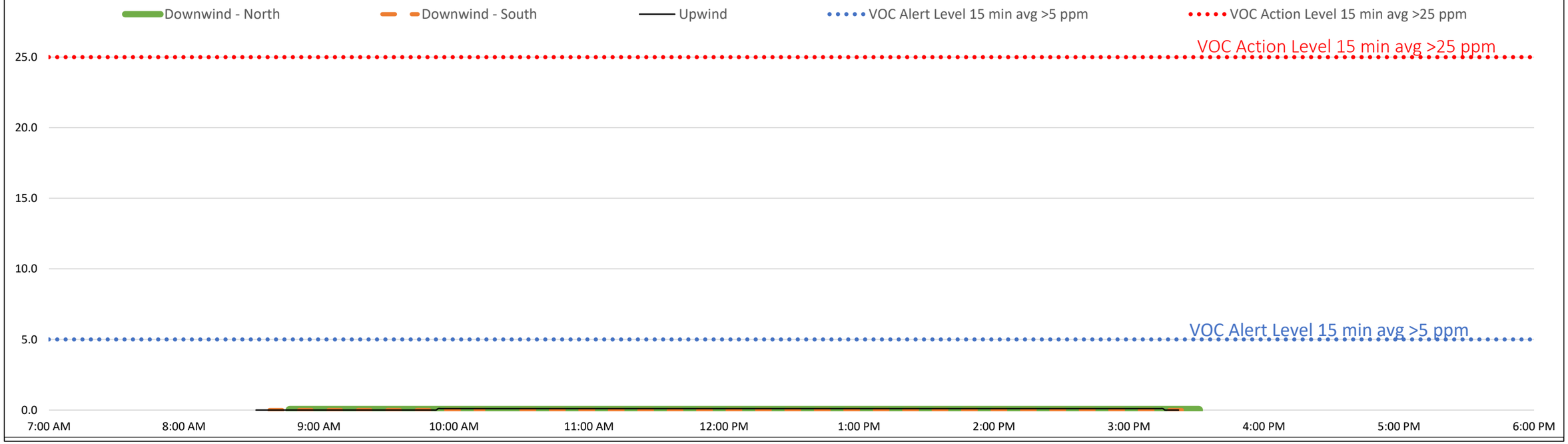


Fixed Station Daily Air Monitoring - December 17, 2021

Dust (mg/m3) 15 min avg

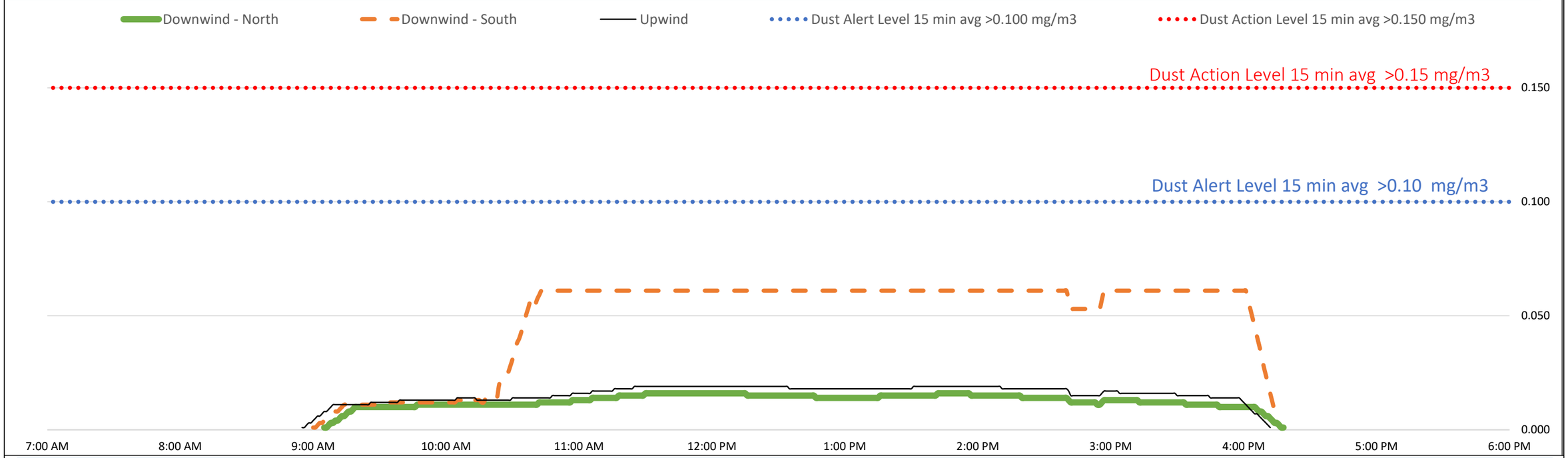


VOC (ppm) 15 min avg

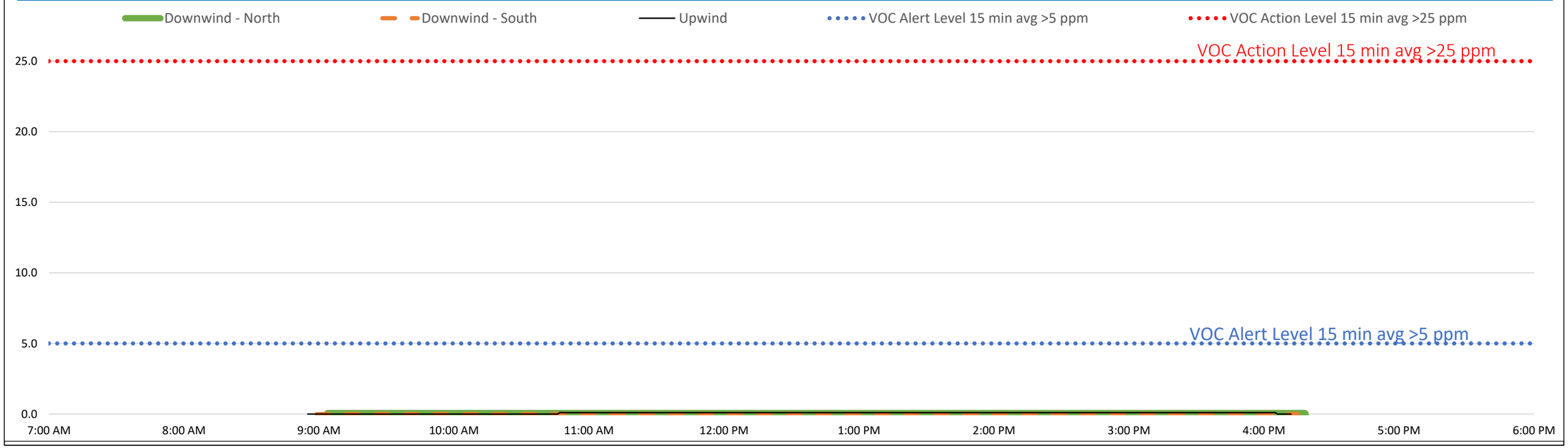


Fixed Station Daily Air Monitoring - December 20, 2021

Dust (mg/m3) 15 min avg

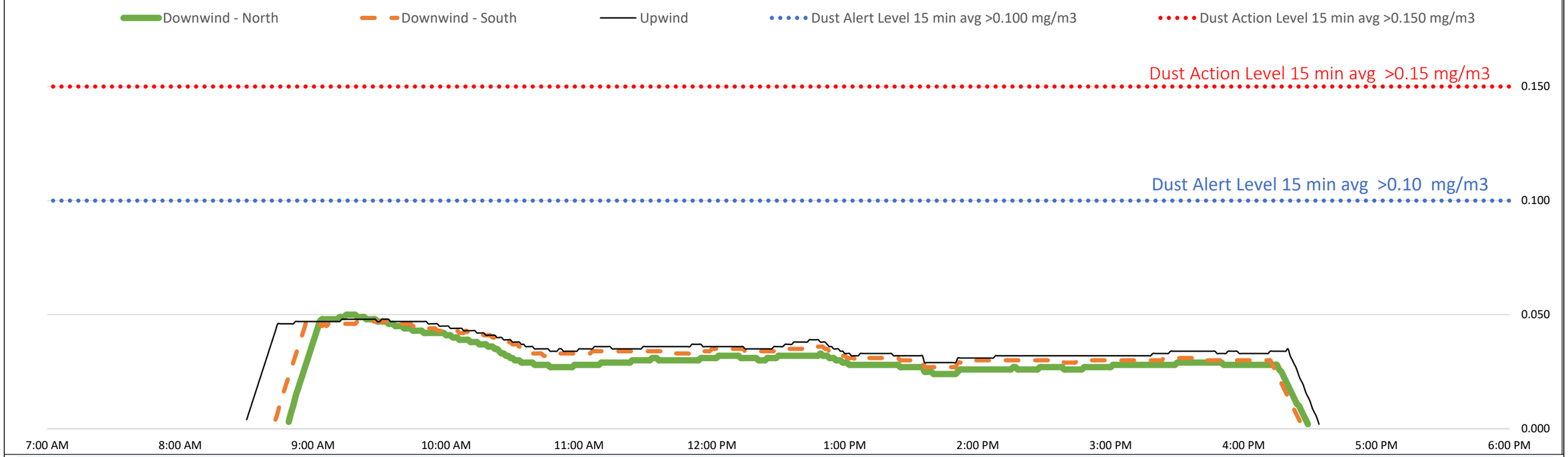


VOC (ppm) 15 min avg

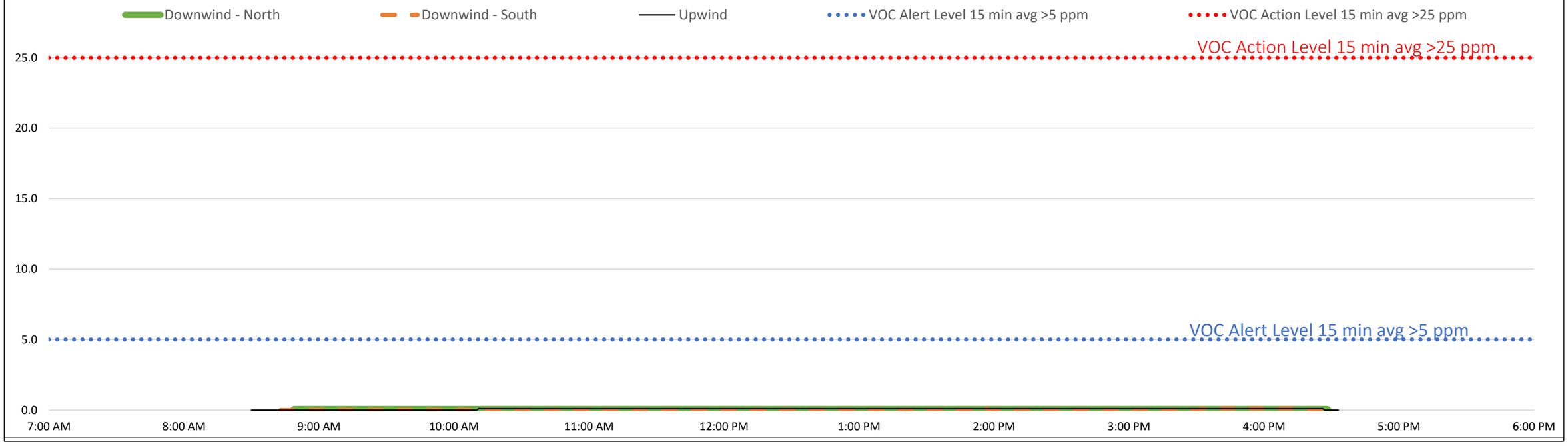


Fixed Station Daily Air Monitoring - December 21, 2021

Dust (mg/m3) 15 min avg

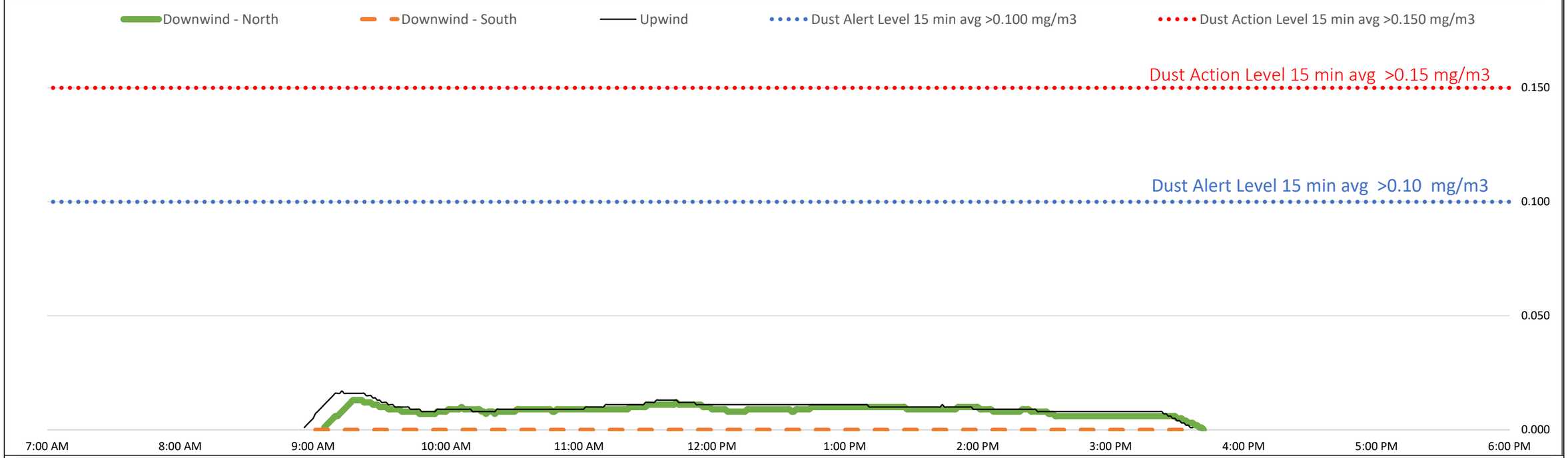


VOC (ppm) 15 min avg

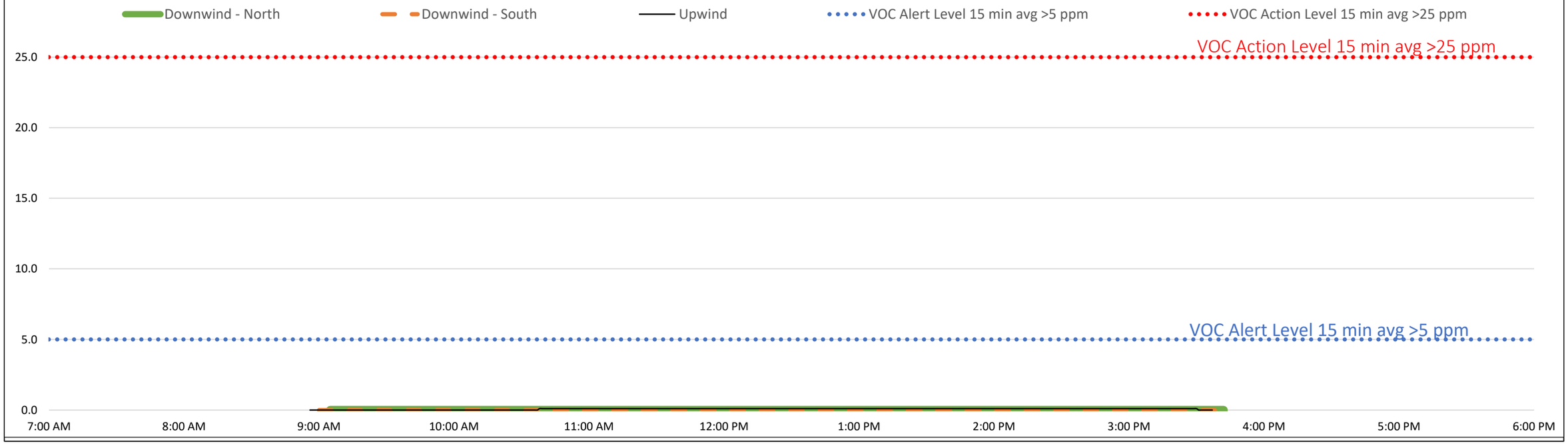


Fixed Station Daily Air Monitoring - December 22, 2021

Dust (mg/m3) 15 min avg

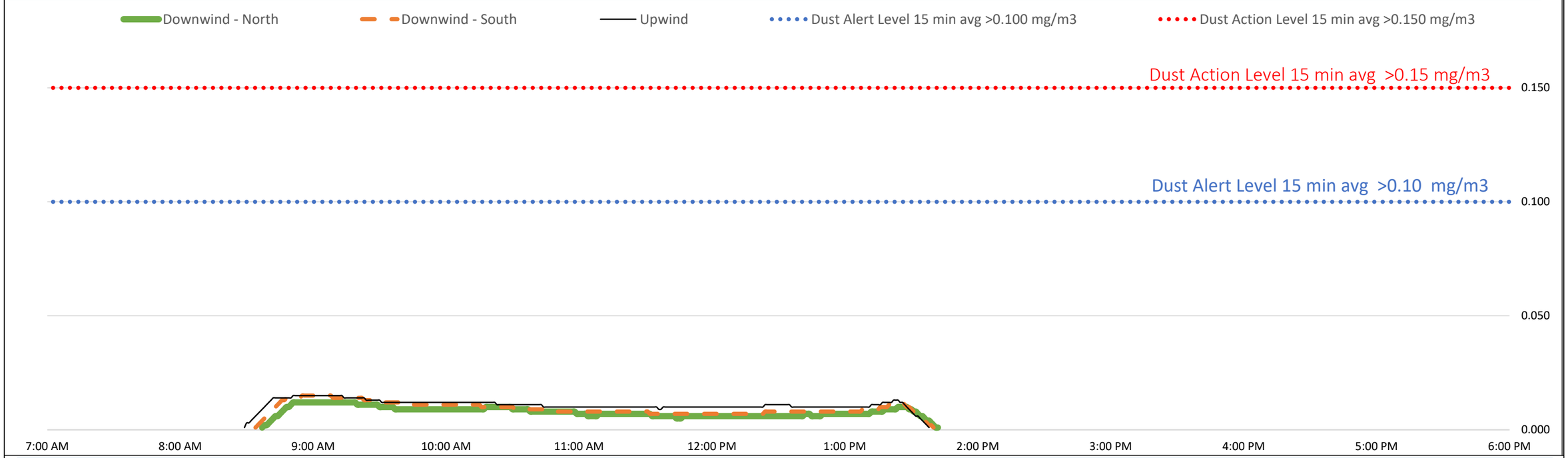


VOC (ppm) 15 min avg

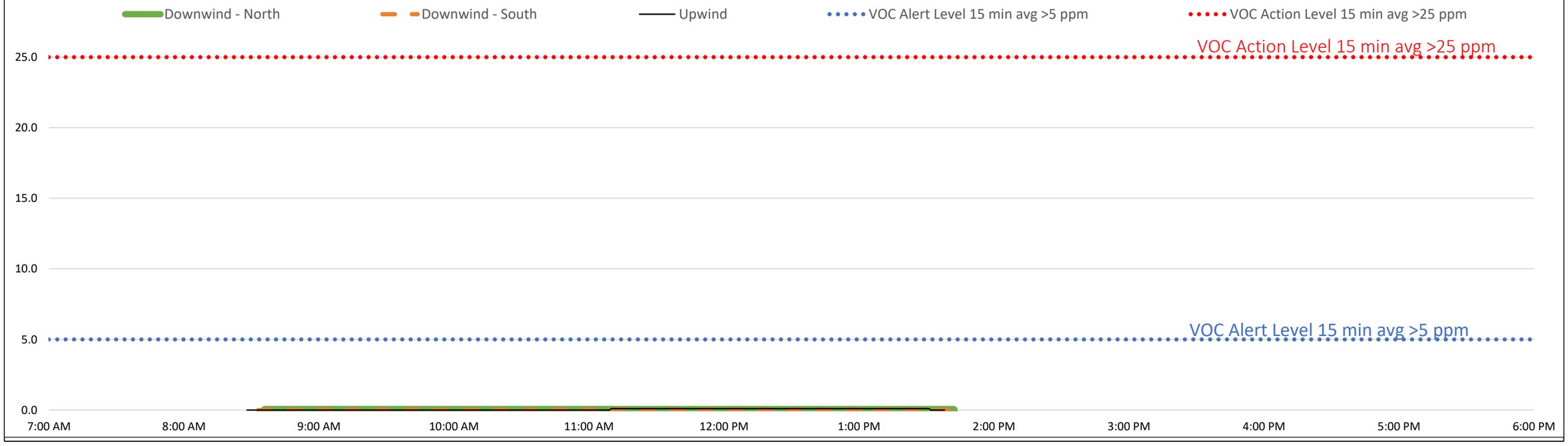


Fixed Station Daily Air Monitoring - December 23, 2021

Dust (mg/m3) 15 min avg

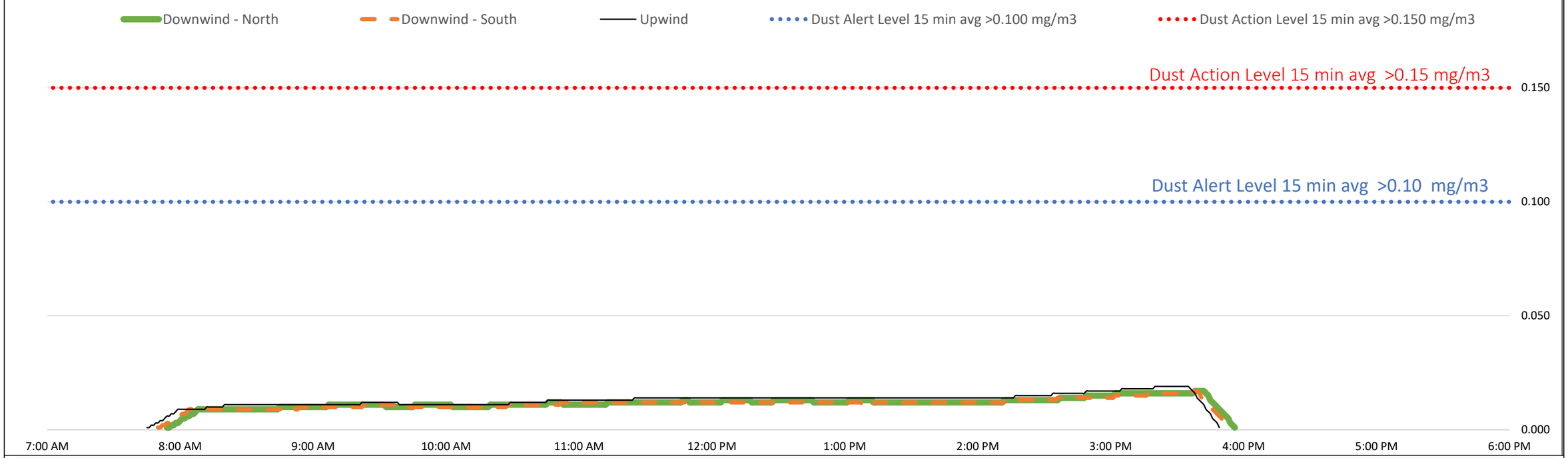


VOC (ppm) 15 min avg

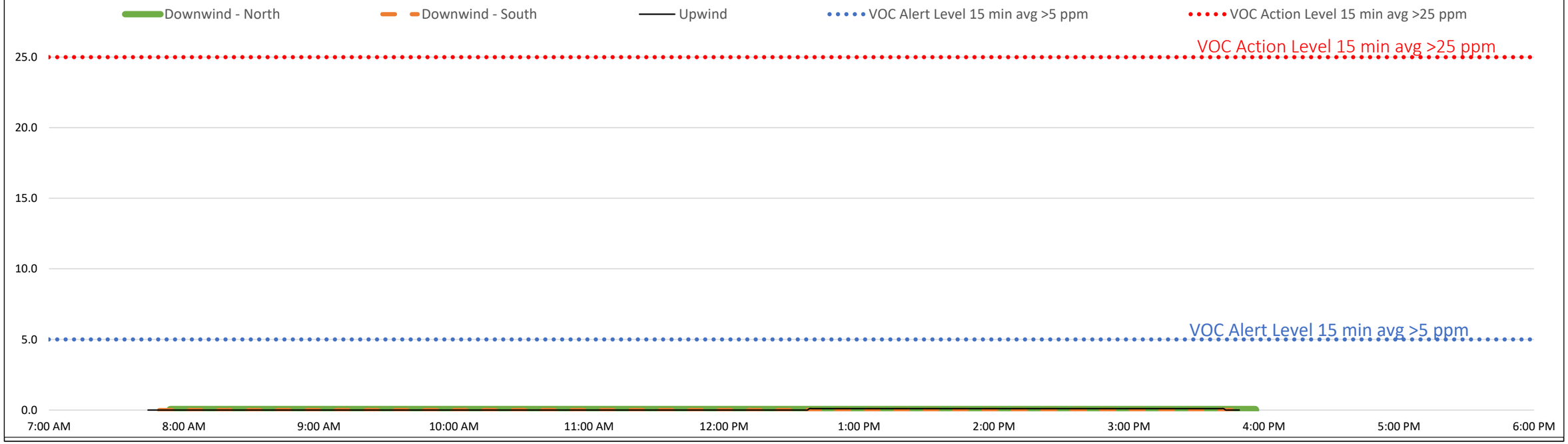


Fixed Station Daily Air Monitoring - December 27, 2021

Dust (mg/m3) 15 min avg

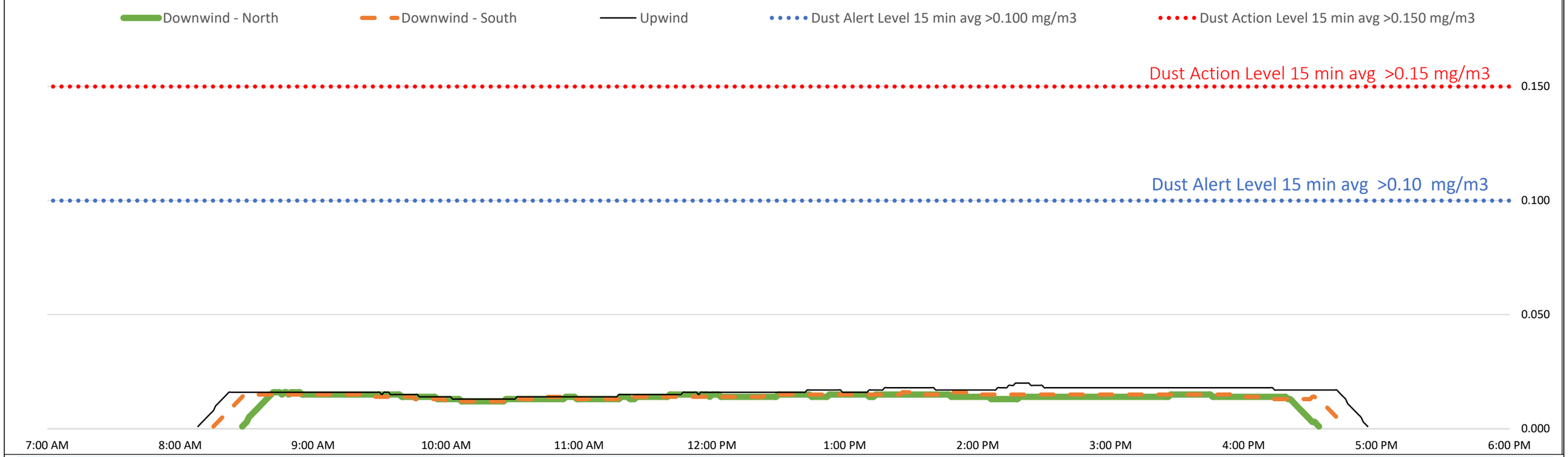


VOC (ppm) 15 min avg

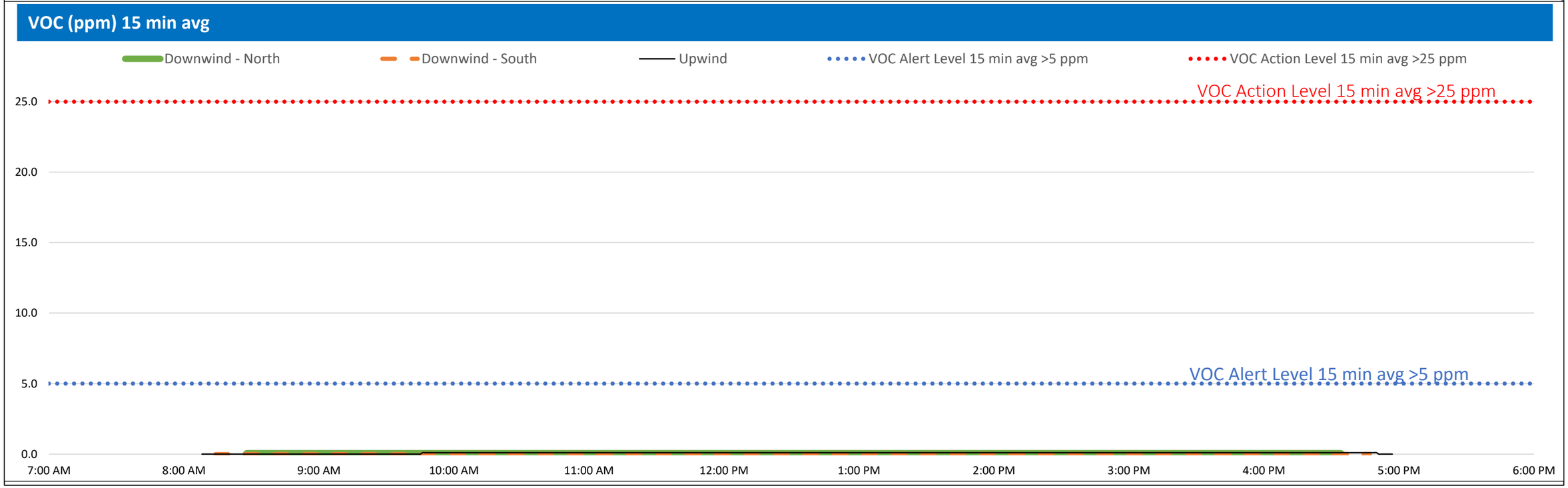


Fixed Station Daily Air Monitoring - December 28, 2021

Dust (mg/m3) 15 min avg

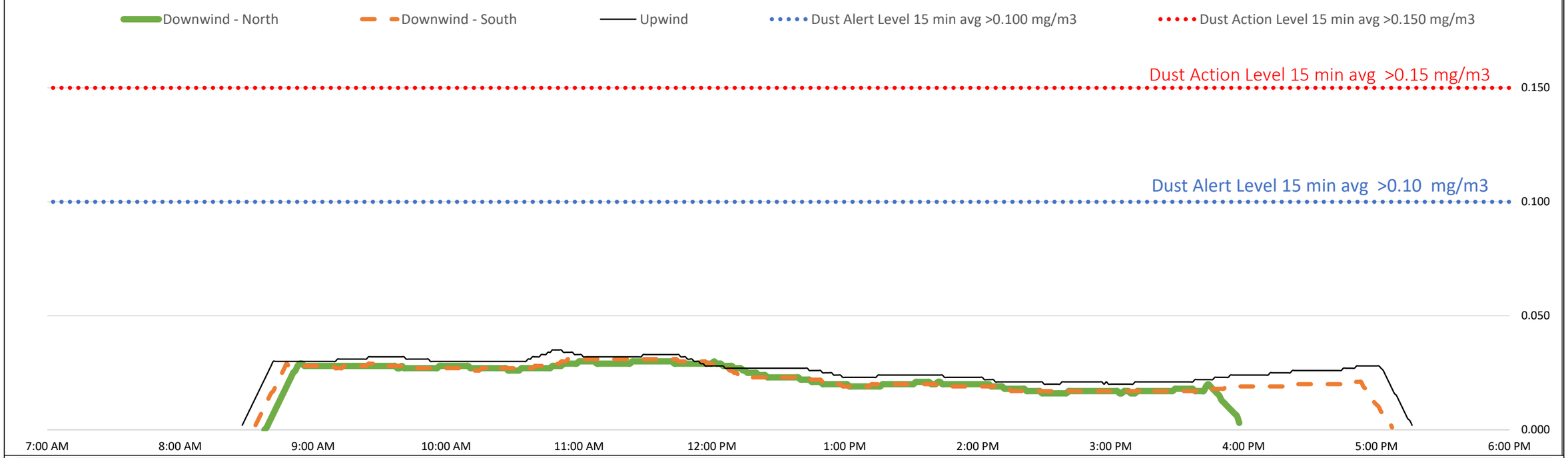


VOC (ppm) 15 min avg

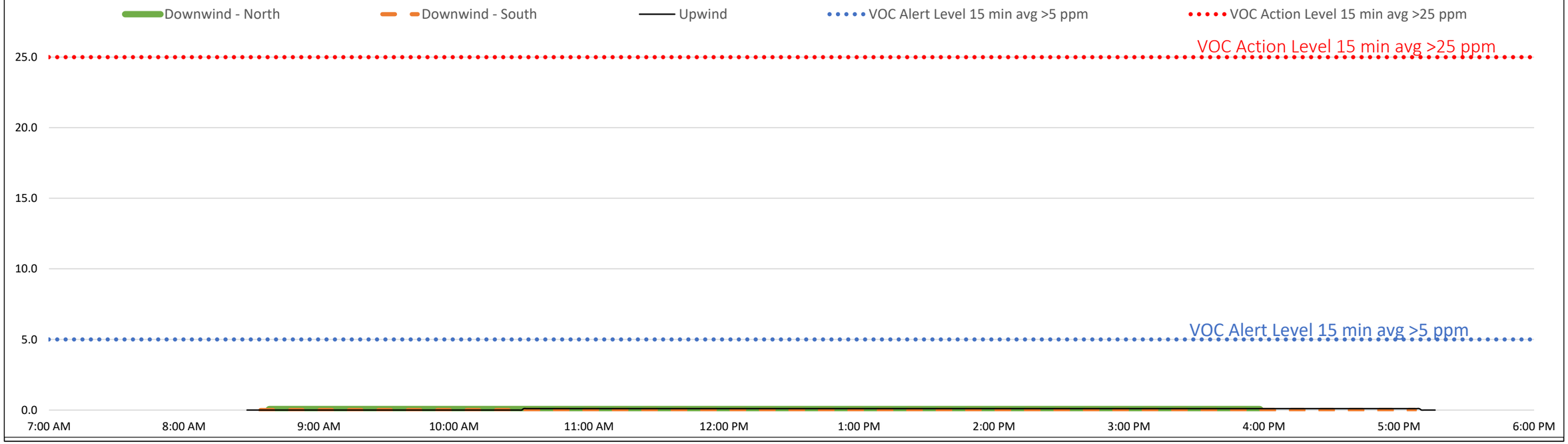


Fixed Station Daily Air Monitoring - December 29, 2021

Dust (mg/m3) 15 min avg

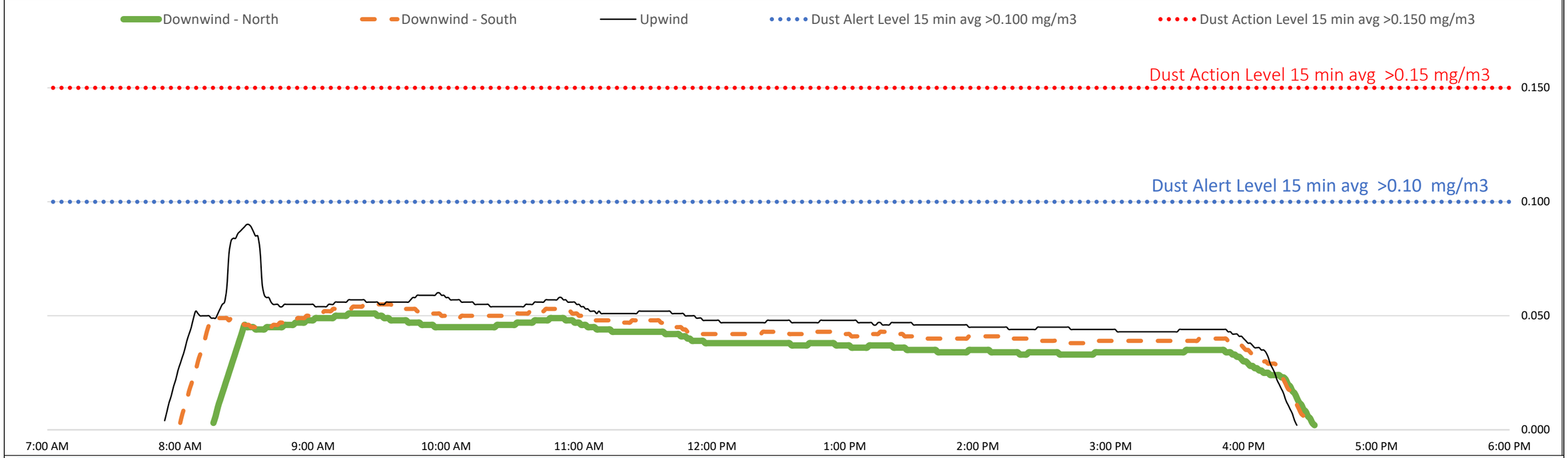


VOC (ppm) 15 min avg

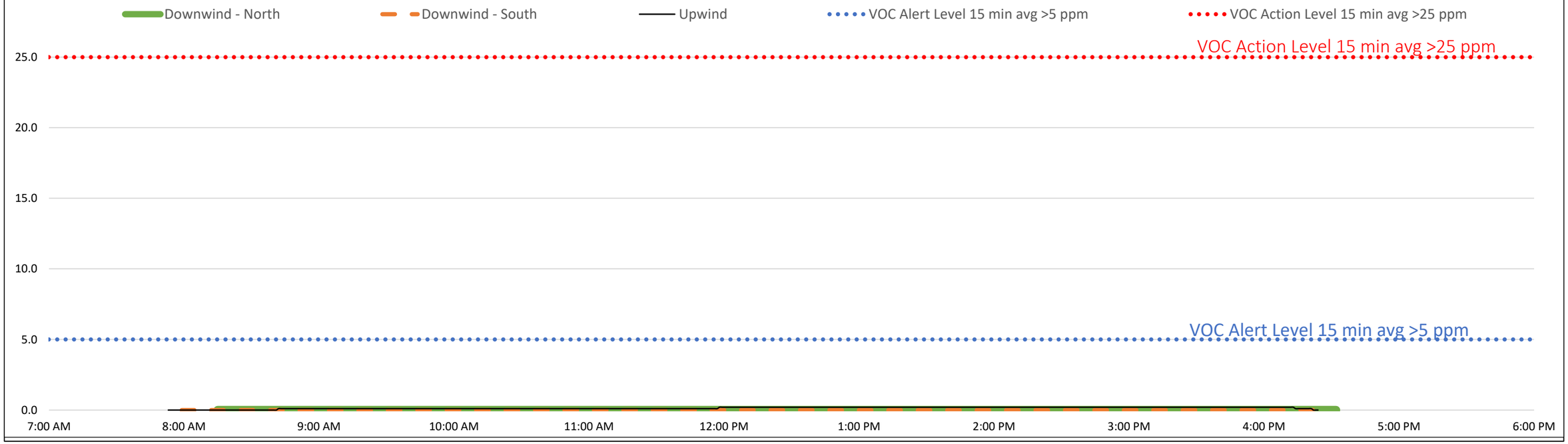


Fixed Station Daily Air Monitoring - December 30, 2021

Dust (mg/m3) 15 min avg

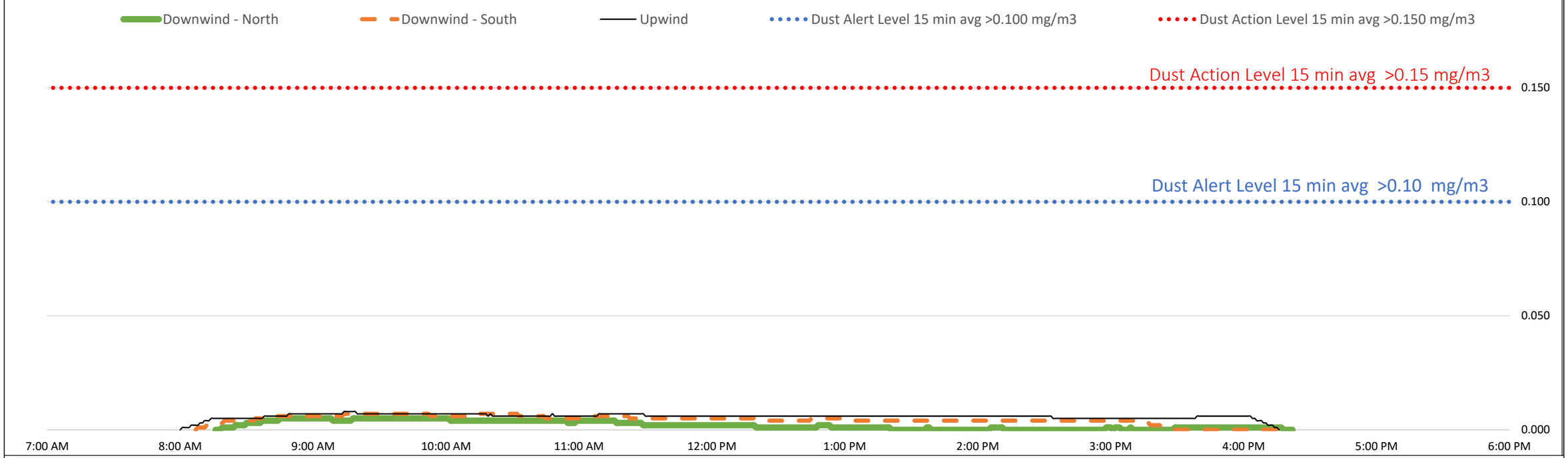


VOC (ppm) 15 min avg

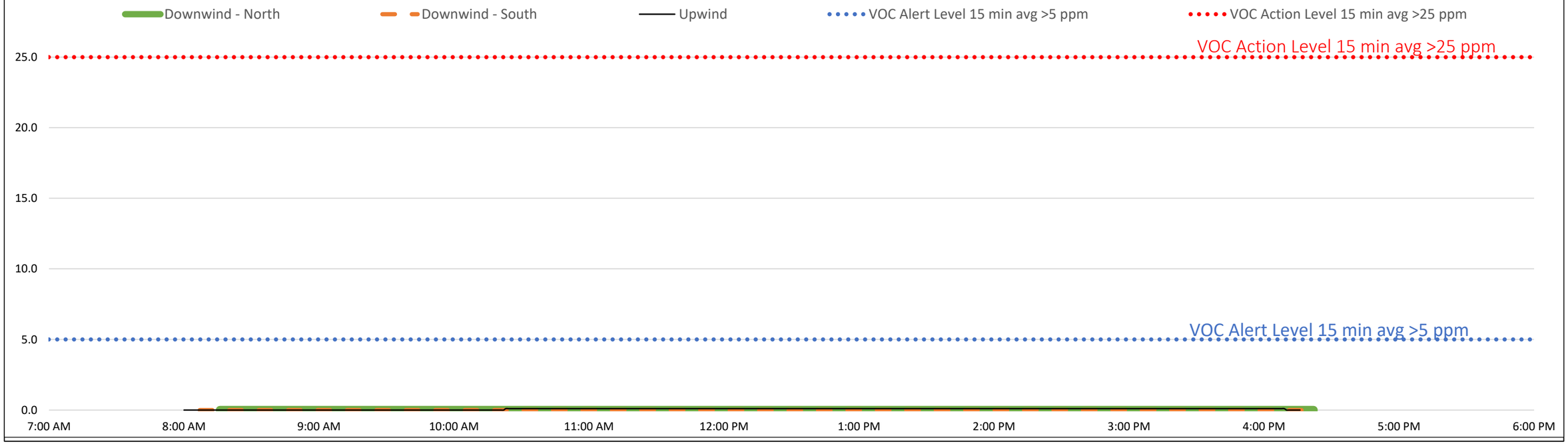


Fixed Station Daily Air Monitoring - January 3, 2022

Dust (mg/m3) 15 min avg

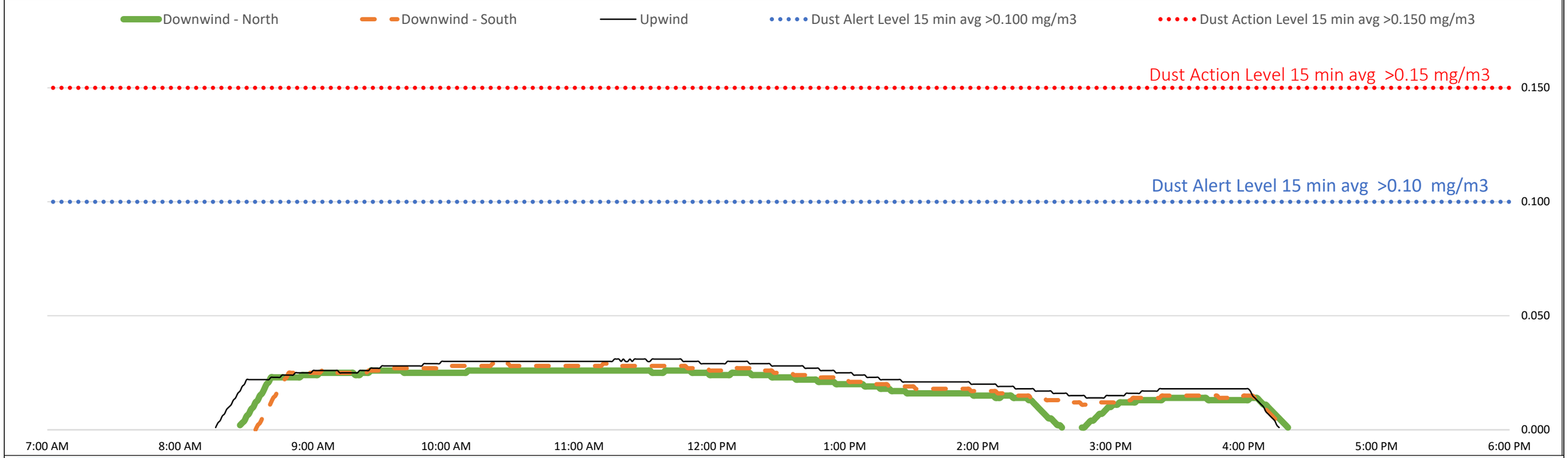


VOC (ppm) 15 min avg

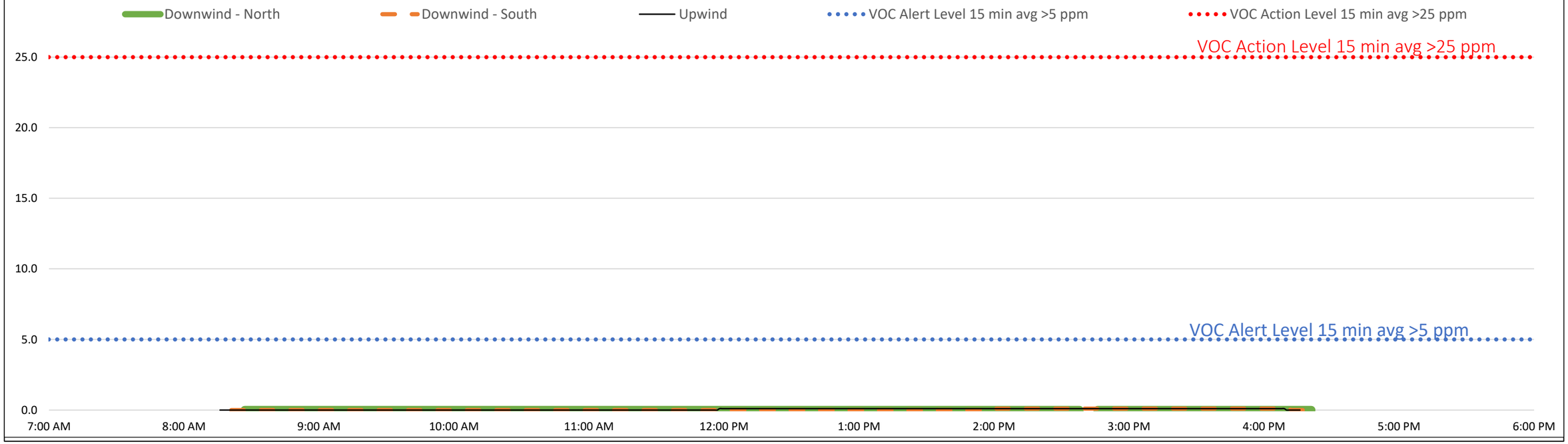


Fixed Station Daily Air Monitoring - January 4, 2022

Dust (mg/m3) 15 min avg

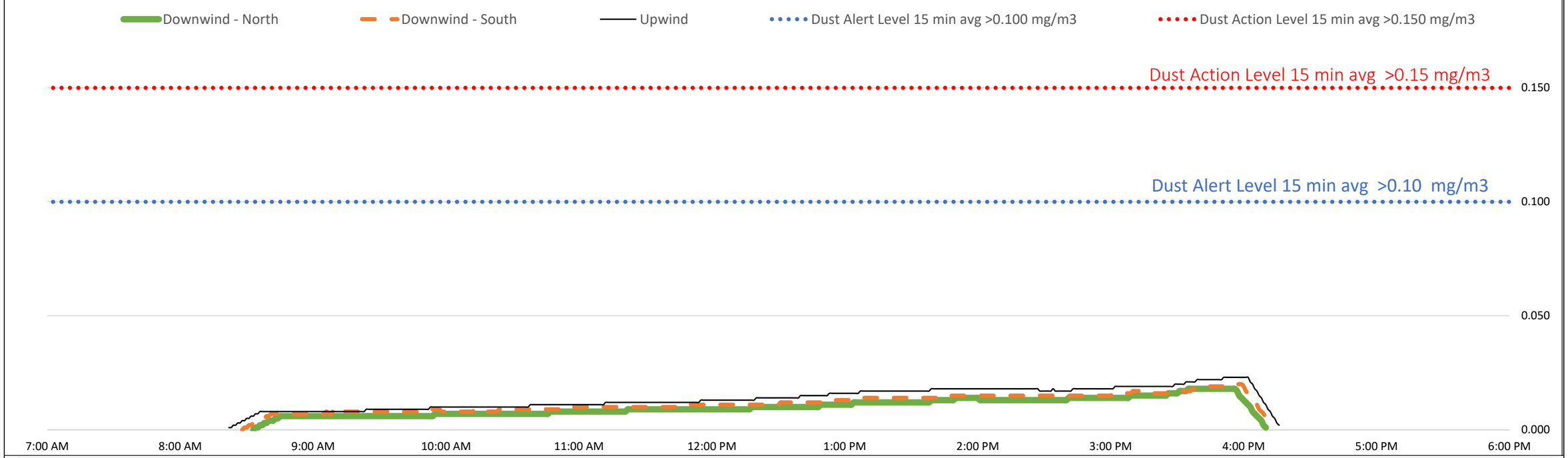


VOC (ppm) 15 min avg

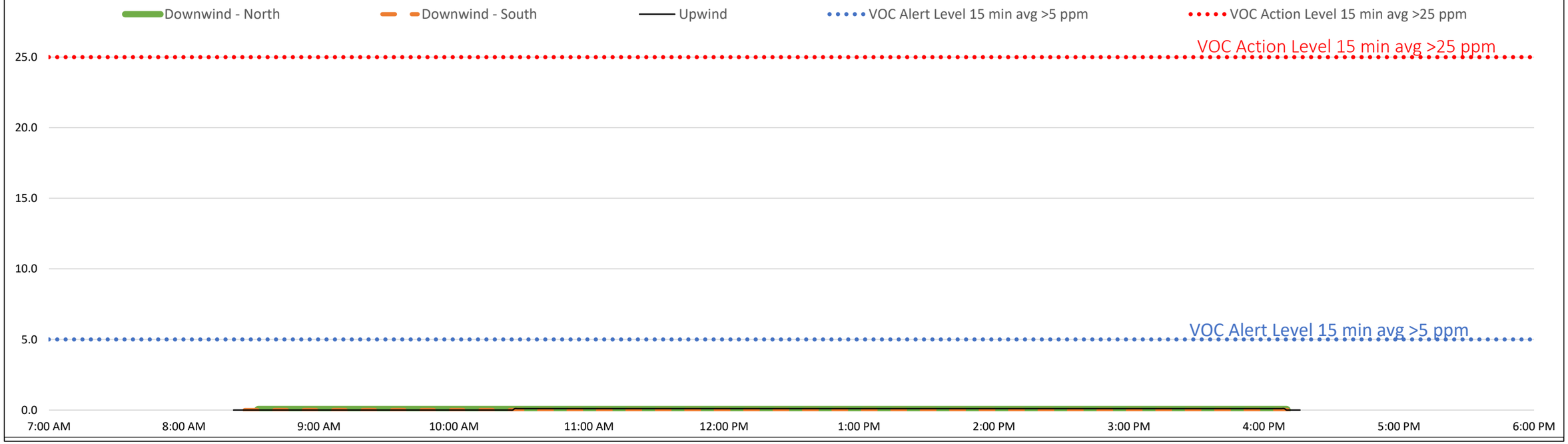


Fixed Station Daily Air Monitoring - January 5, 2022

Dust (mg/m3) 15 min avg

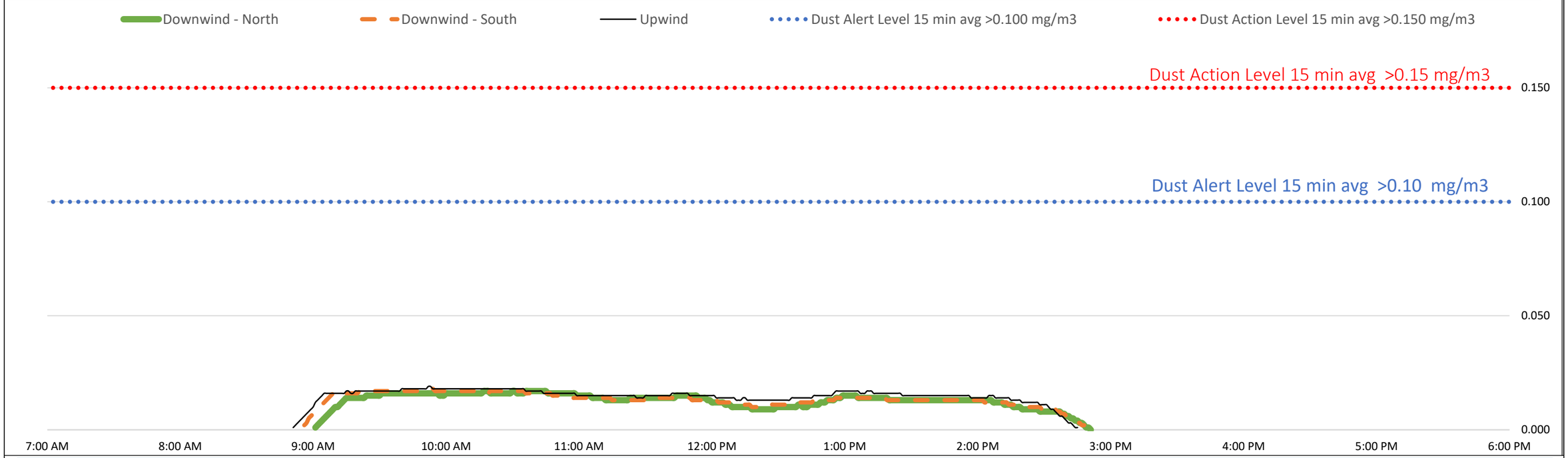


VOC (ppm) 15 min avg

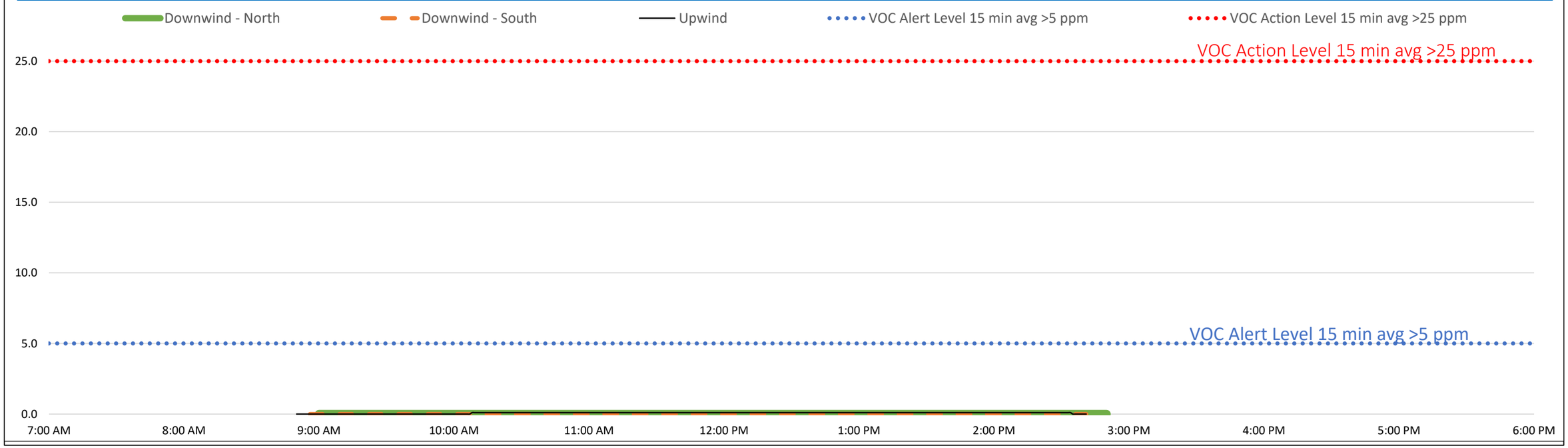


Fixed Station Daily Air Monitoring - January 6, 2022

Dust (mg/m3) 15 min avg

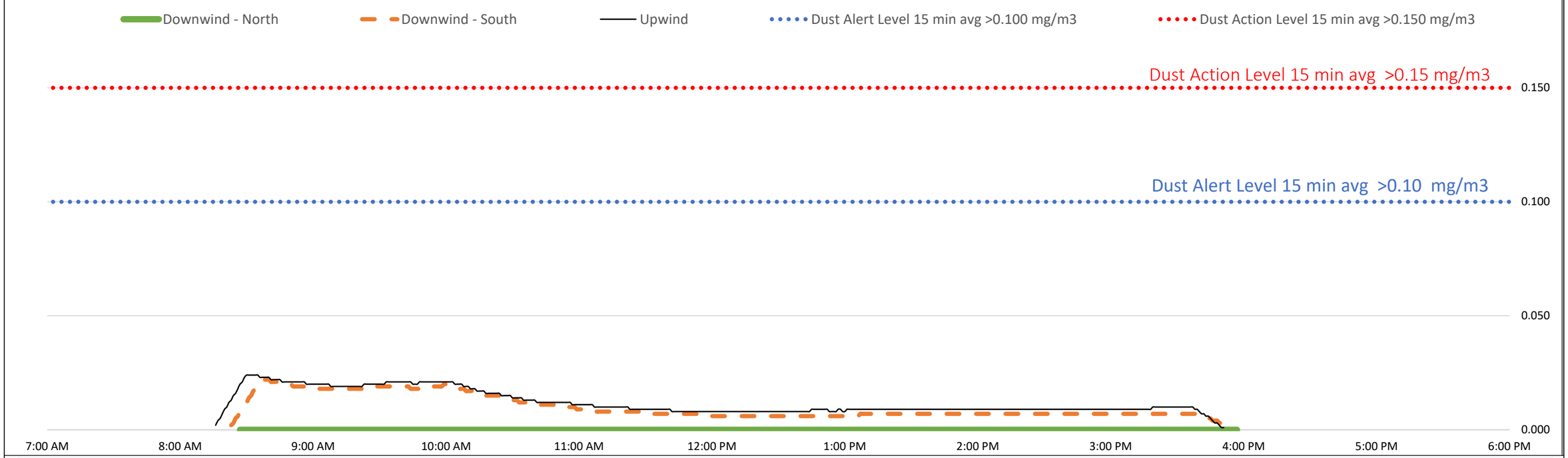


VOC (ppm) 15 min avg

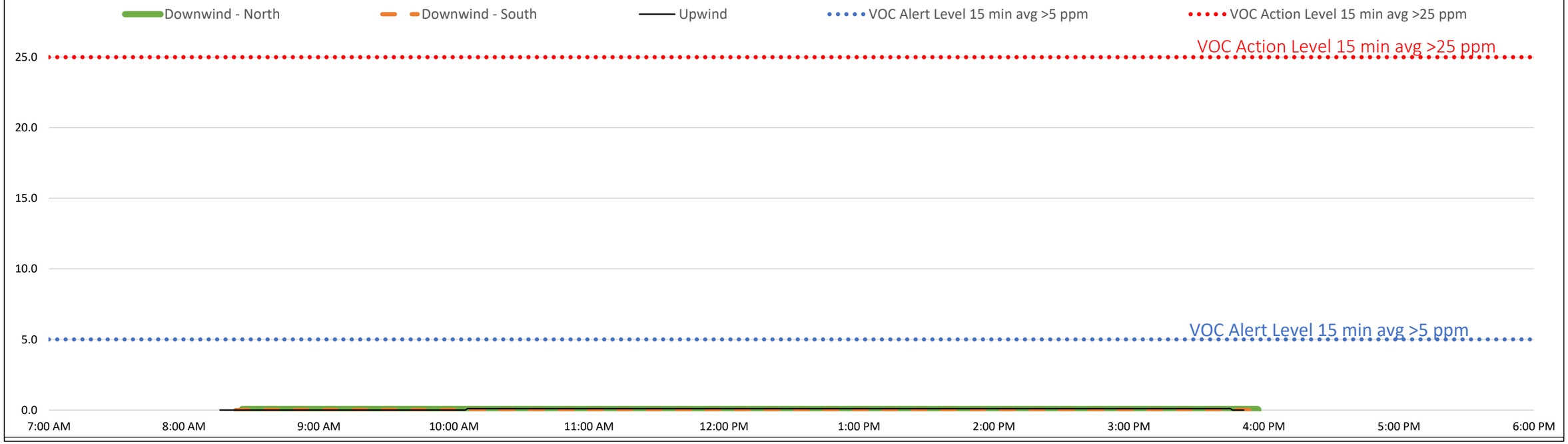


Fixed Station Daily Air Monitoring - January 7, 2022

Dust (mg/m3) 15 min avg

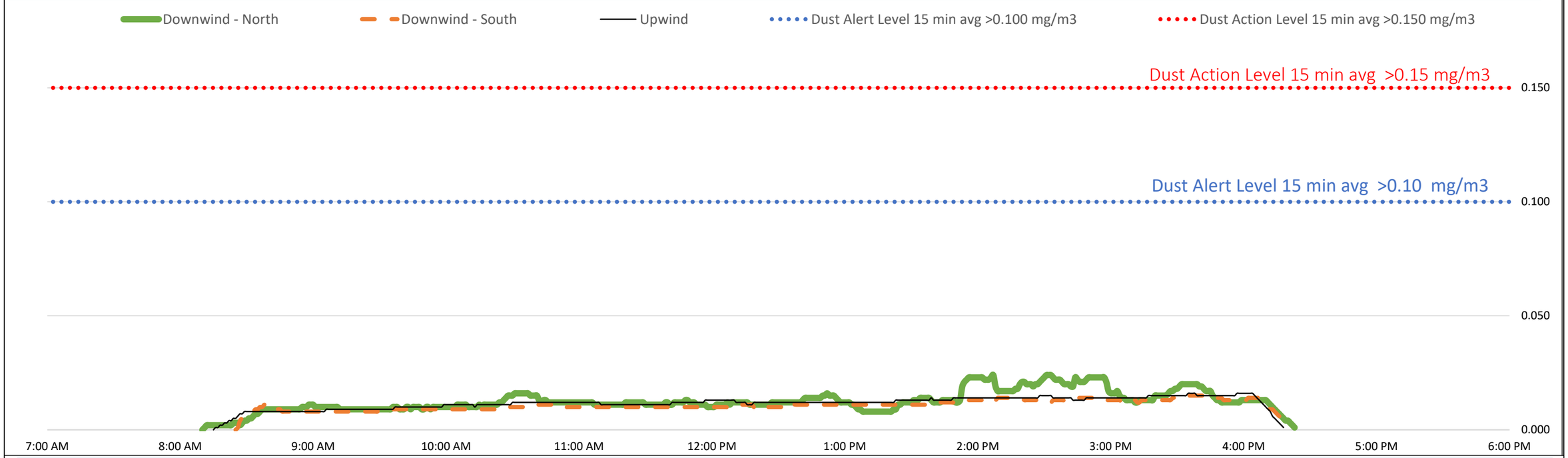


VOC (ppm) 15 min avg

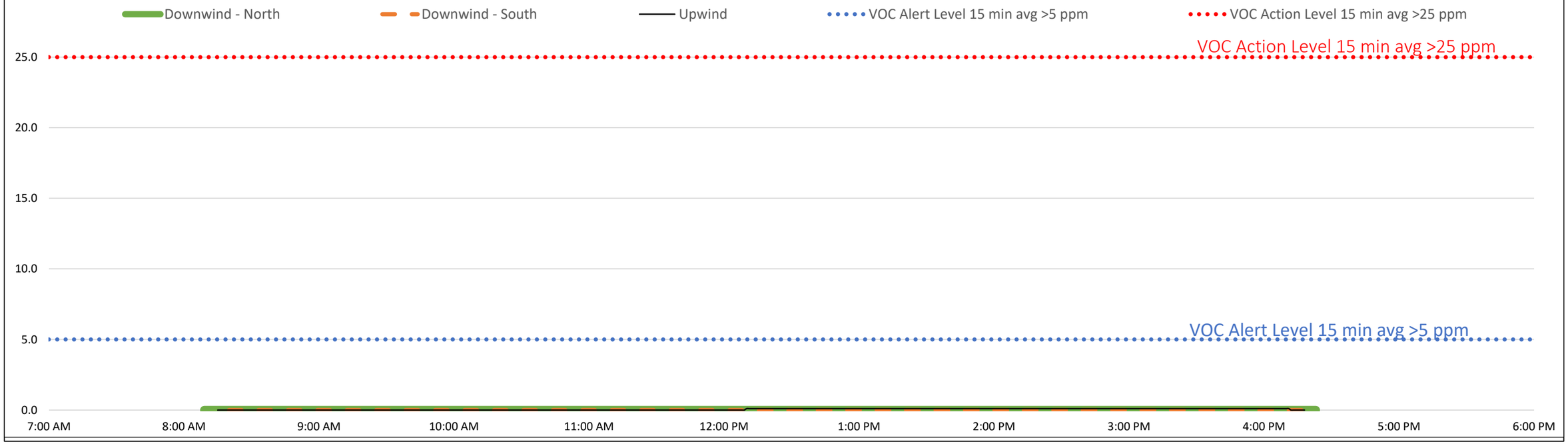


Fixed Station Daily Air Monitoring - January 10, 2022

Dust (mg/m3) 15 min avg

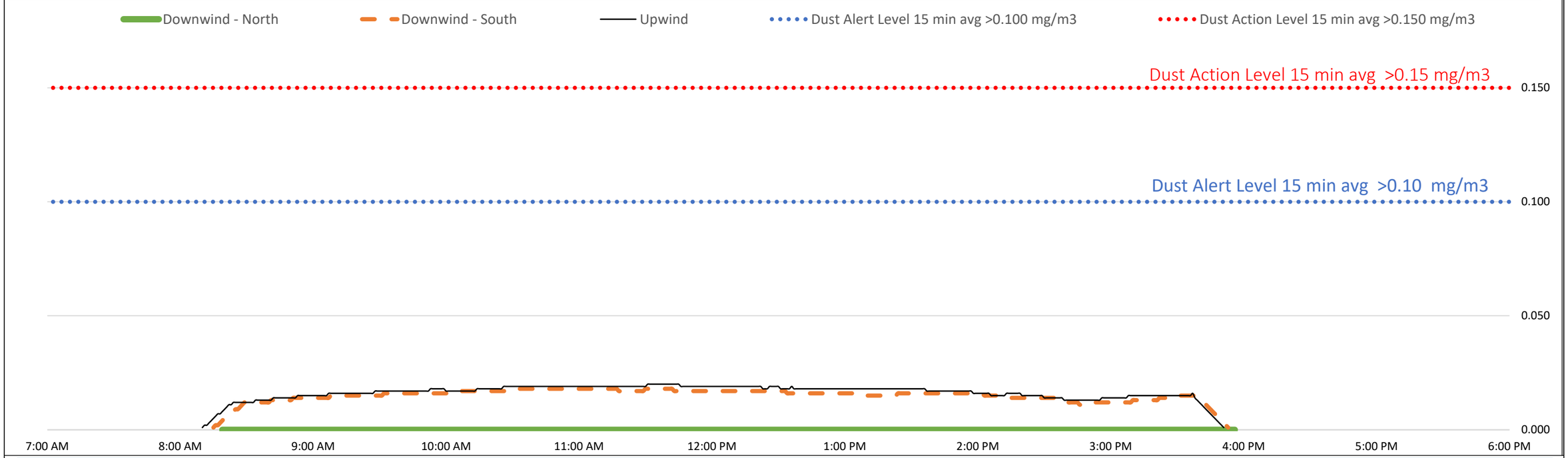


VOC (ppm) 15 min avg

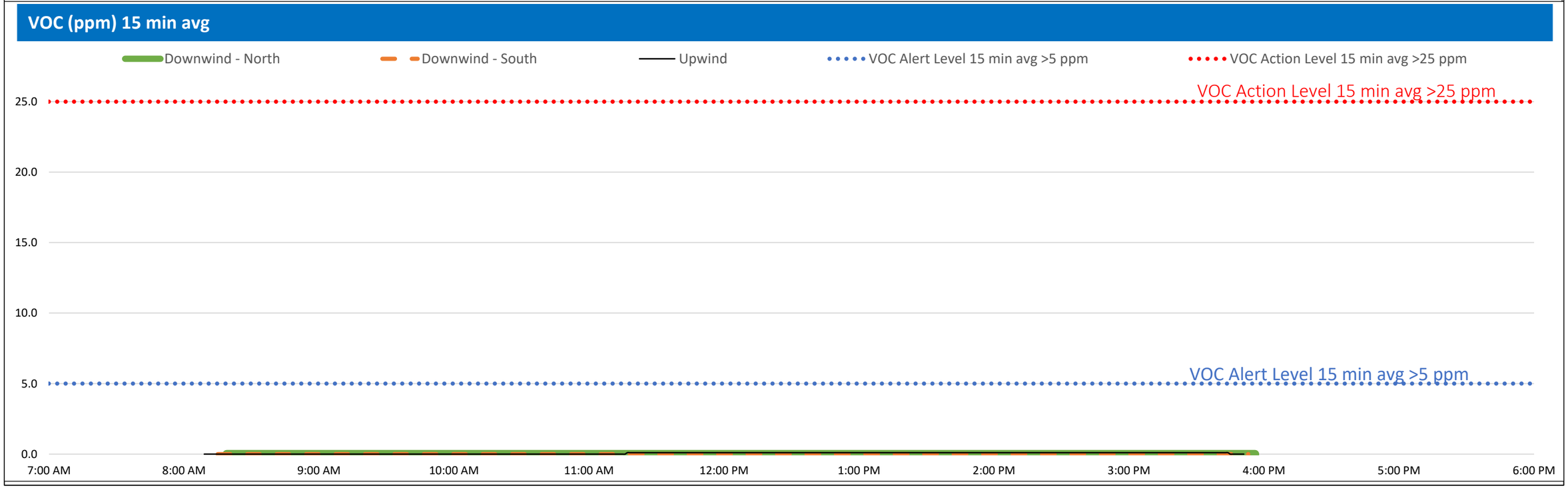


Fixed Station Daily Air Monitoring - January 11, 2022

Dust (mg/m3) 15 min avg

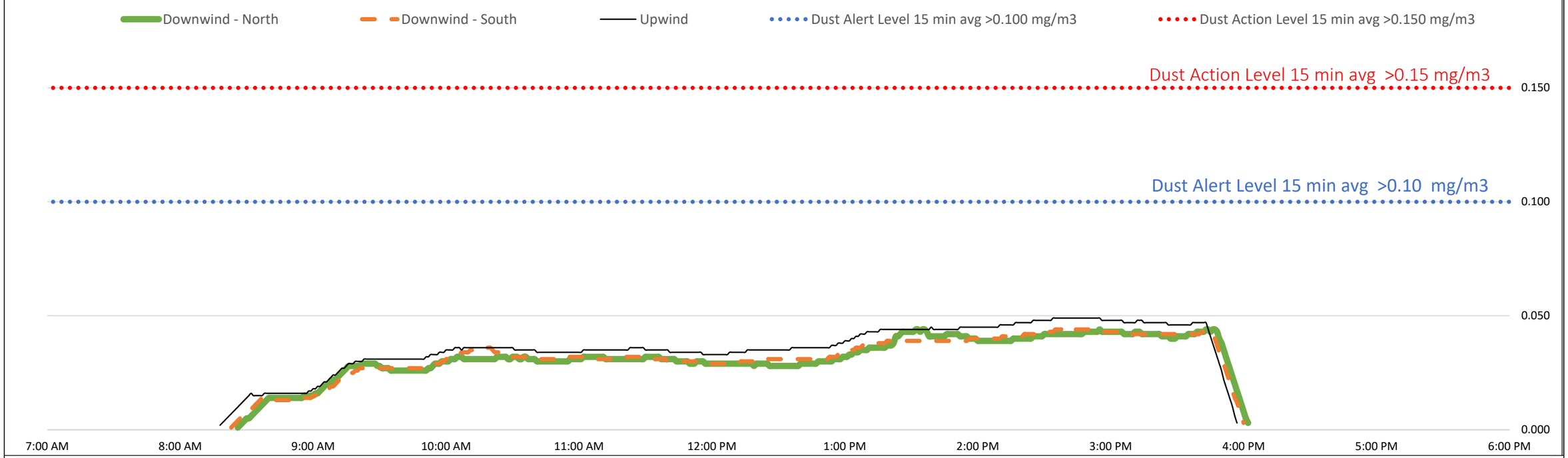


VOC (ppm) 15 min avg

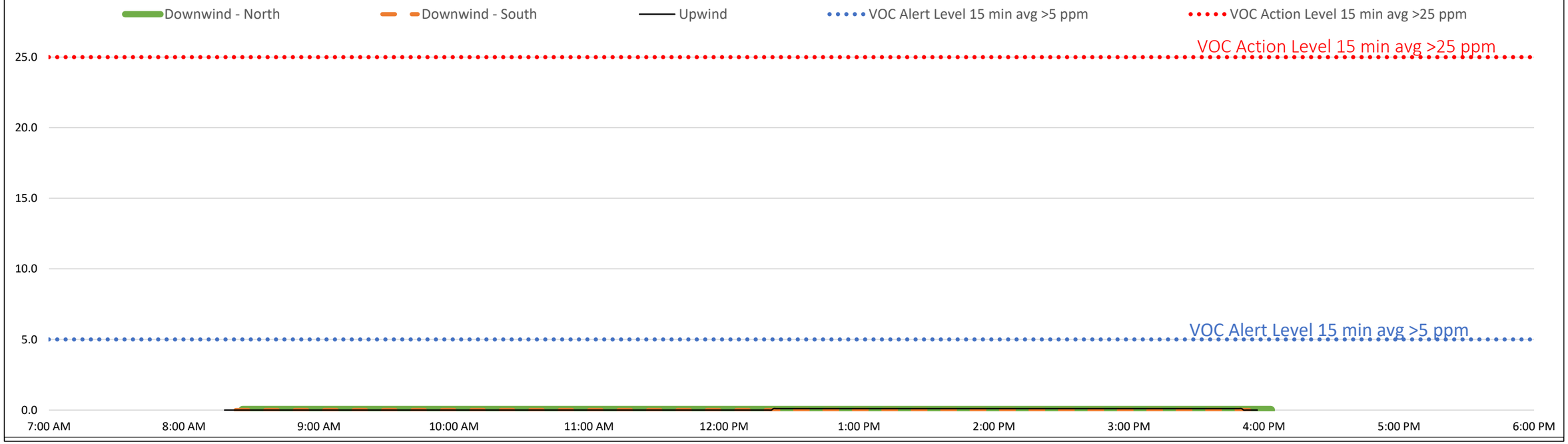


Fixed Station Daily Air Monitoring - January 12, 2022

Dust (mg/m3) 15 min avg

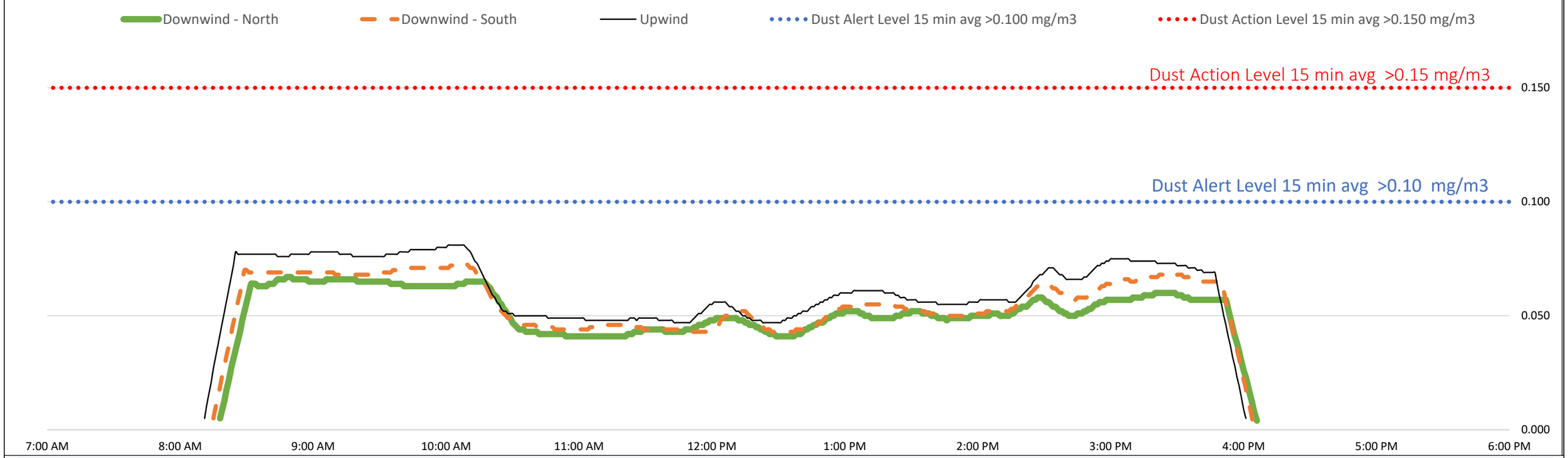


VOC (ppm) 15 min avg

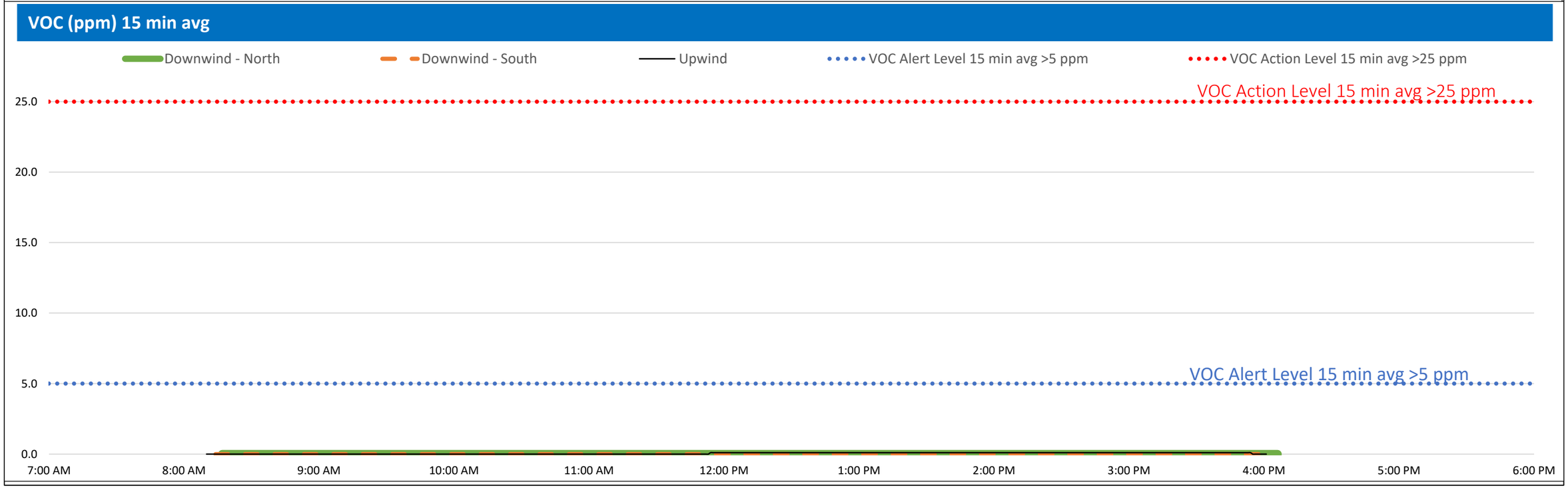


Fixed Station Daily Air Monitoring - January 13, 2022

Dust (mg/m3) 15 min avg

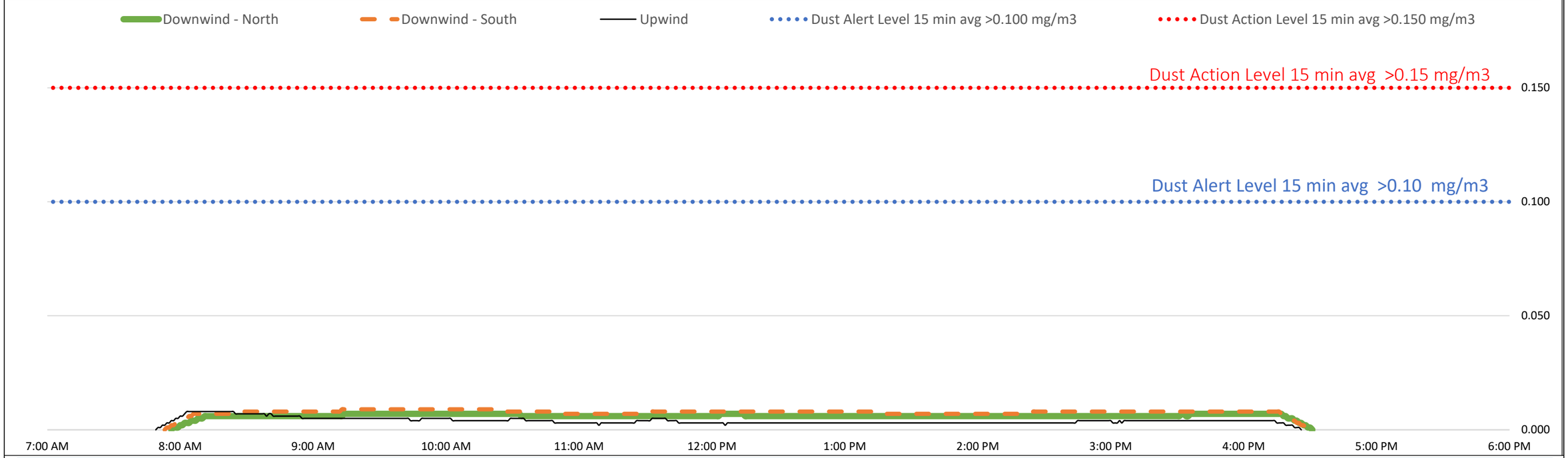


VOC (ppm) 15 min avg

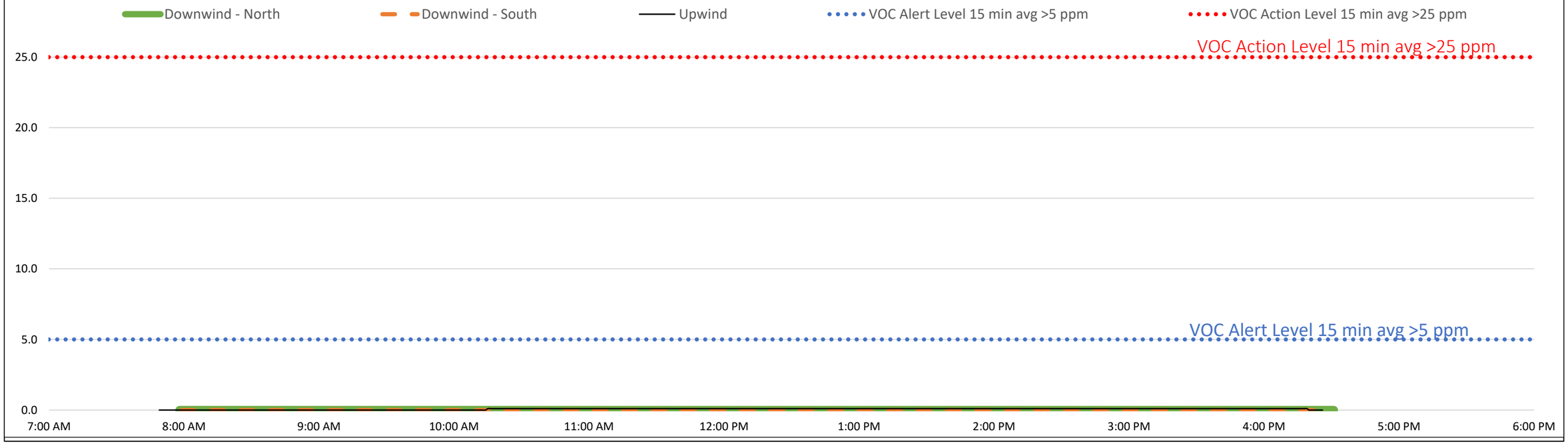


Fixed Station Daily Air Monitoring - January 14, 2022

Dust (mg/m3) 15 min avg

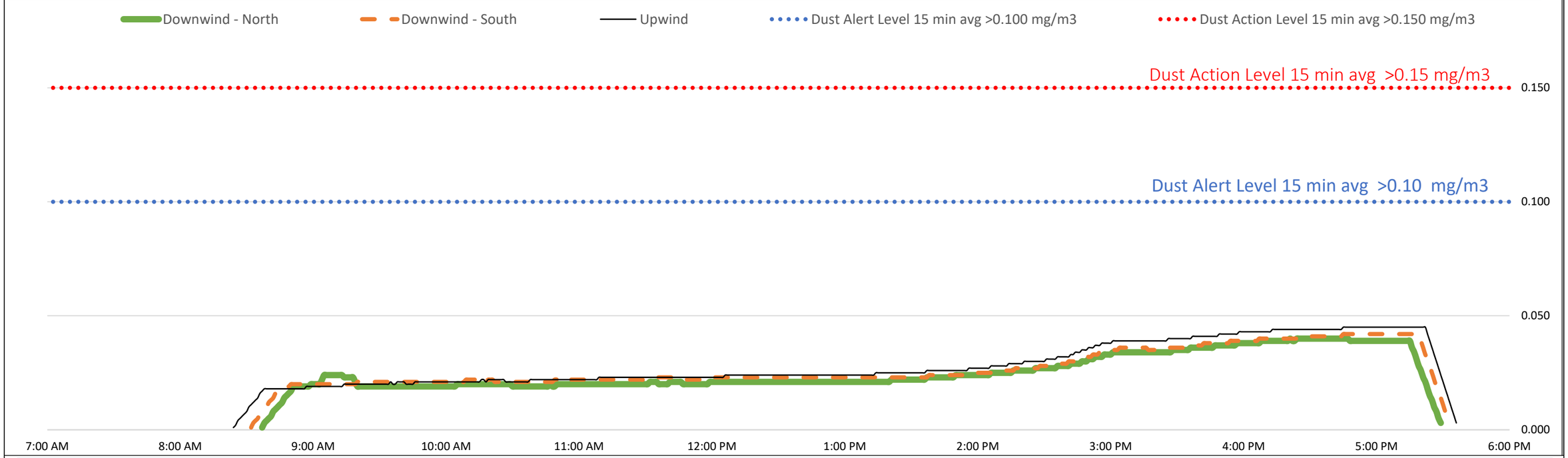


VOC (ppm) 15 min avg

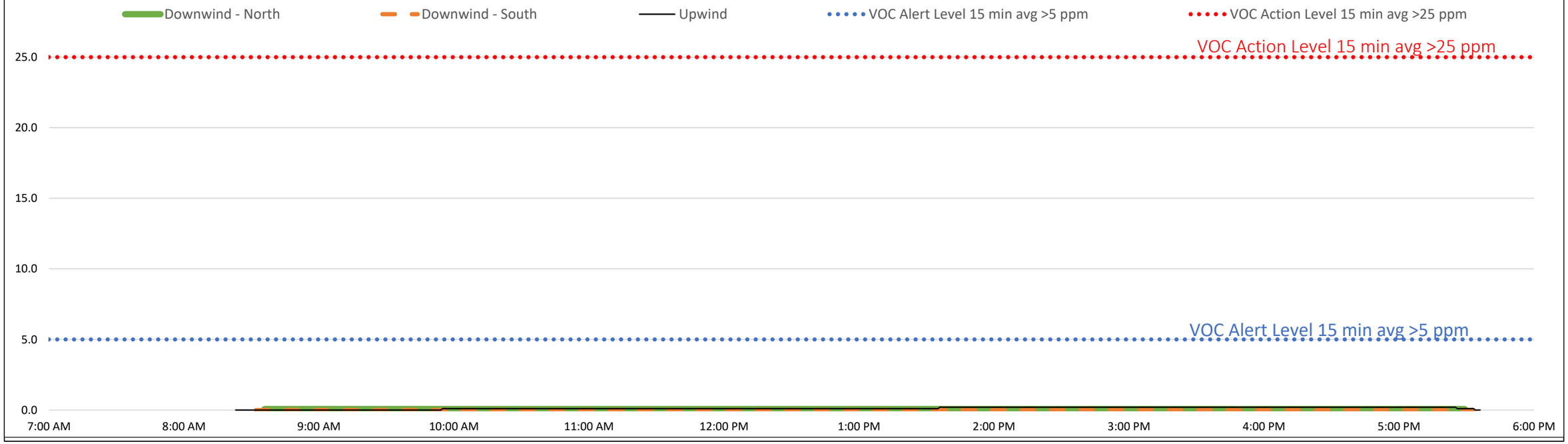


Fixed Station Daily Air Monitoring - January 19, 2022

Dust (mg/m3) 15 min avg

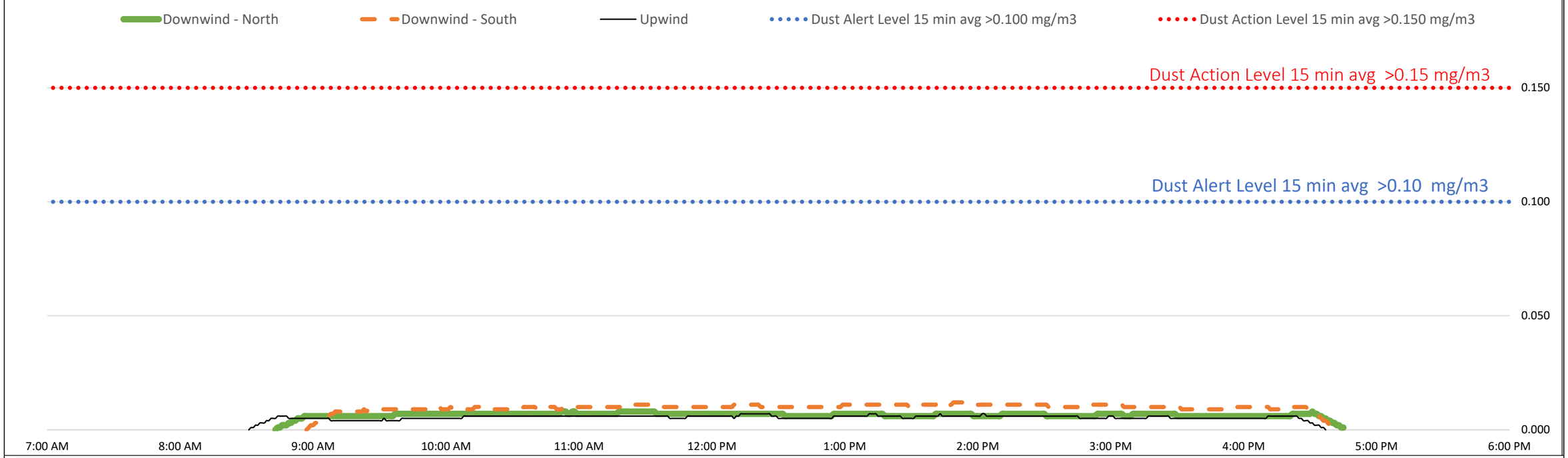


VOC (ppm) 15 min avg

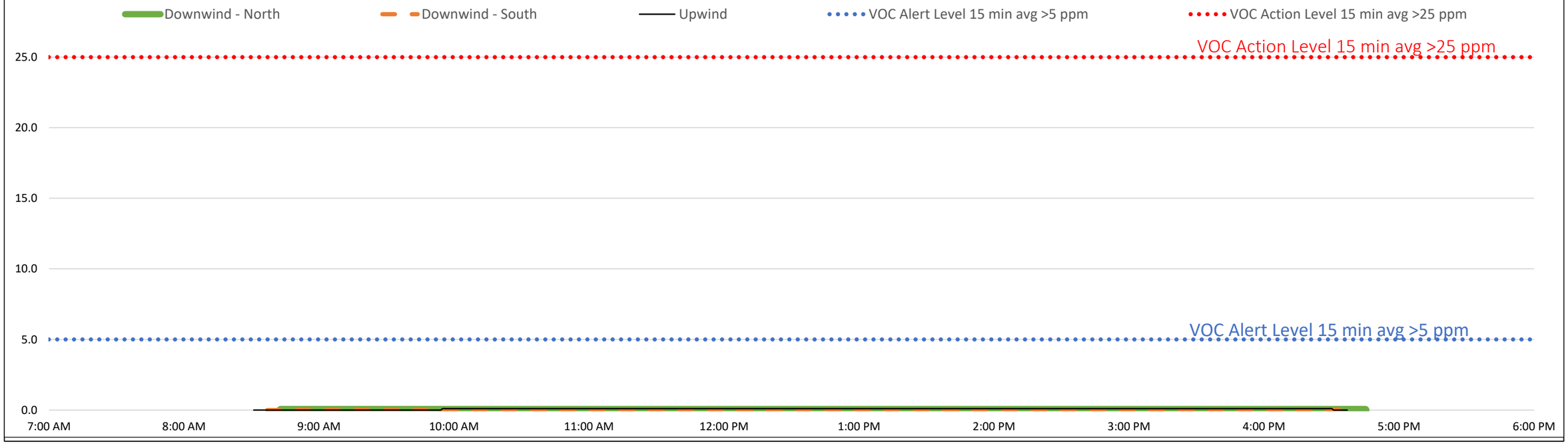


Fixed Station Daily Air Monitoring - January 20, 2022

Dust (mg/m3) 15 min avg

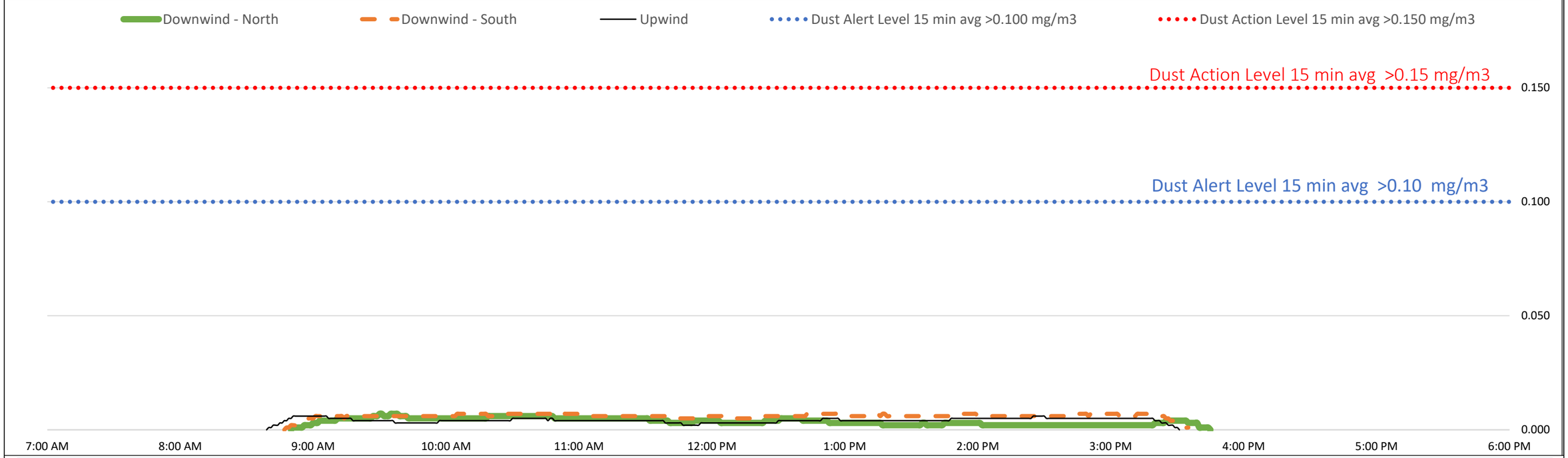


VOC (ppm) 15 min avg

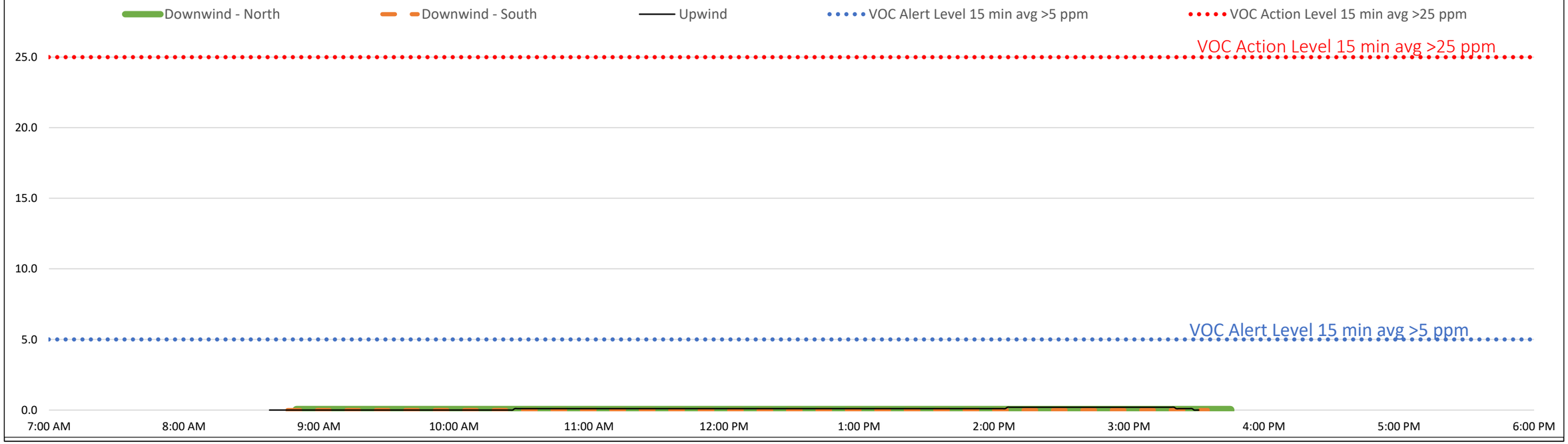


Fixed Station Daily Air Monitoring - January 21, 2022

Dust (mg/m3) 15 min avg

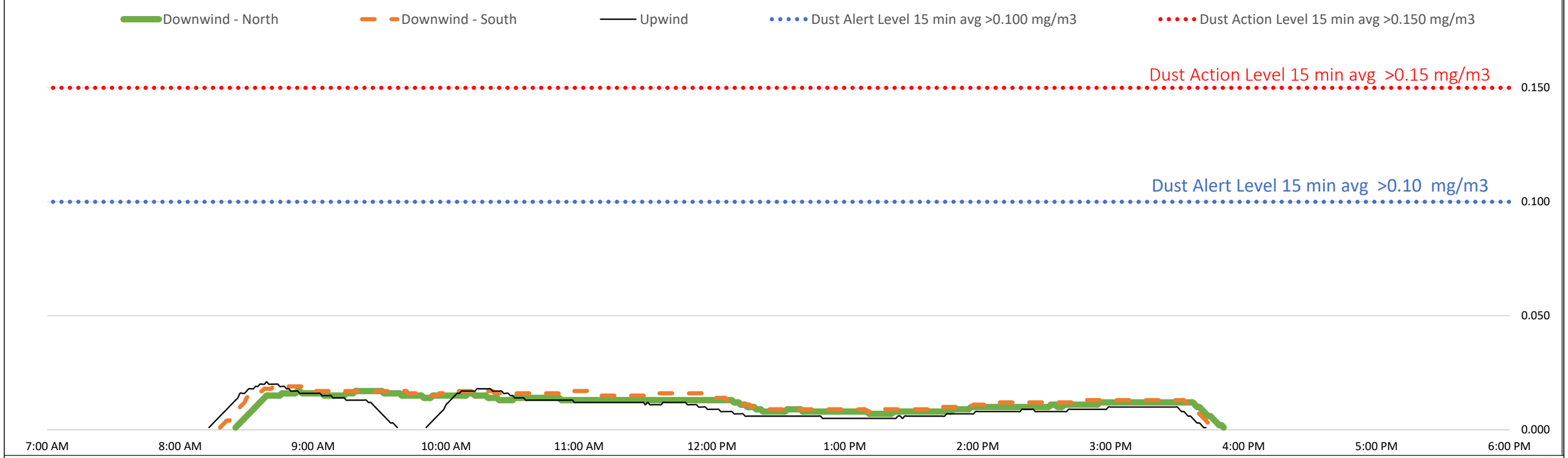


VOC (ppm) 15 min avg

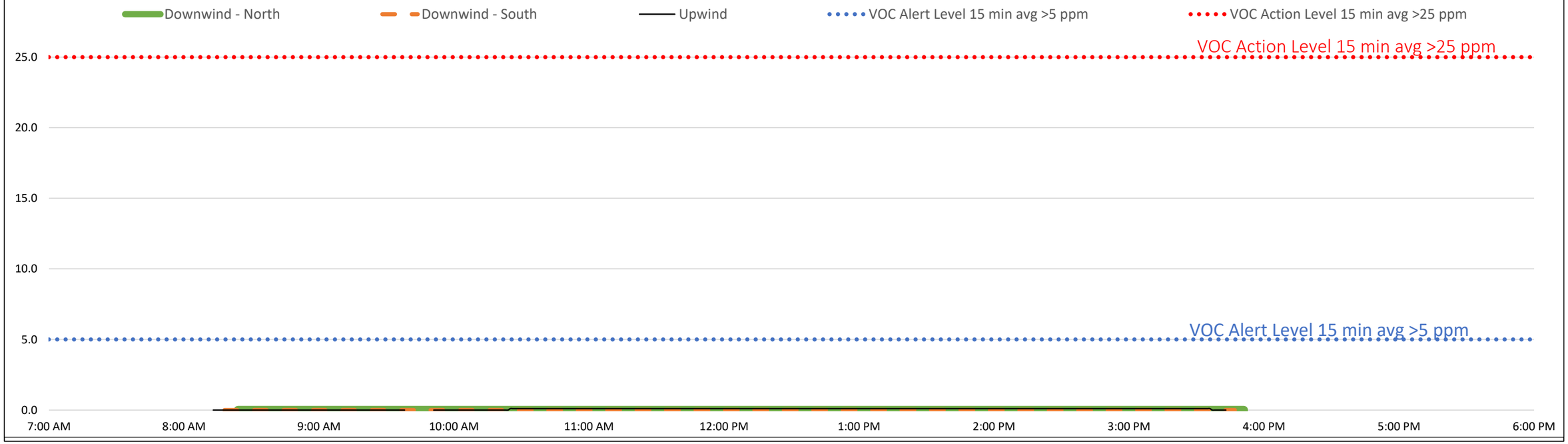


Fixed Station Daily Air Monitoring - January 24, 2022

Dust (mg/m3) 15 min avg

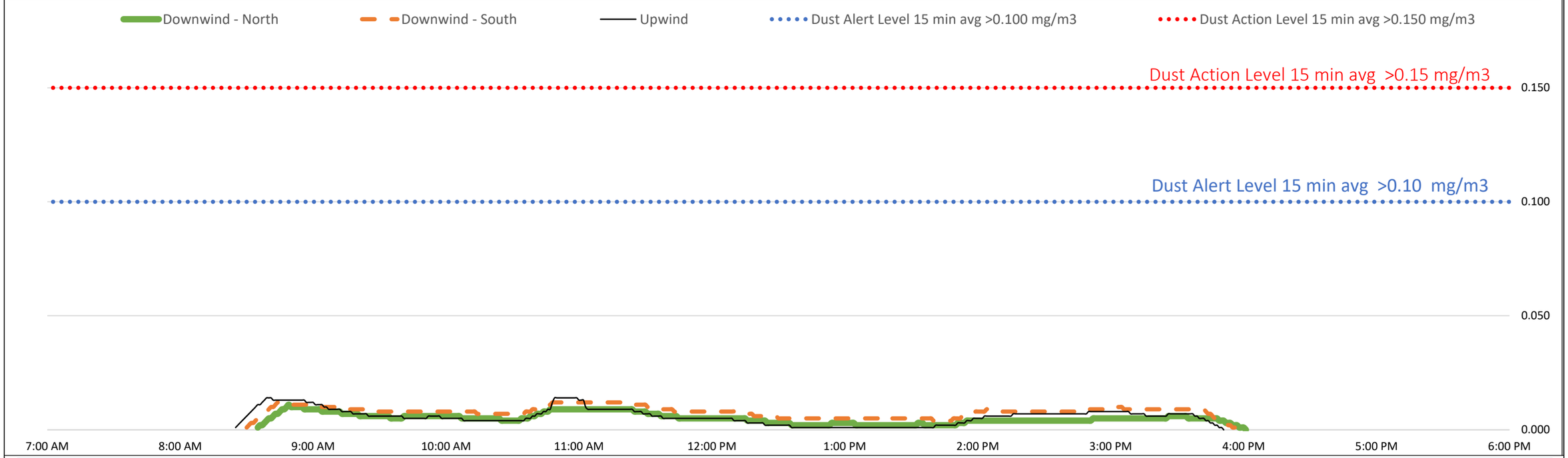


VOC (ppm) 15 min avg

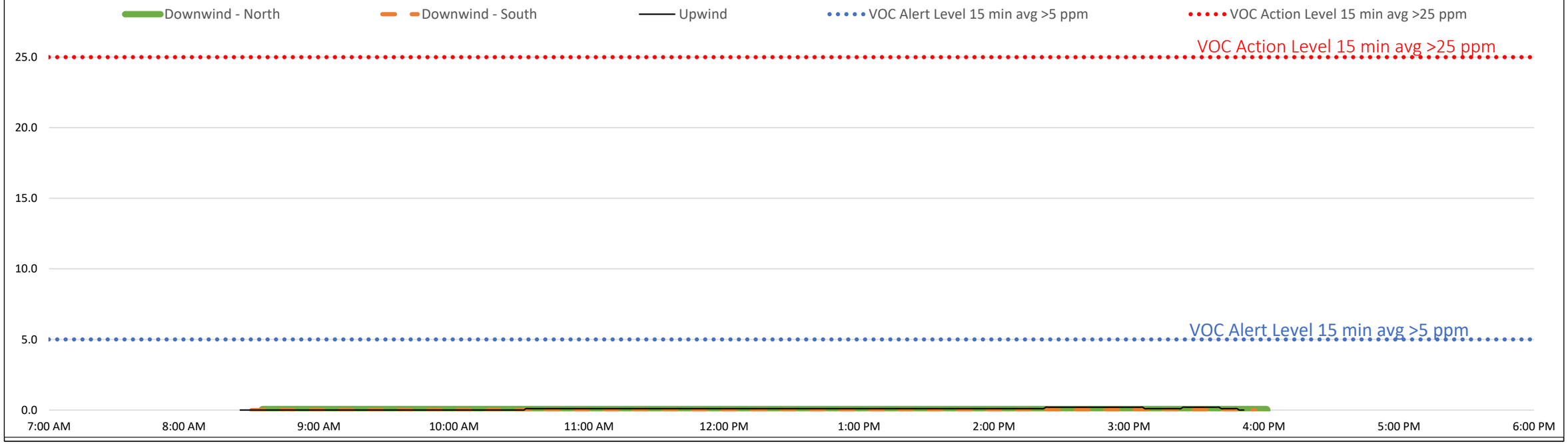


Fixed Station Daily Air Monitoring - January 25, 2022

Dust (mg/m3) 15 min avg

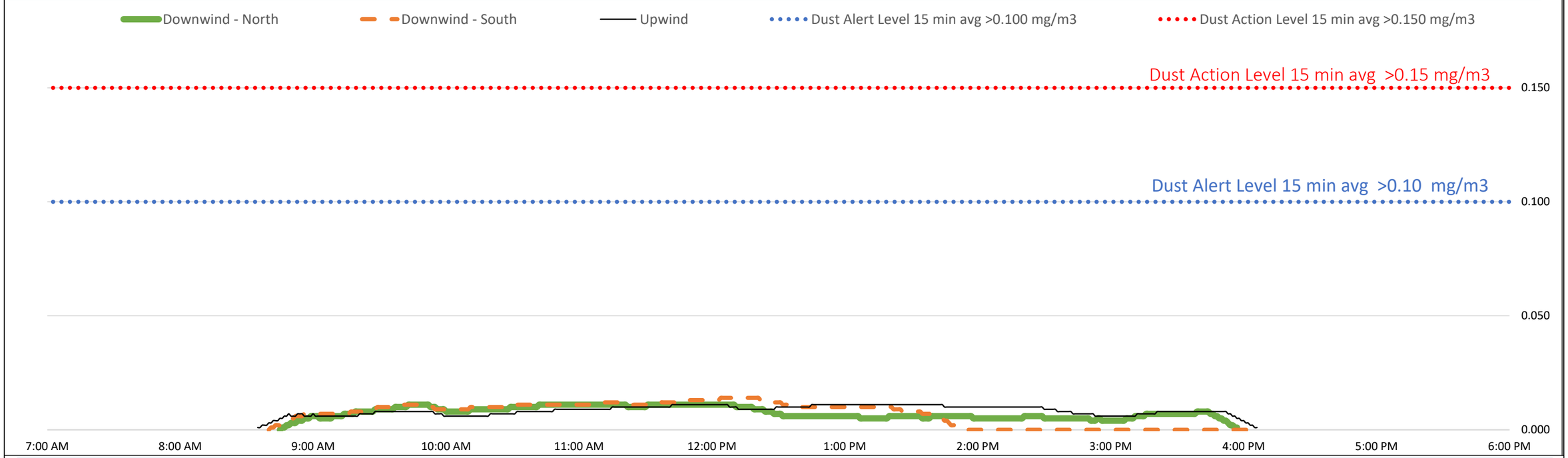


VOC (ppm) 15 min avg

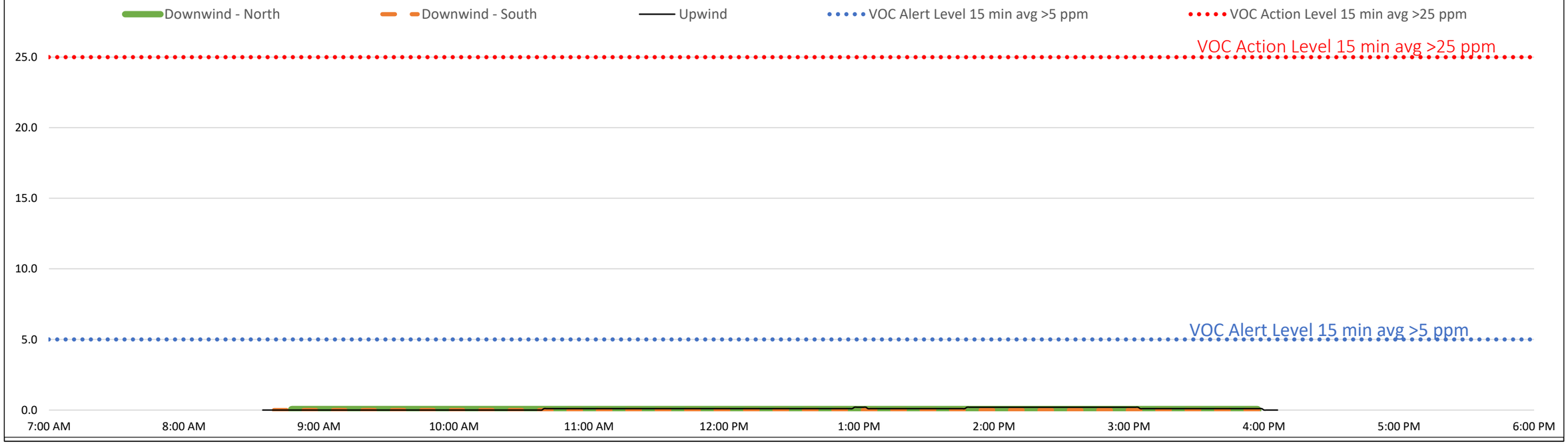


Fixed Station Daily Air Monitoring - January 26, 2022

Dust (mg/m3) 15 min avg

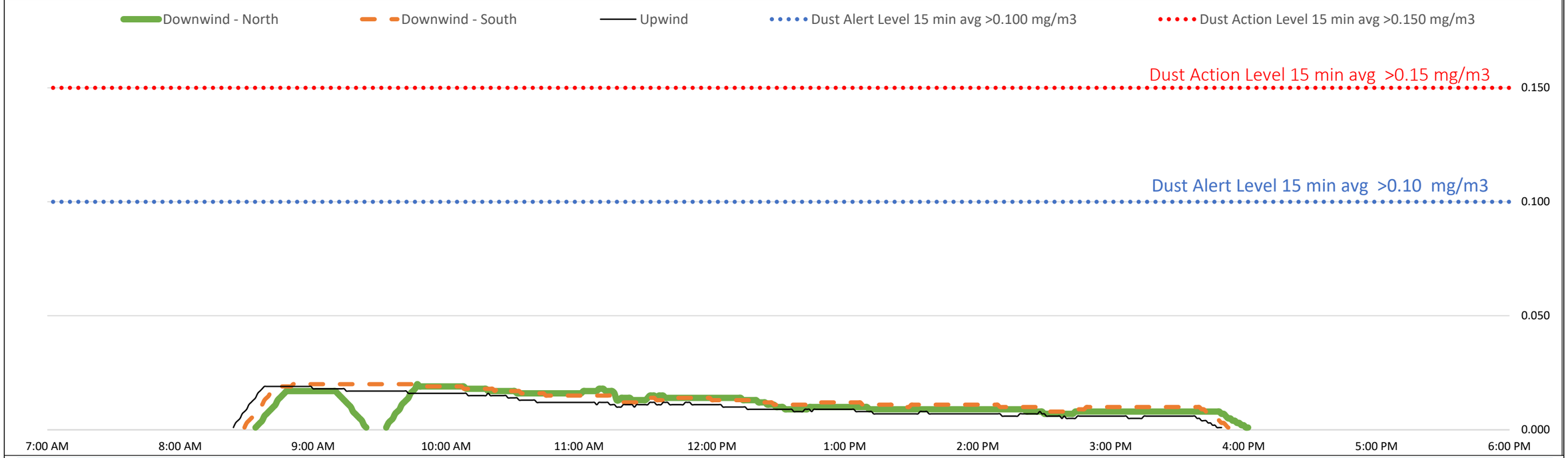


VOC (ppm) 15 min avg

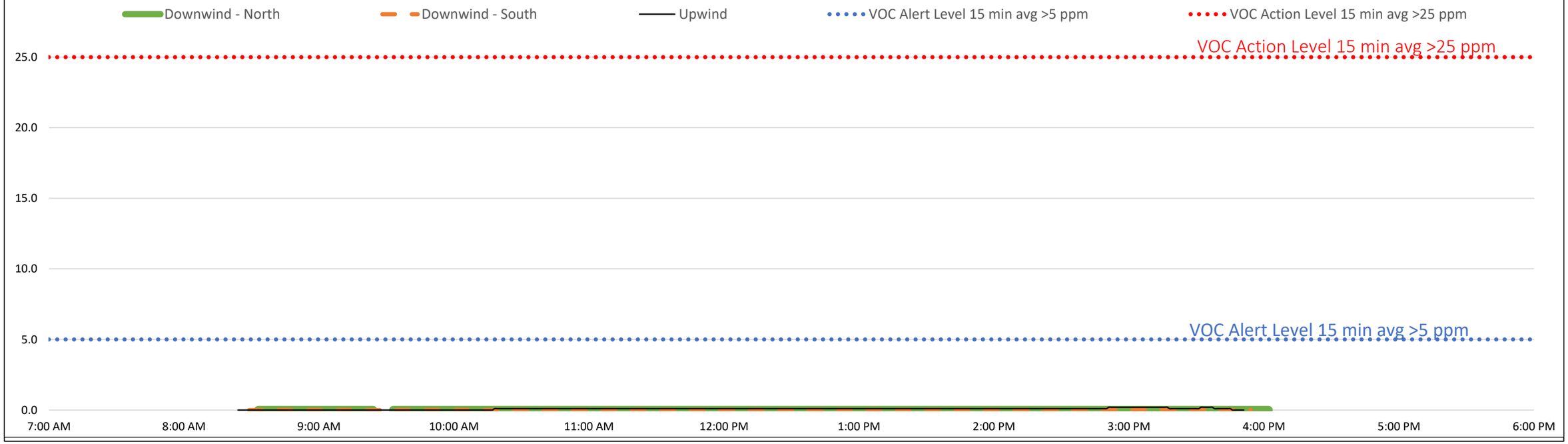


Fixed Station Daily Air Monitoring - January 27, 2022

Dust (mg/m3) 15 min avg

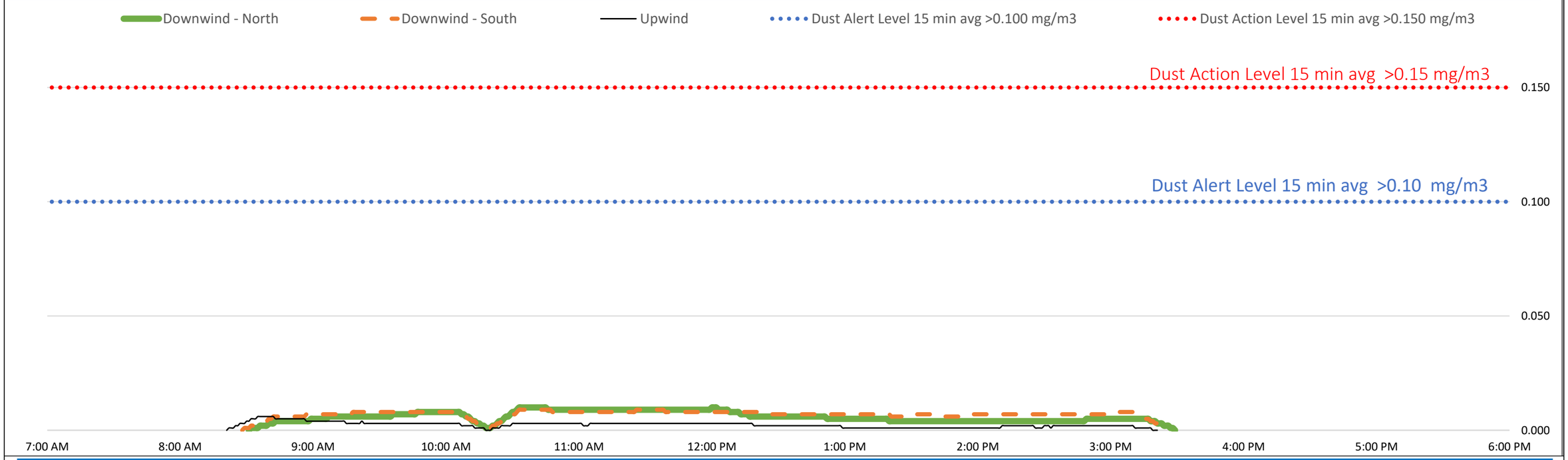


VOC (ppm) 15 min avg

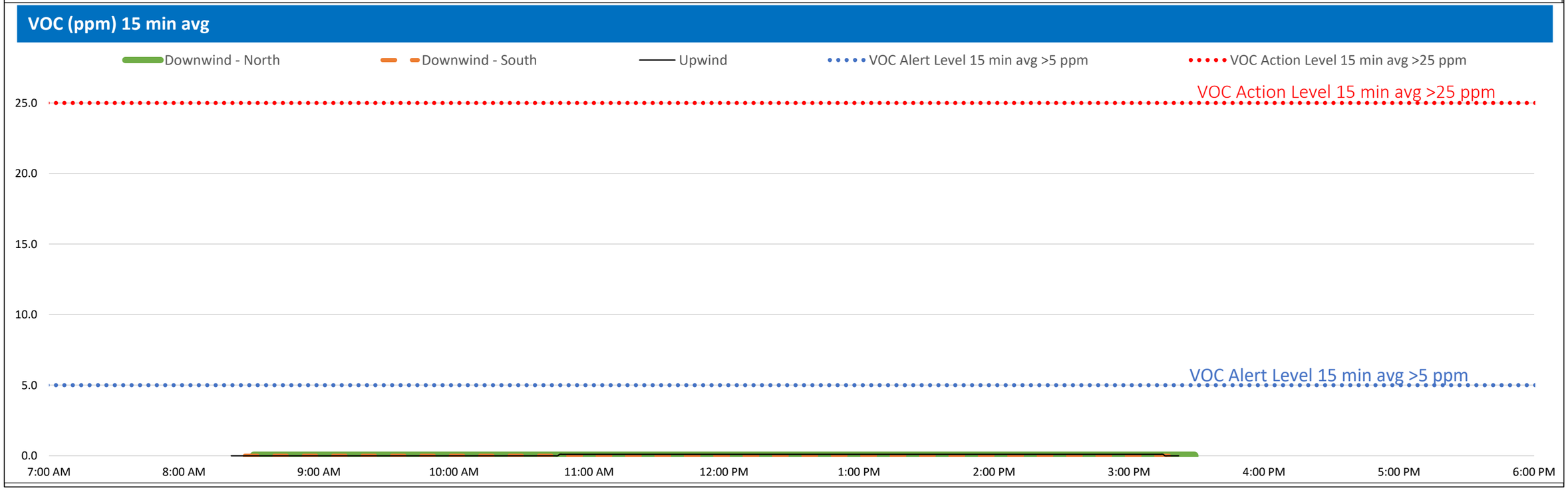


Fixed Station Daily Air Monitoring - January 28, 2022

Dust (mg/m3) 15 min avg

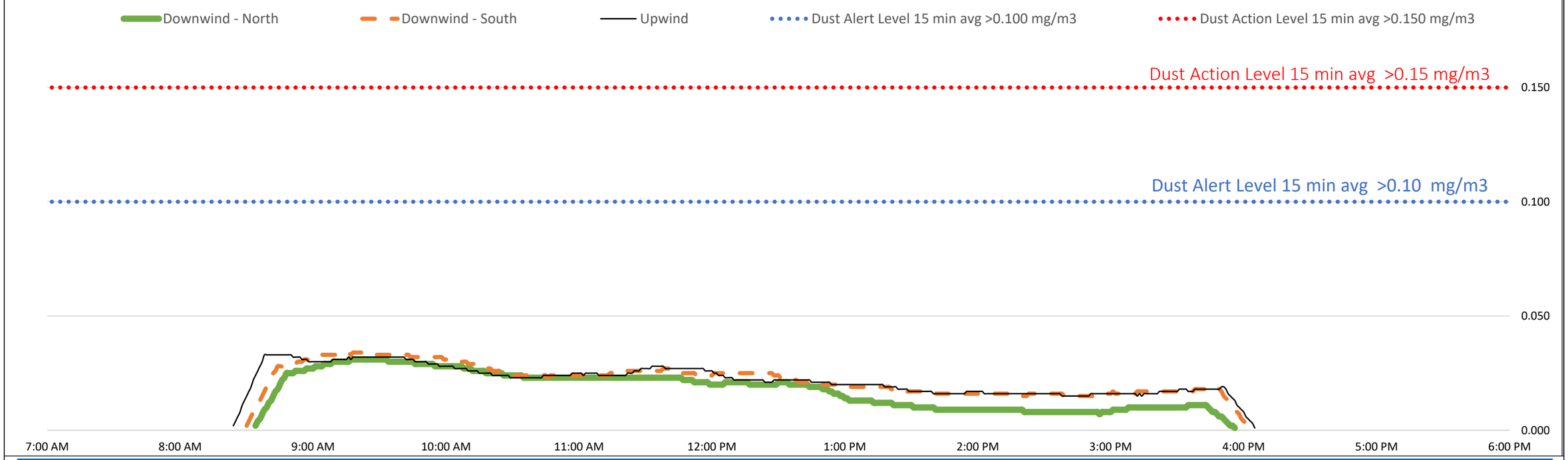


VOC (ppm) 15 min avg



Fixed Station Daily Air Monitoring - January 31, 2022

Dust (mg/m3) 15 min avg

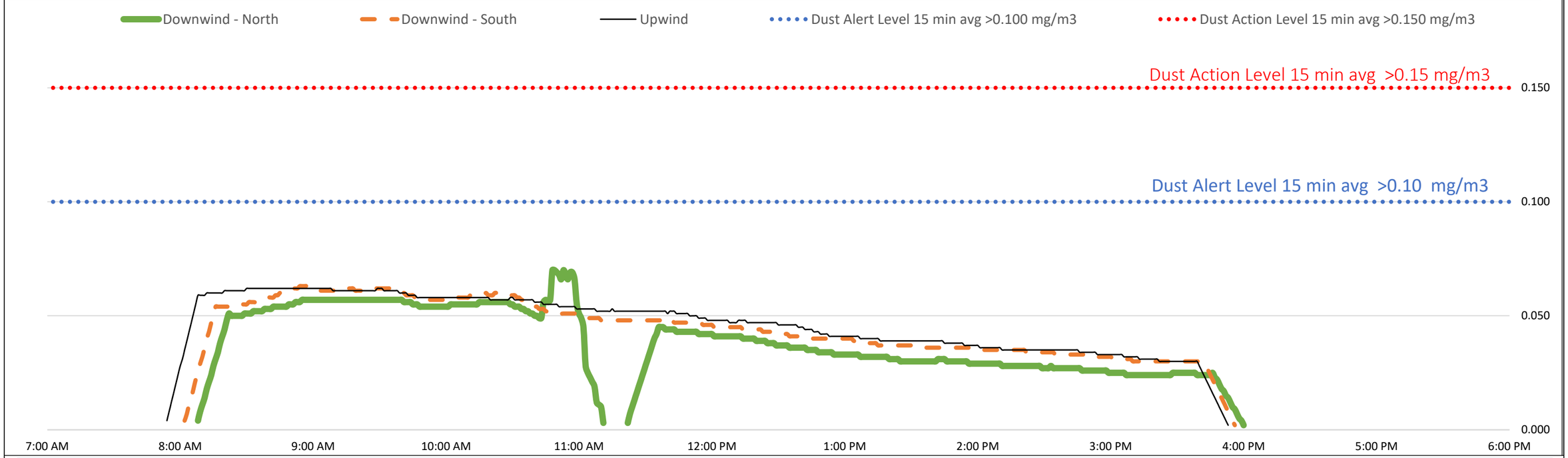


VOC (ppm) 15 min avg

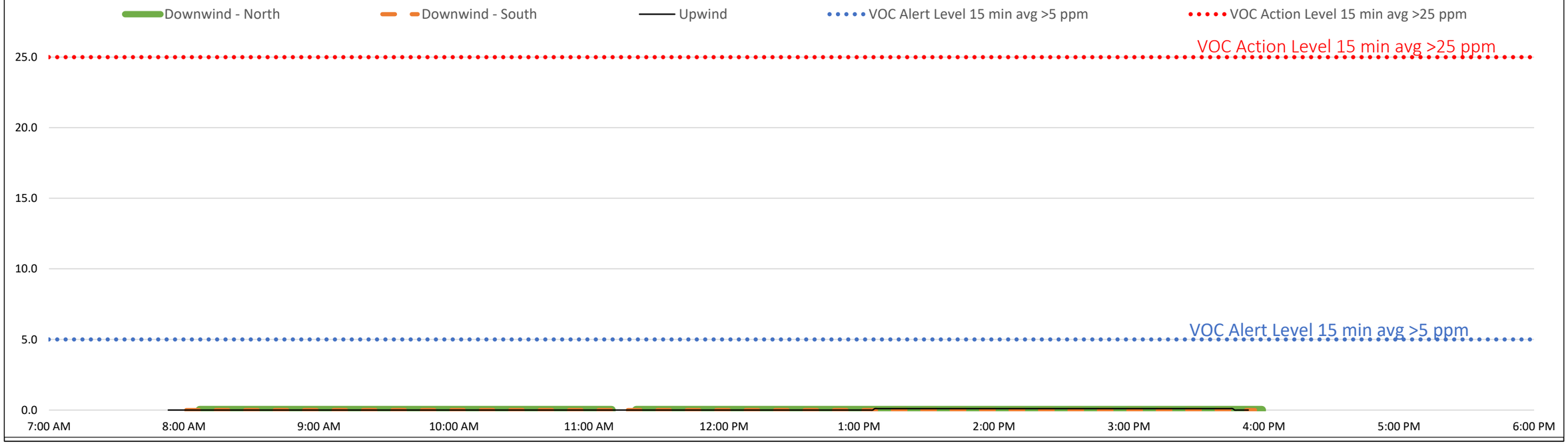


Fixed Station Daily Air Monitoring - February 1, 2022

Dust (mg/m3) 15 min avg

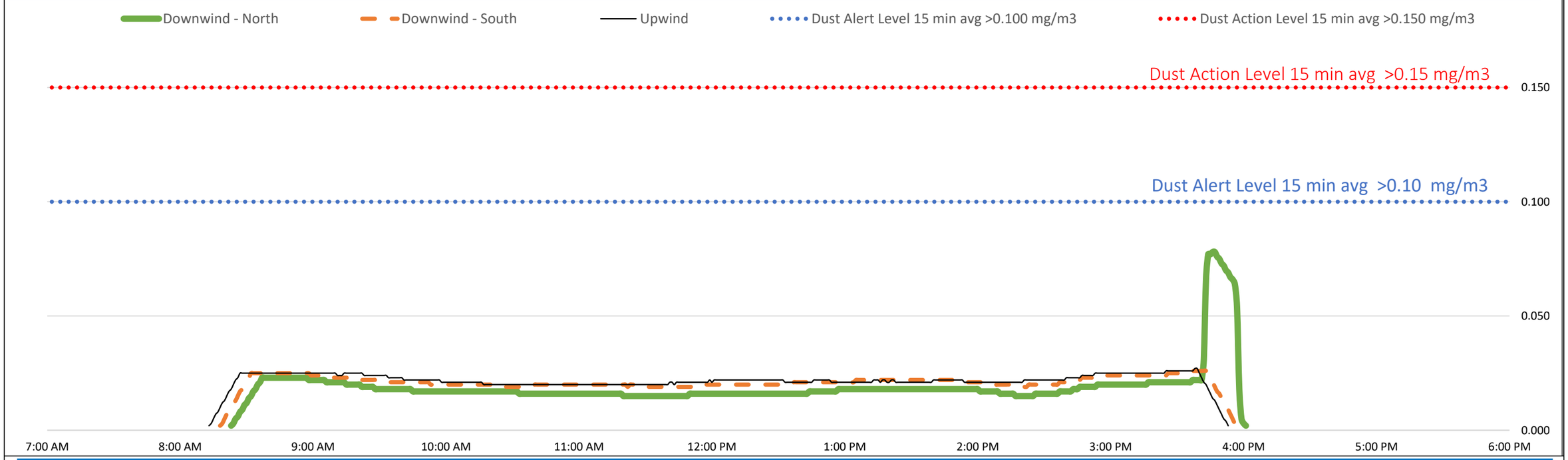


VOC (ppm) 15 min avg

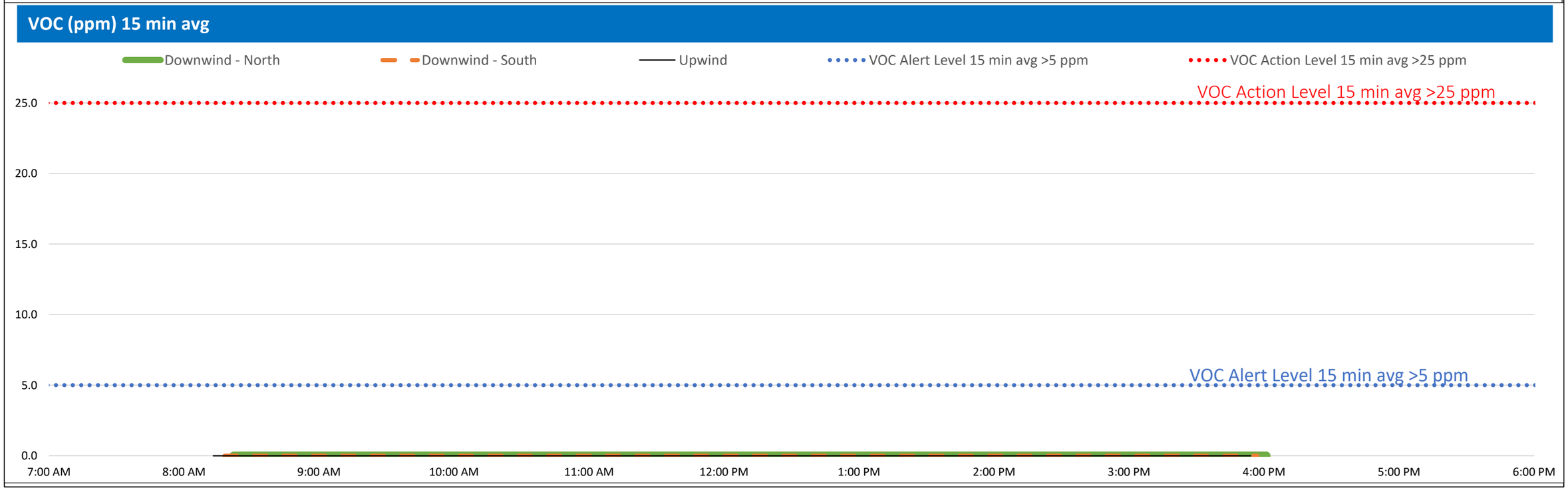


Fixed Station Daily Air Monitoring - February 2, 2022

Dust (mg/m3) 15 min avg

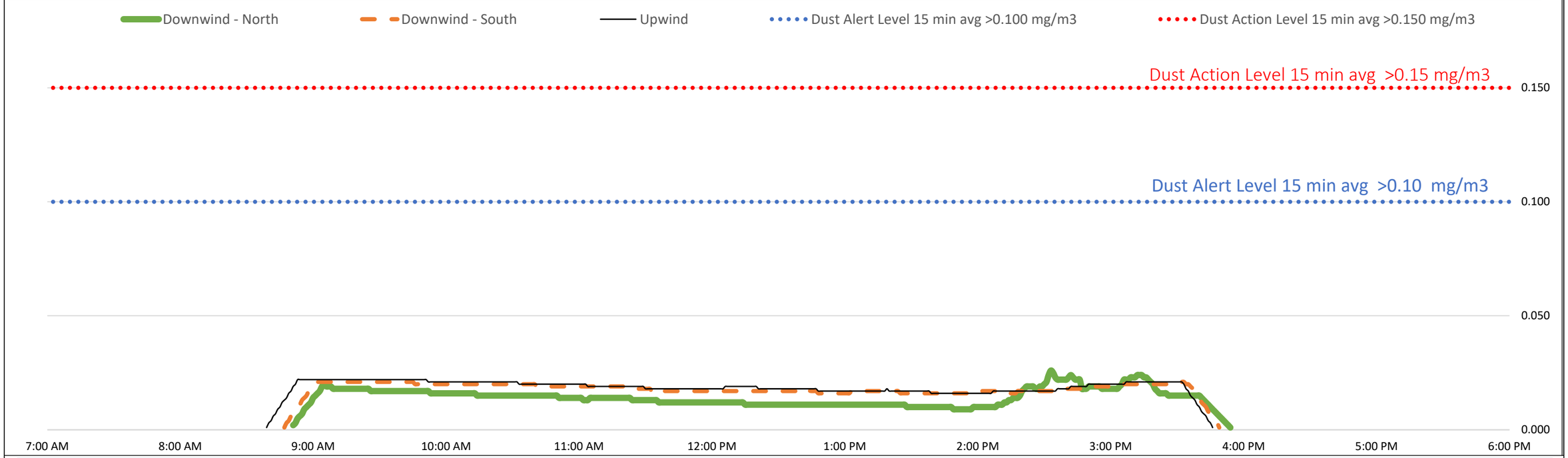


VOC (ppm) 15 min avg

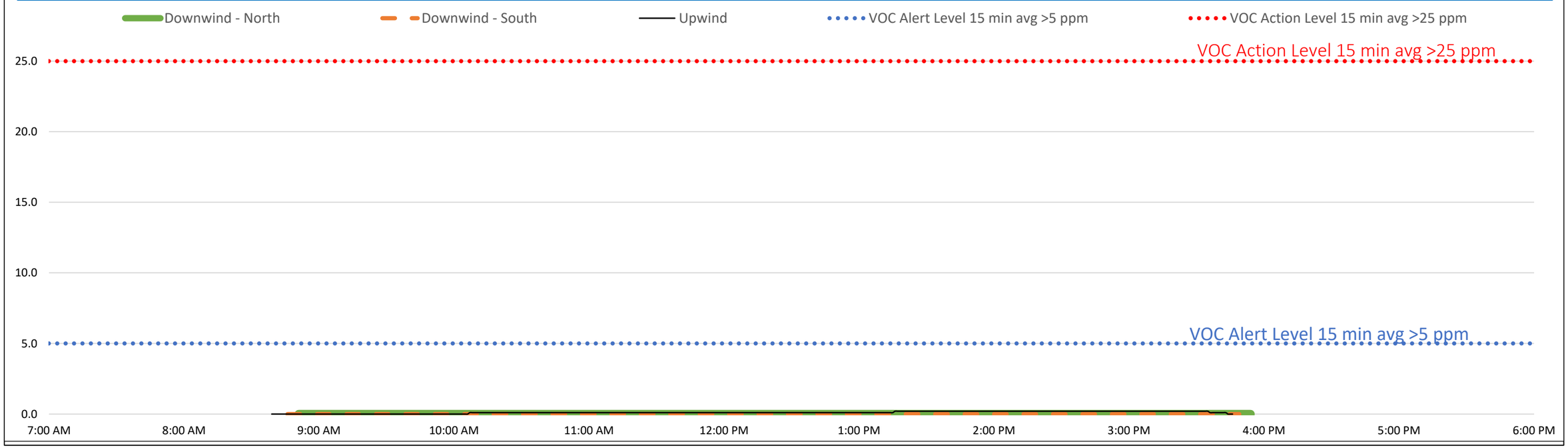


Fixed Station Daily Air Monitoring - February 7, 2022

Dust (mg/m3) 15 min avg

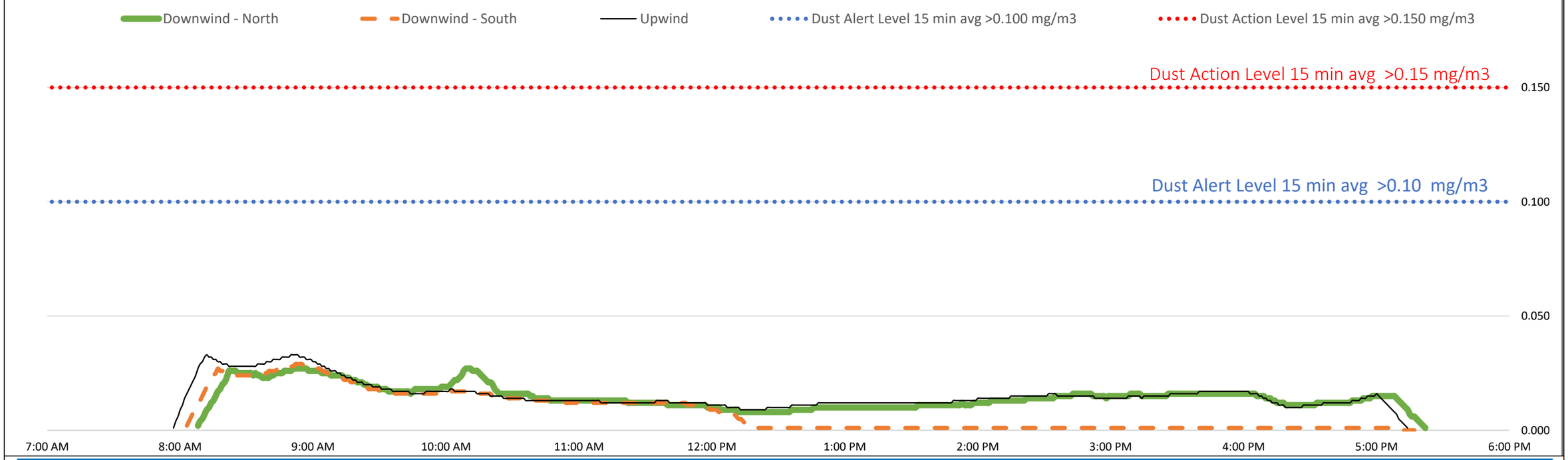


VOC (ppm) 15 min avg

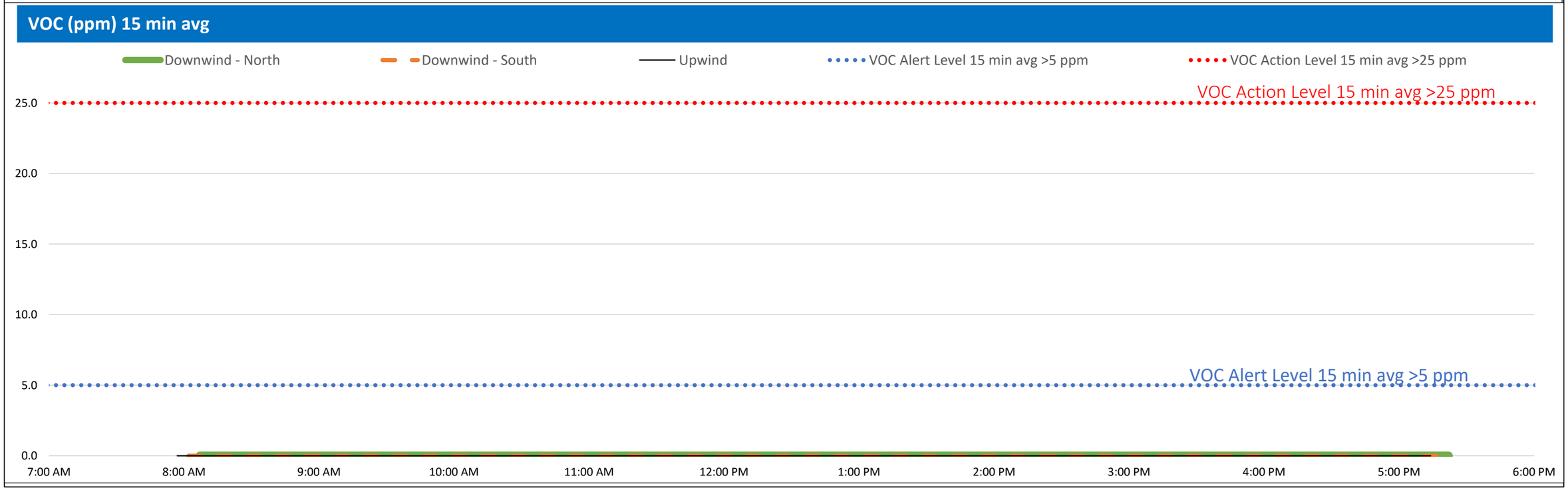


Fixed Station Daily Air Monitoring - February 8, 2022

Dust (mg/m3) 15 min avg

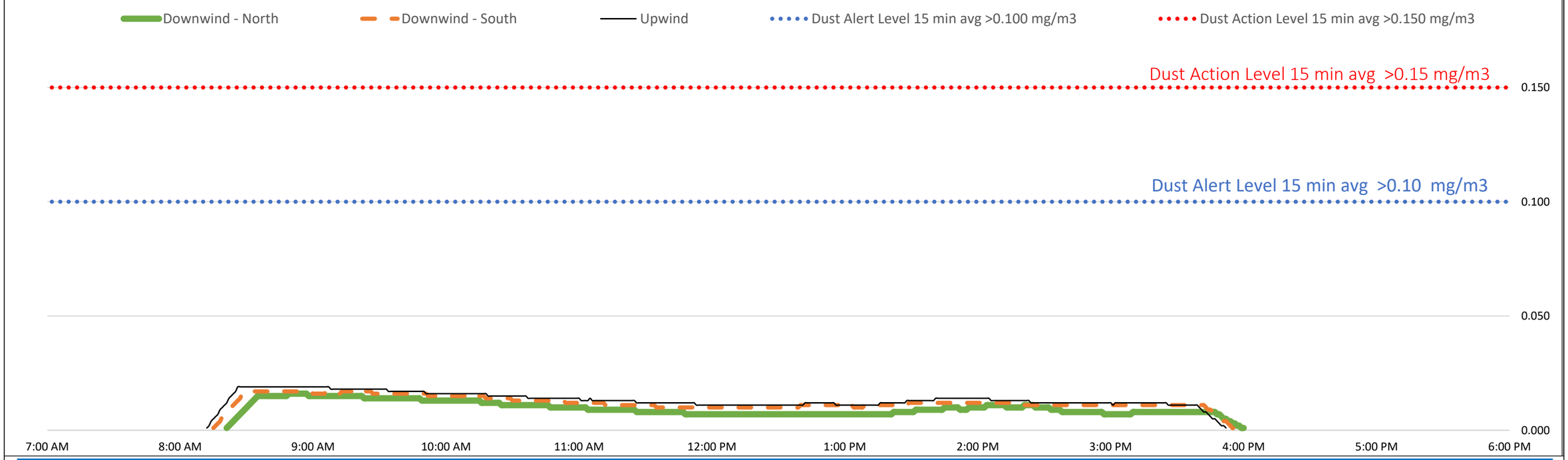


VOC (ppm) 15 min avg

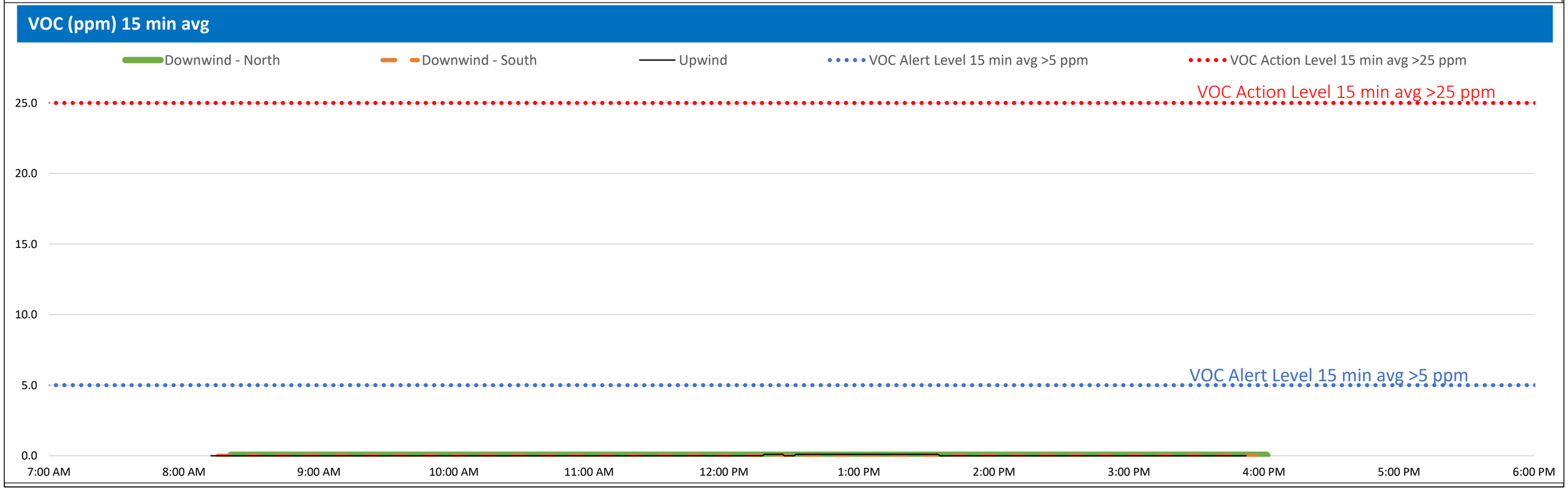


Fixed Station Daily Air Monitoring - February 9, 2022

Dust (mg/m3) 15 min avg

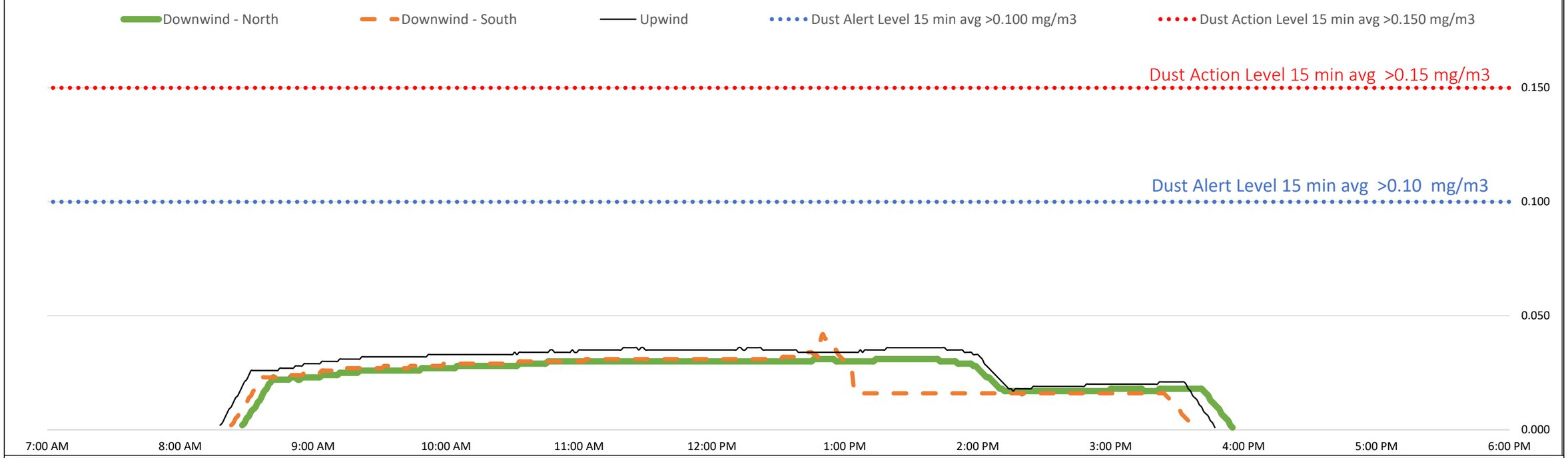


VOC (ppm) 15 min avg

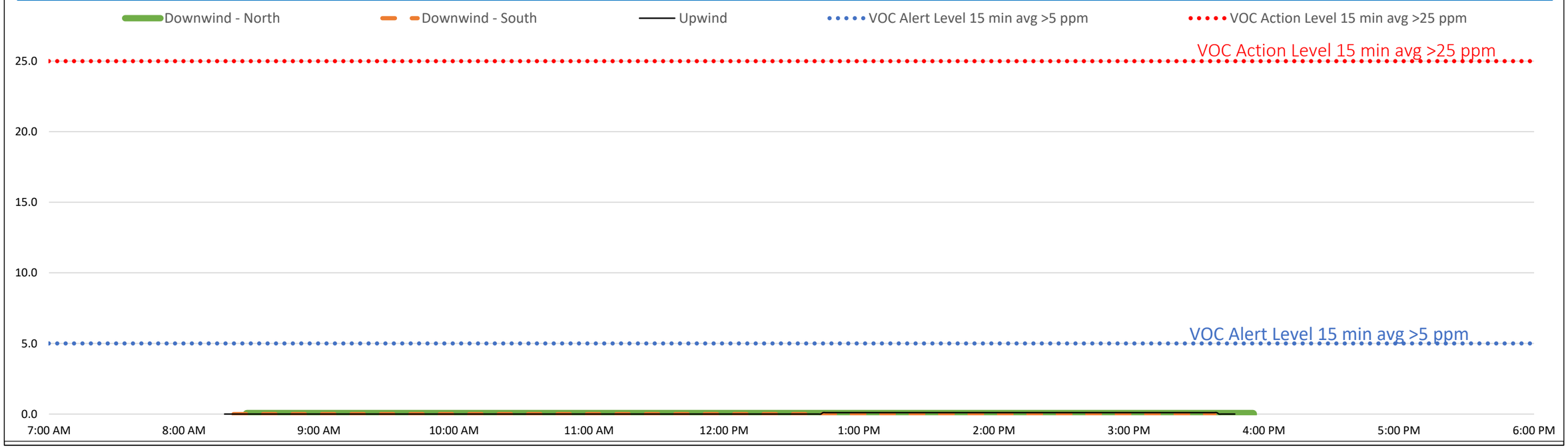


Fixed Station Daily Air Monitoring - February 10, 2022

Dust (mg/m3) 15 min avg

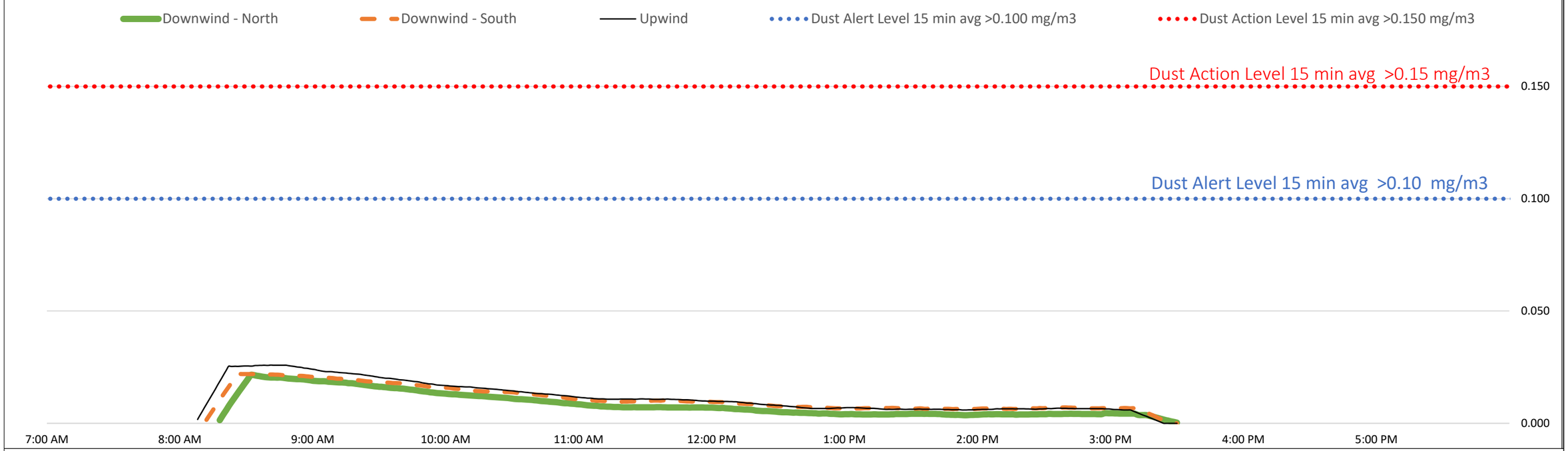


VOC (ppm) 15 min avg

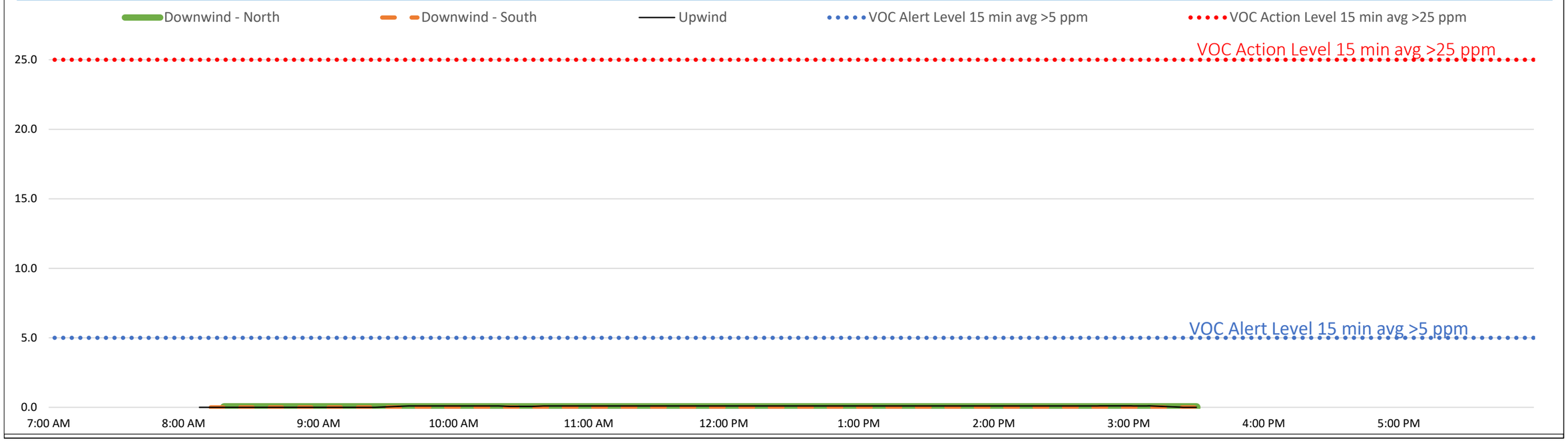


Fixed Station Daily Air Monitoring - February 11, 2022

Dust (mg/m3) 15 min avg

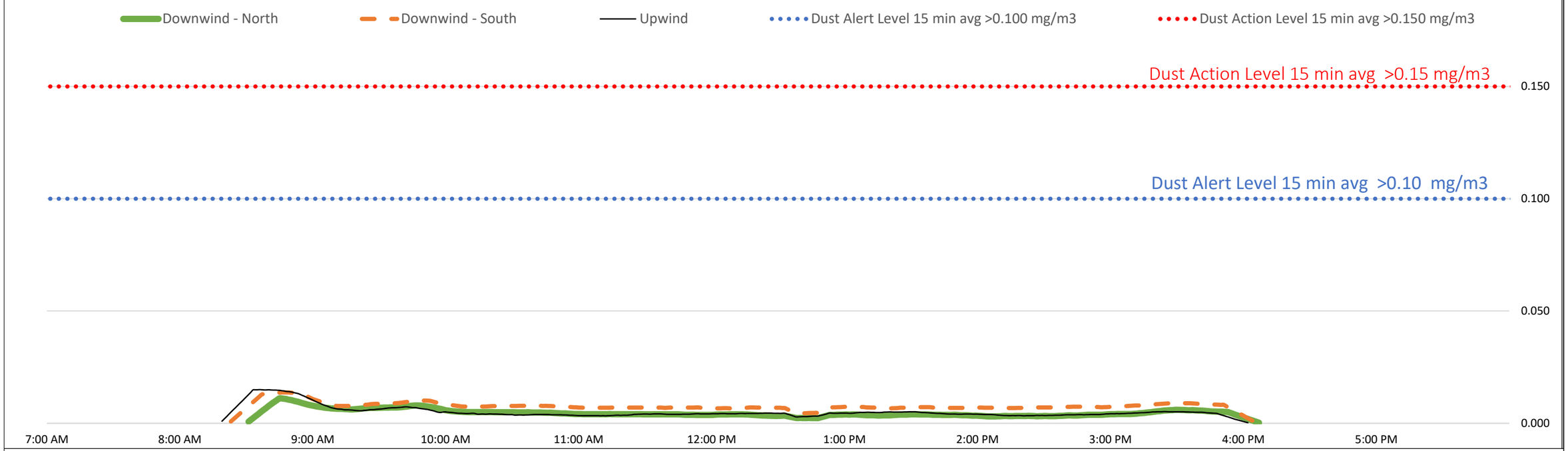


VOC (ppm) 15 min avg

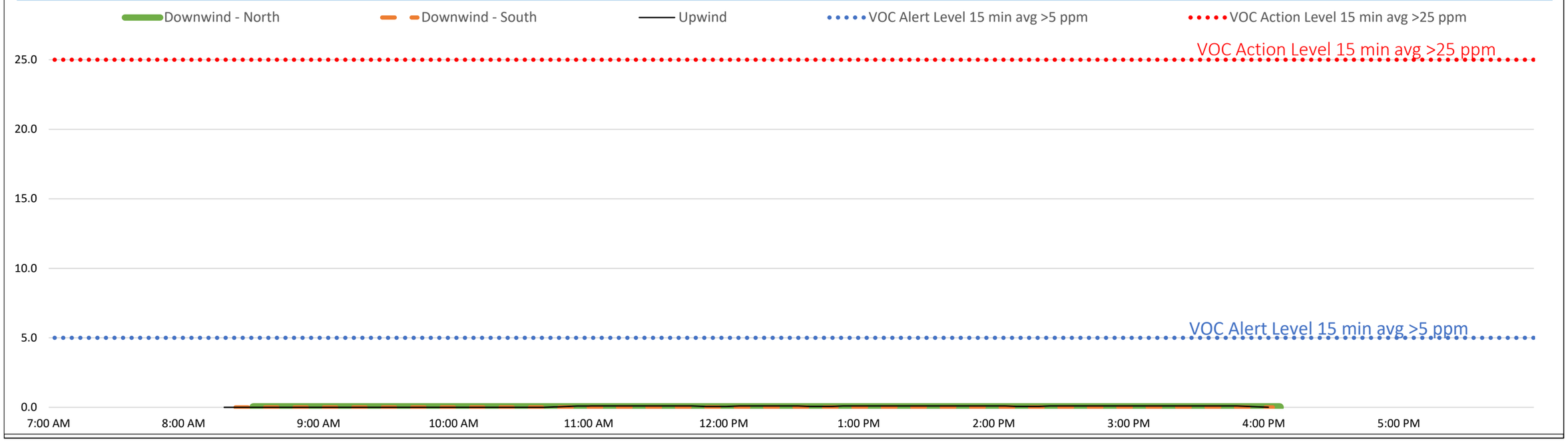


Fixed Station Daily Air Monitoring - February 14, 2022

Dust (mg/m3) 15 min avg

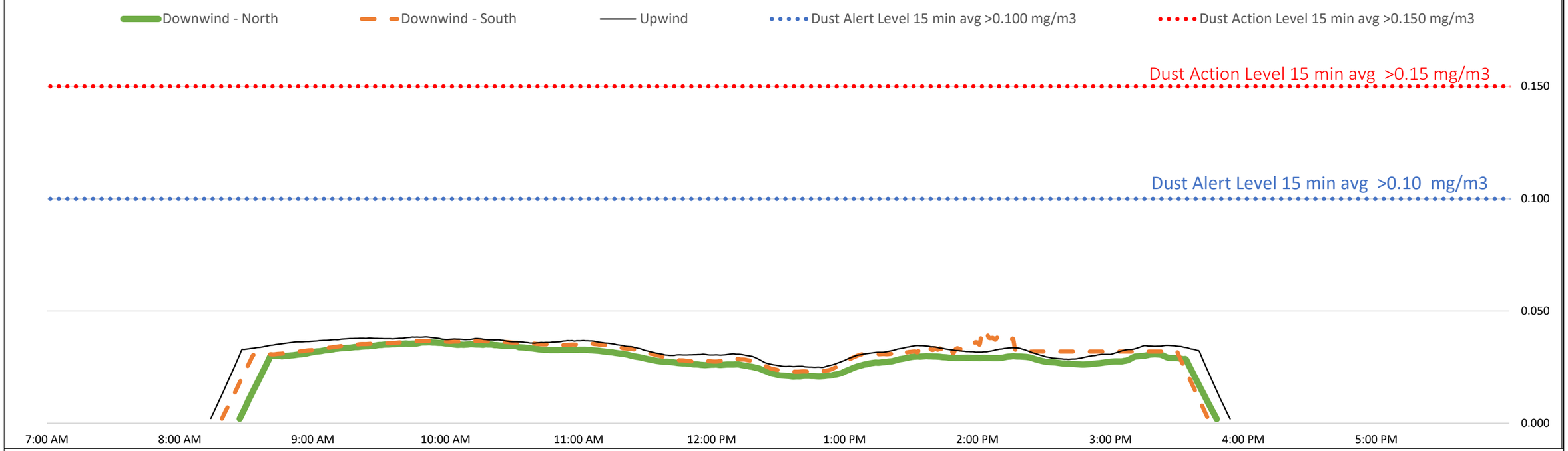


VOC (ppm) 15 min avg

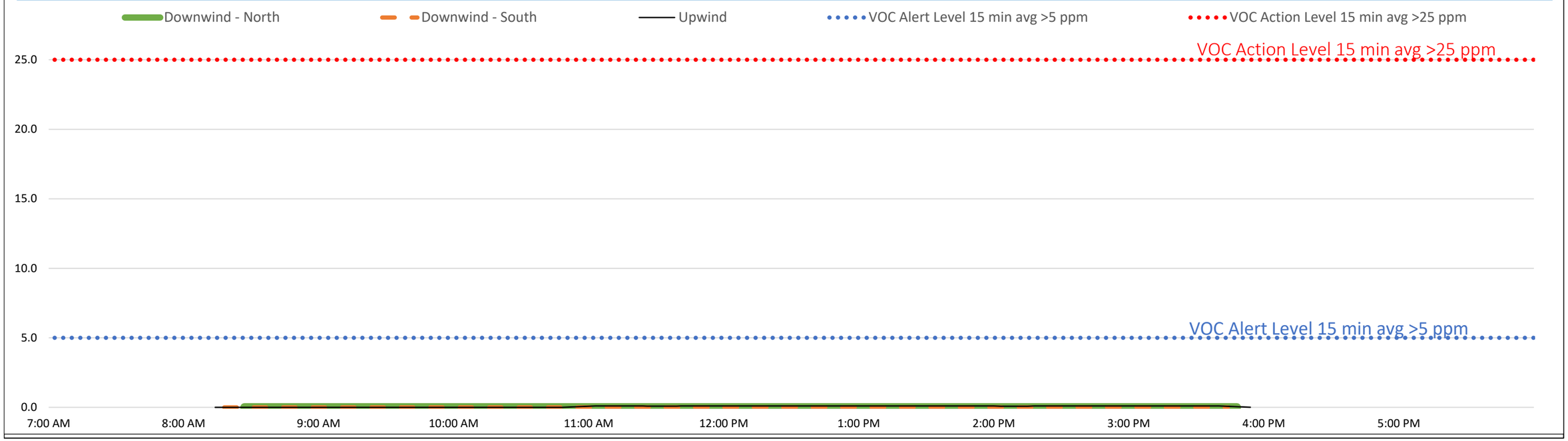


Fixed Station Daily Air Monitoring - February 15, 2022

Dust (mg/m3) 15 min avg

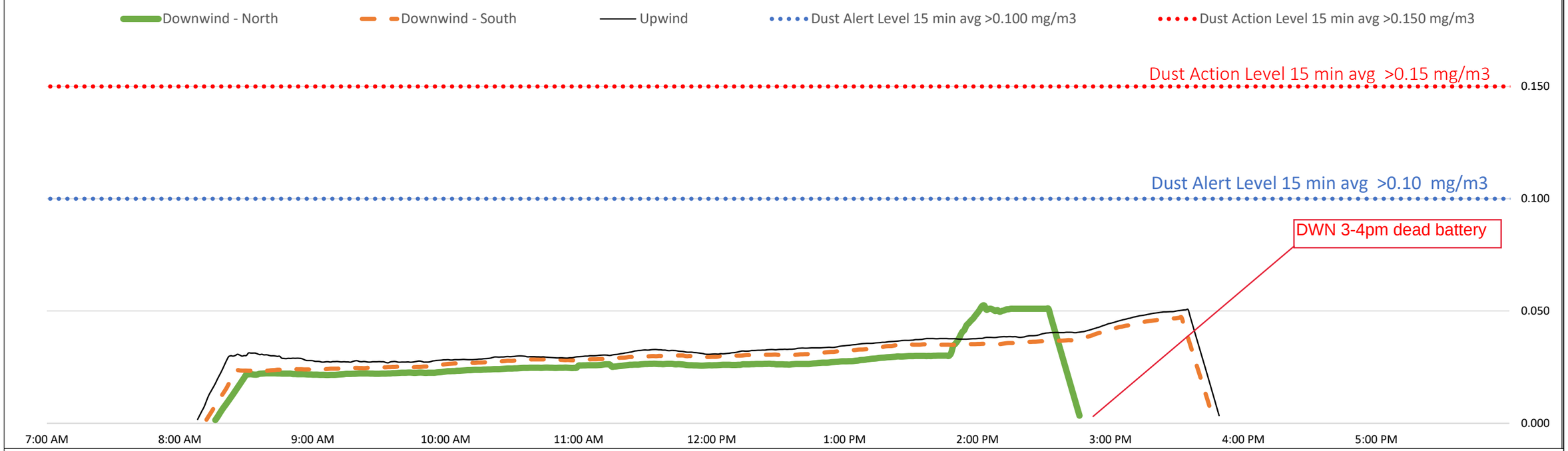


VOC (ppm) 15 min avg

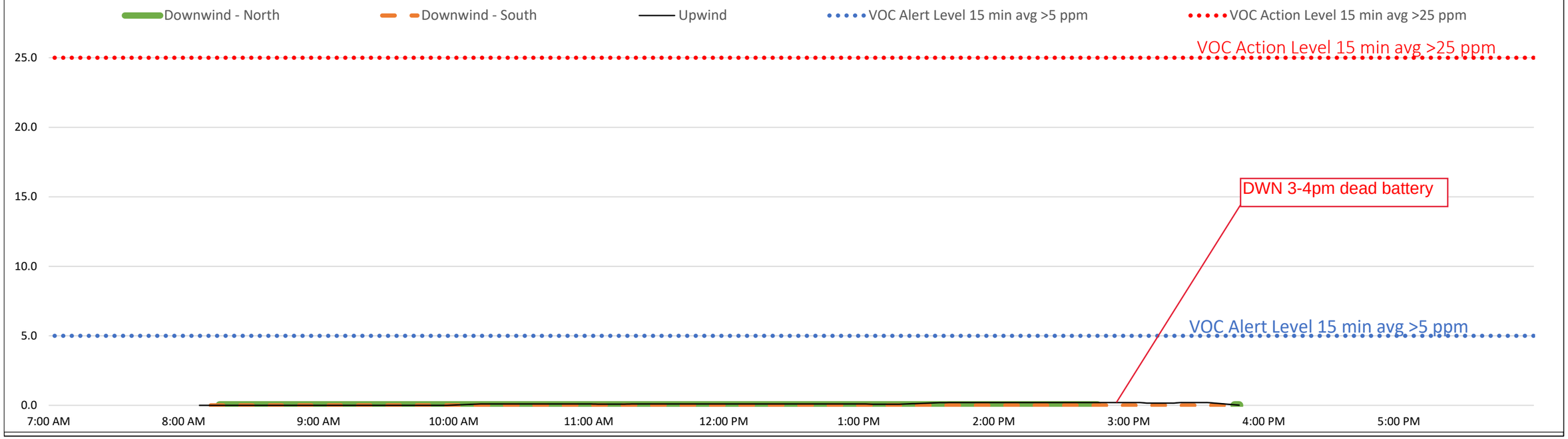


Fixed Station Daily Air Monitoring - February 16, 2022

Dust (mg/m3) 15 min avg

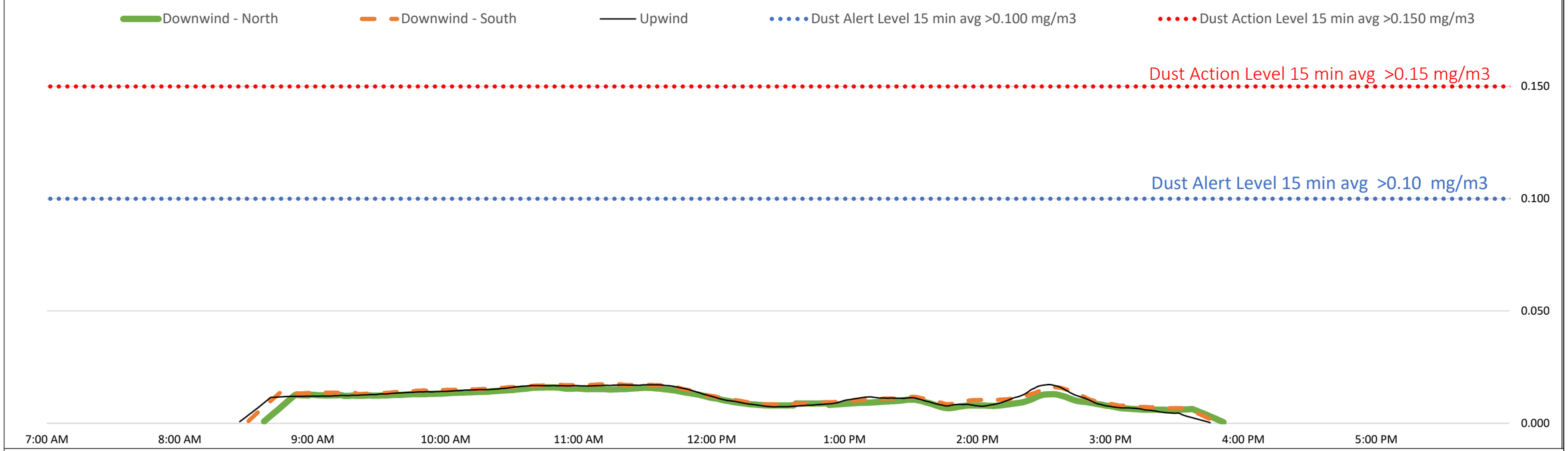


VOC (ppm) 15 min avg

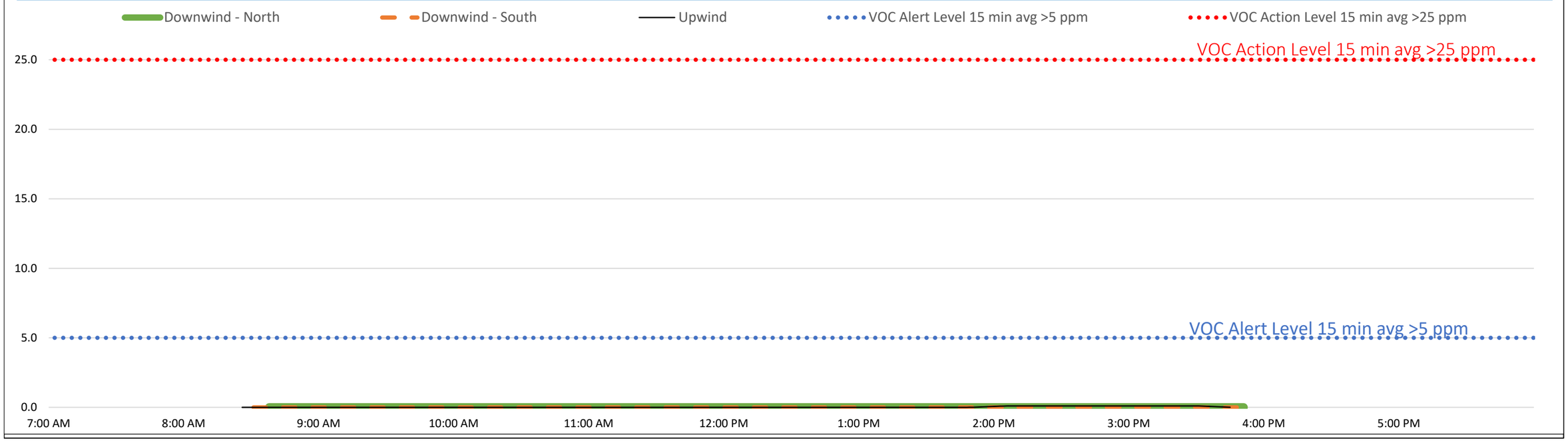


Fixed Station Daily Air Monitoring - February 17, 2022

Dust (mg/m3) 15 min avg

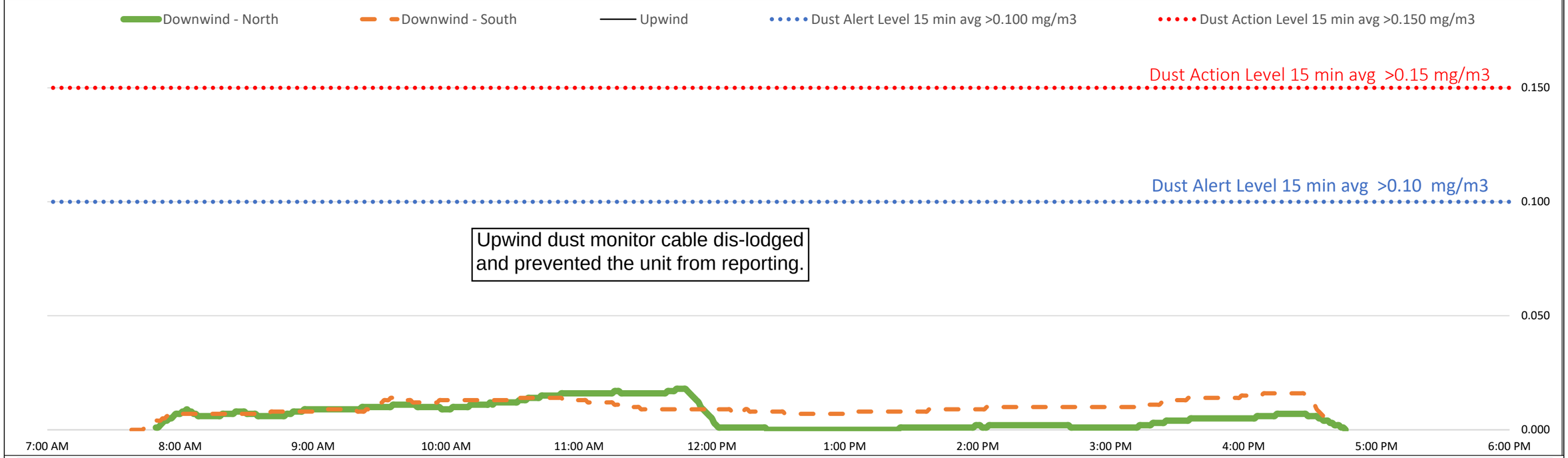


VOC (ppm) 15 min avg

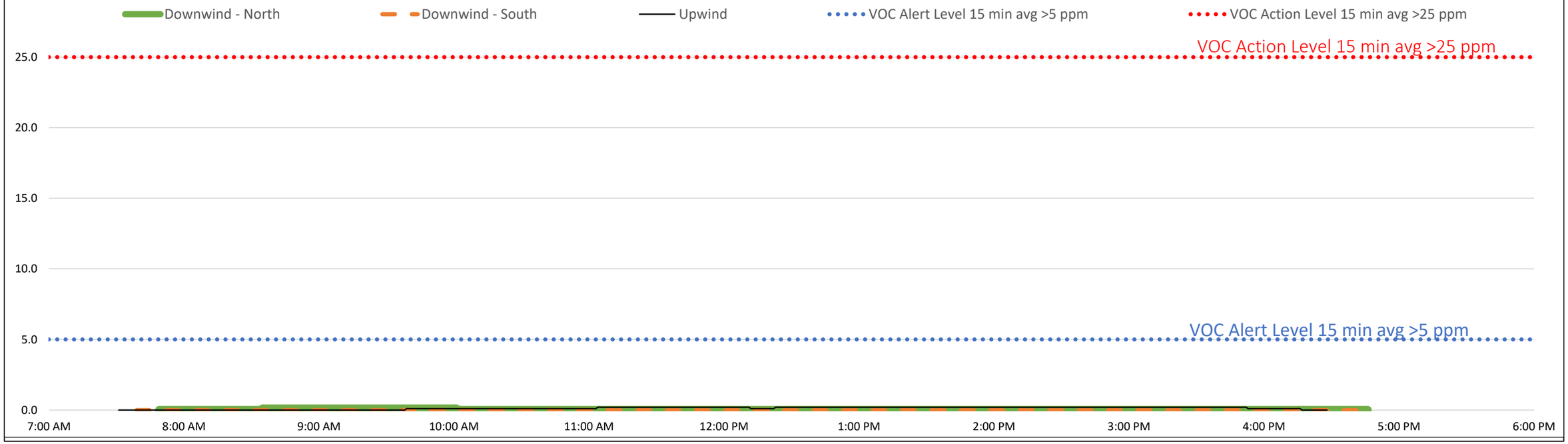


Fixed Station Daily Air Monitoring - February 21, 2022

Dust (mg/m3) 15 min avg

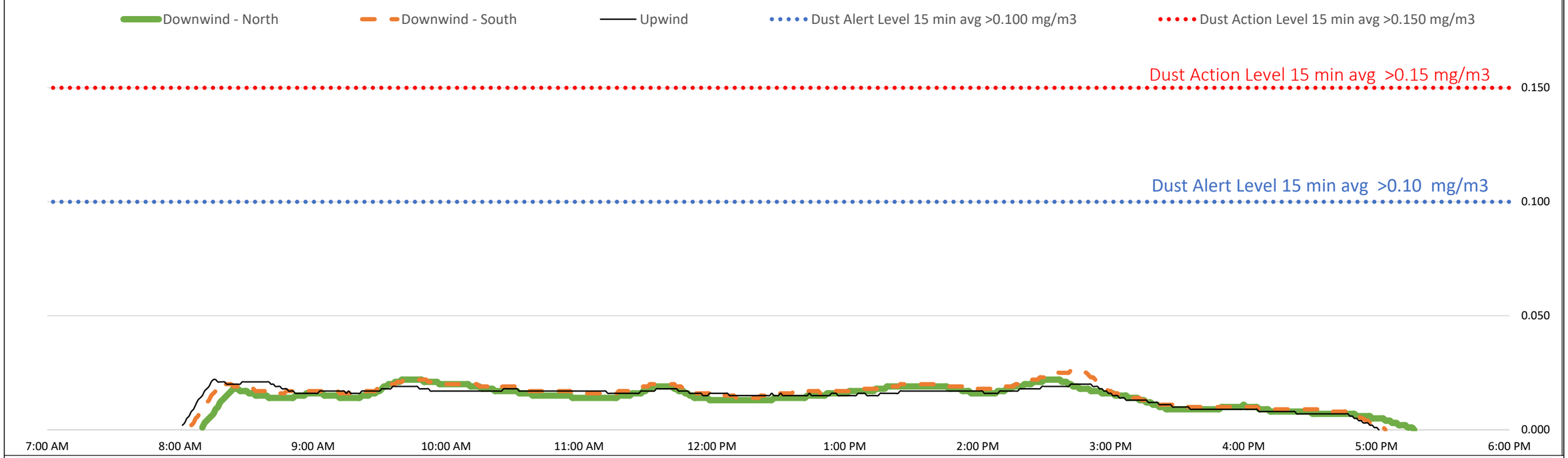


VOC (ppm) 15 min avg

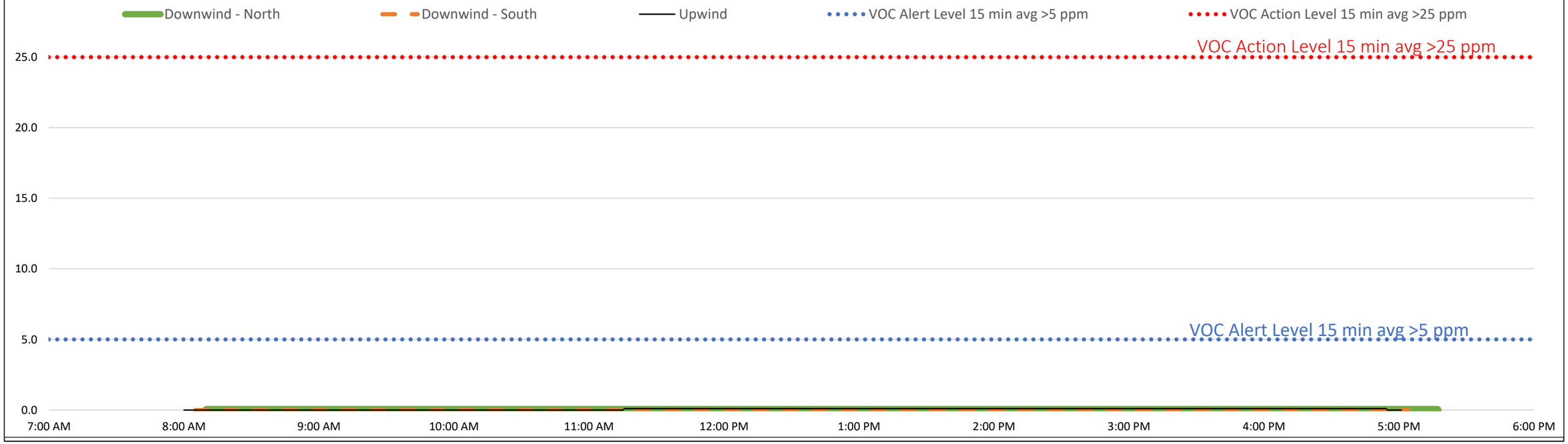


Fixed Station Daily Air Monitoring - February 22, 2022

Dust (mg/m3) 15 min avg

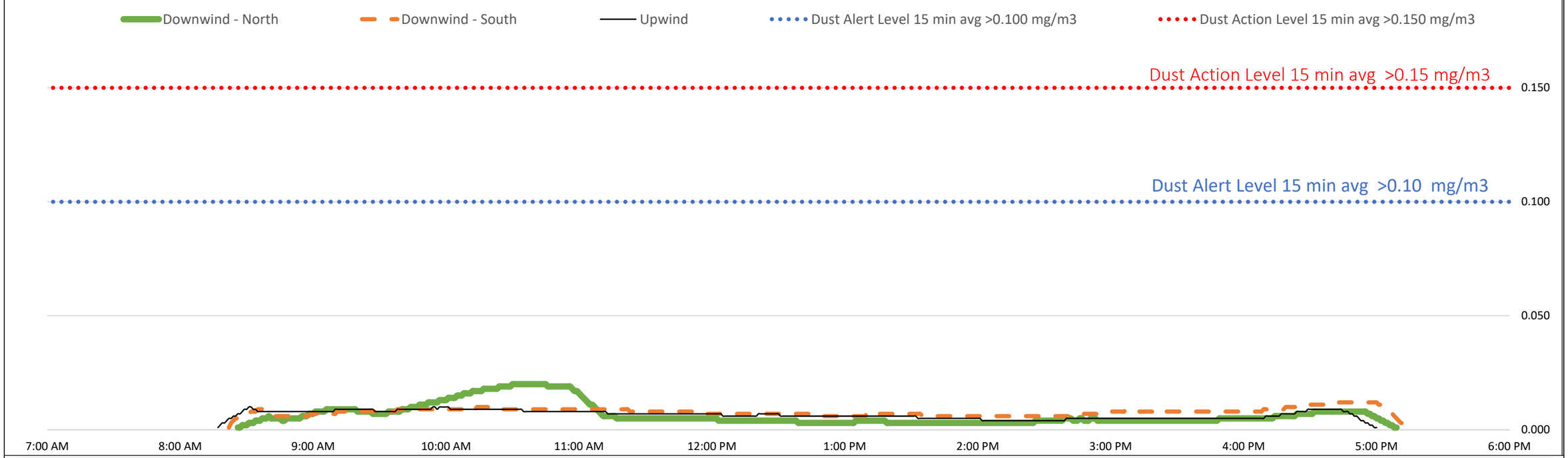


VOC (ppm) 15 min avg

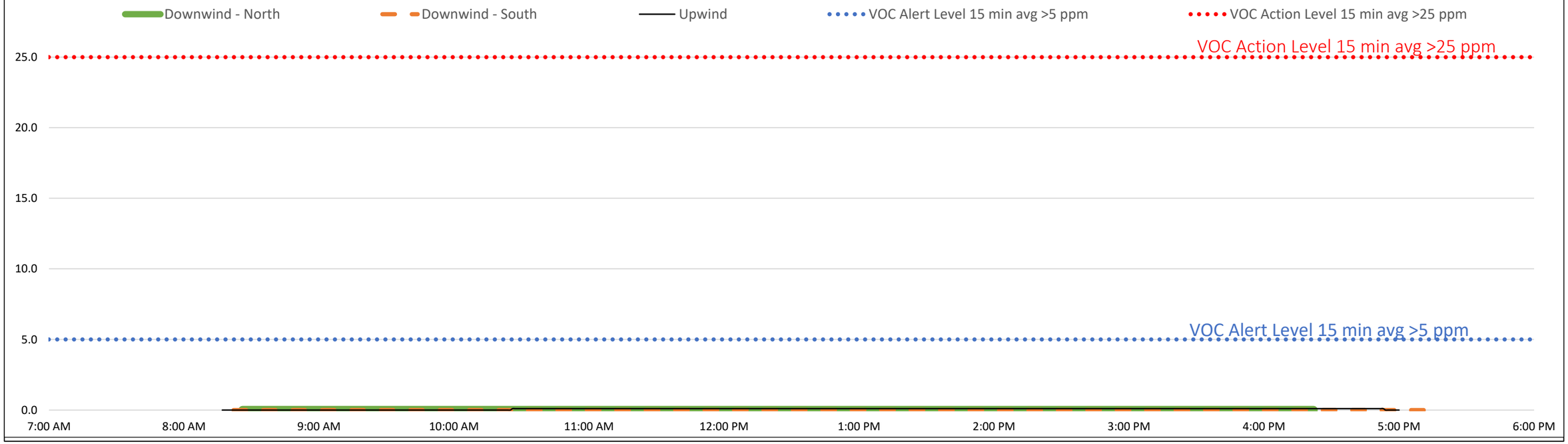


Fixed Station Daily Air Monitoring - February 23, 2022

Dust (mg/m3) 15 min avg

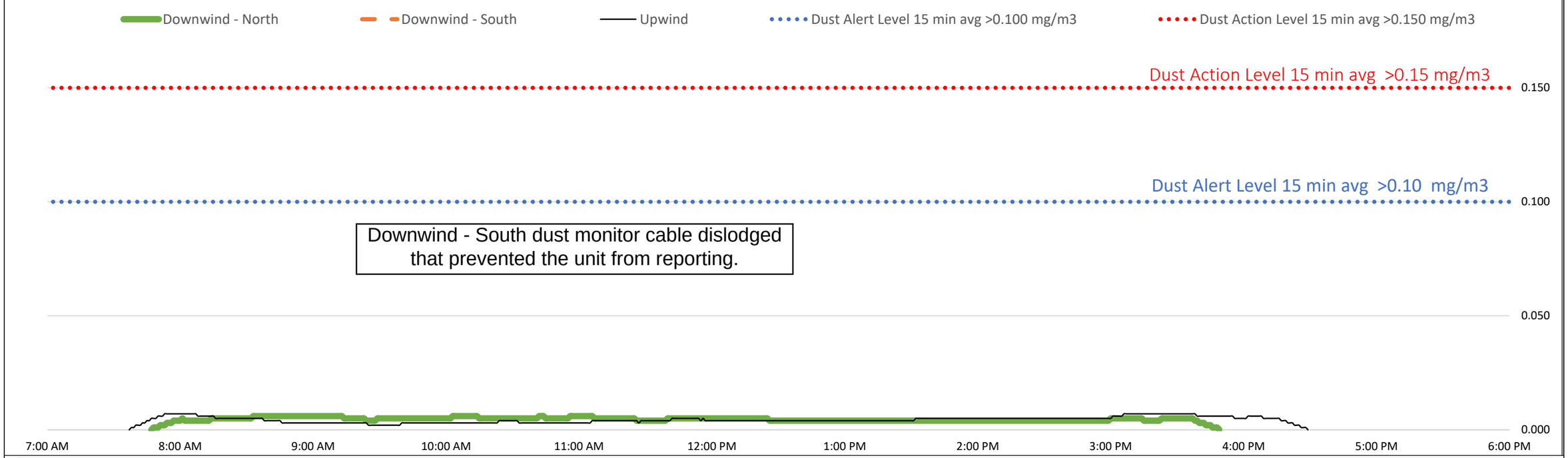


VOC (ppm) 15 min avg

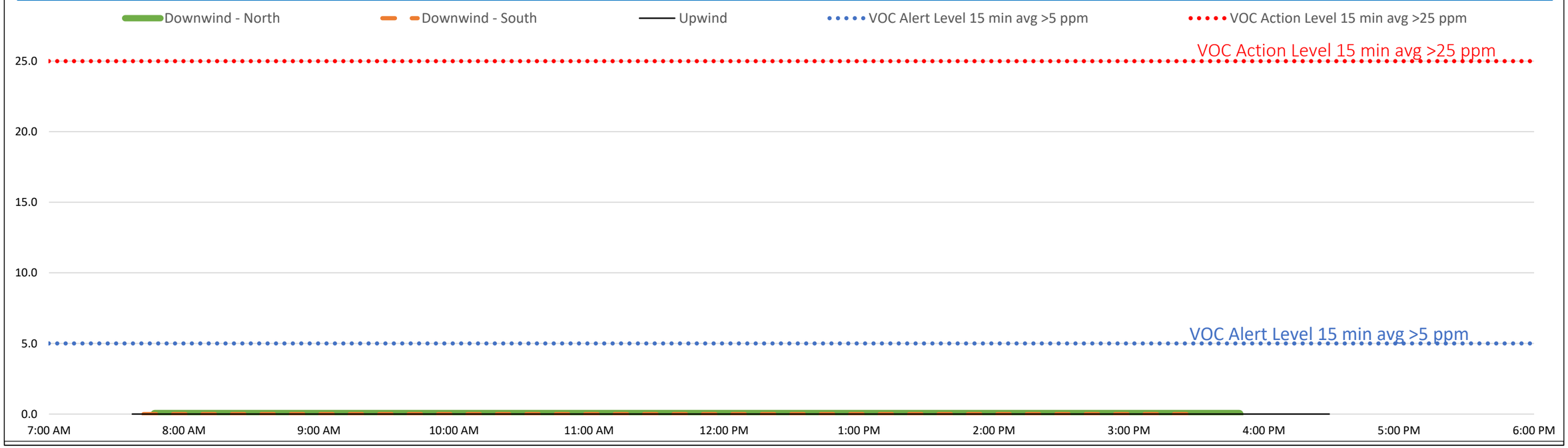


Fixed Station Daily Air Monitoring - February 24, 2022

Dust (mg/m3) 15 min avg

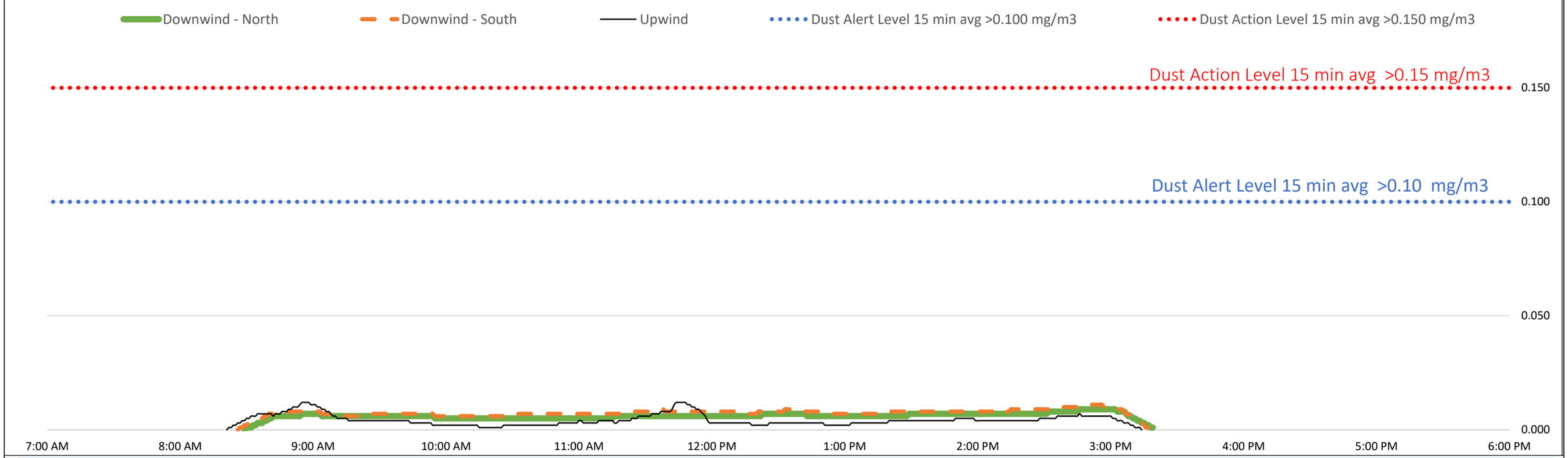


VOC (ppm) 15 min avg

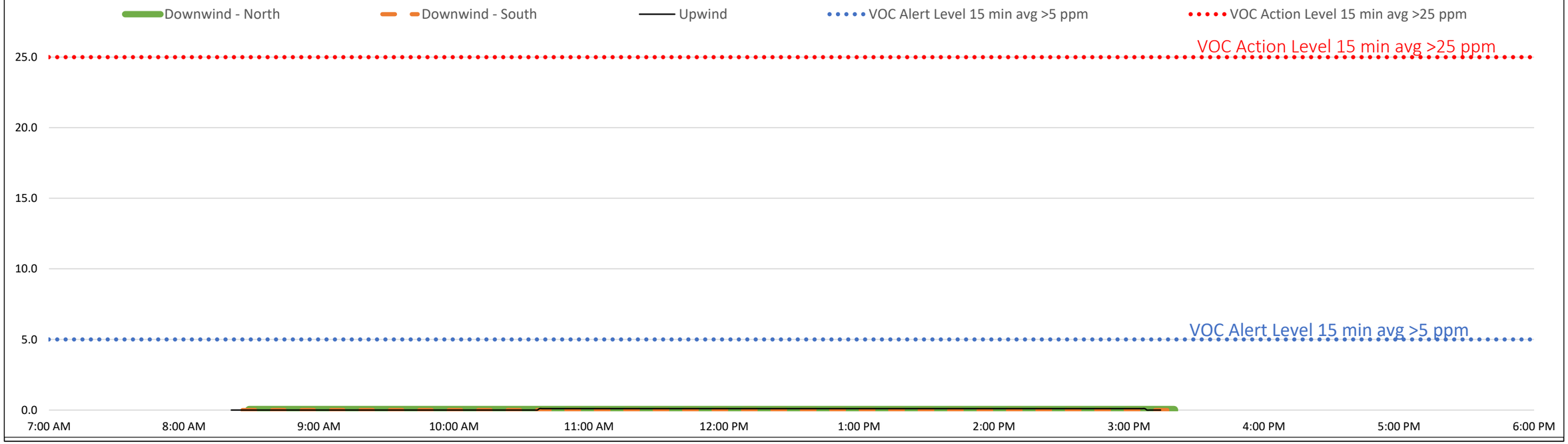


Fixed Station Daily Air Monitoring - February 25, 2022

Dust (mg/m3) 15 min avg

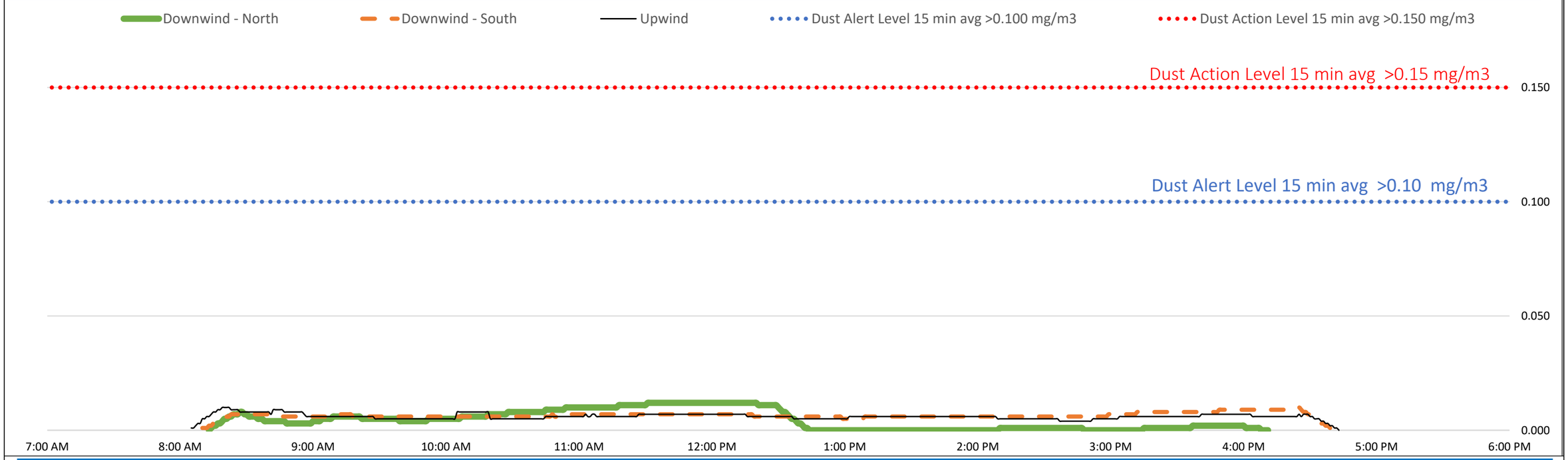


VOC (ppm) 15 min avg

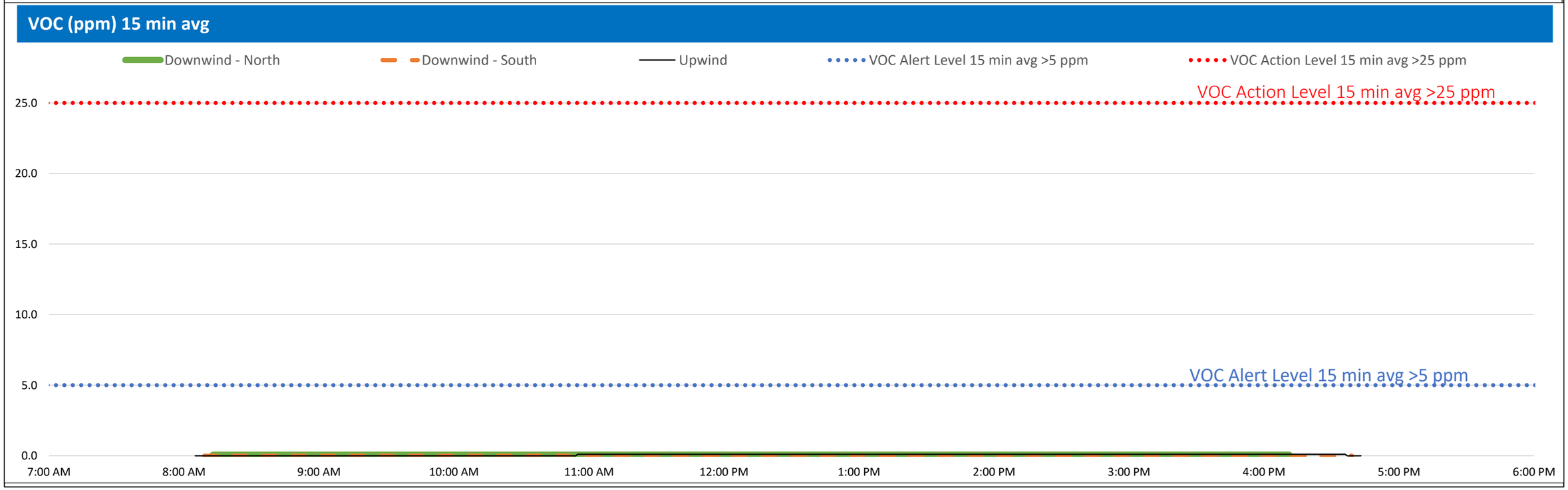


Fixed Station Daily Air Monitoring - February 28, 2022

Dust (mg/m3) 15 min avg

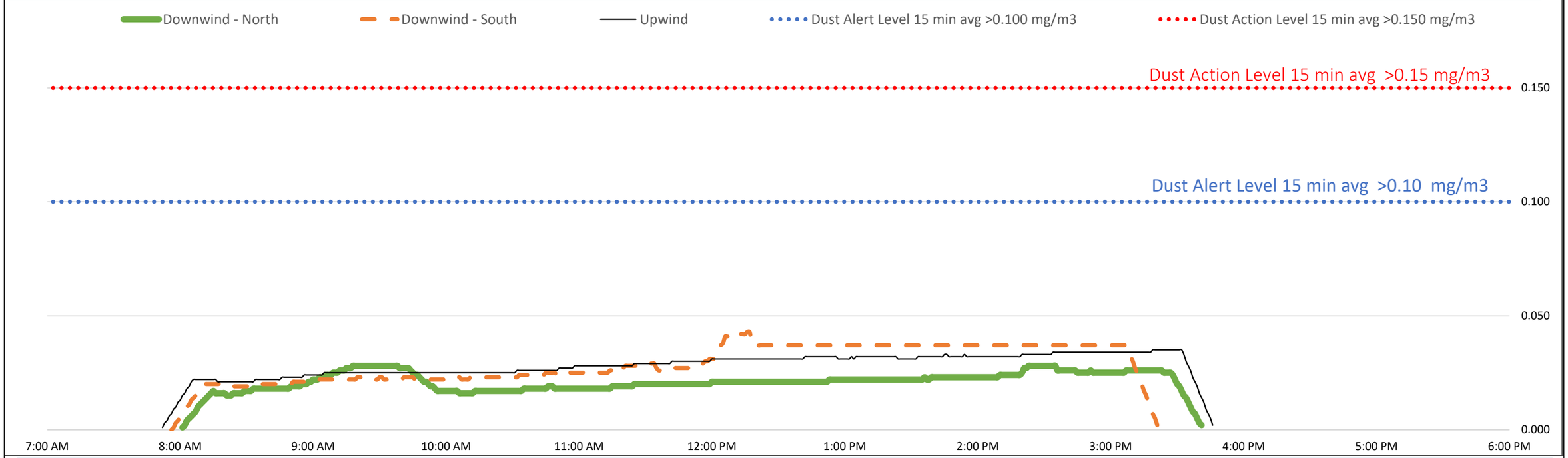


VOC (ppm) 15 min avg

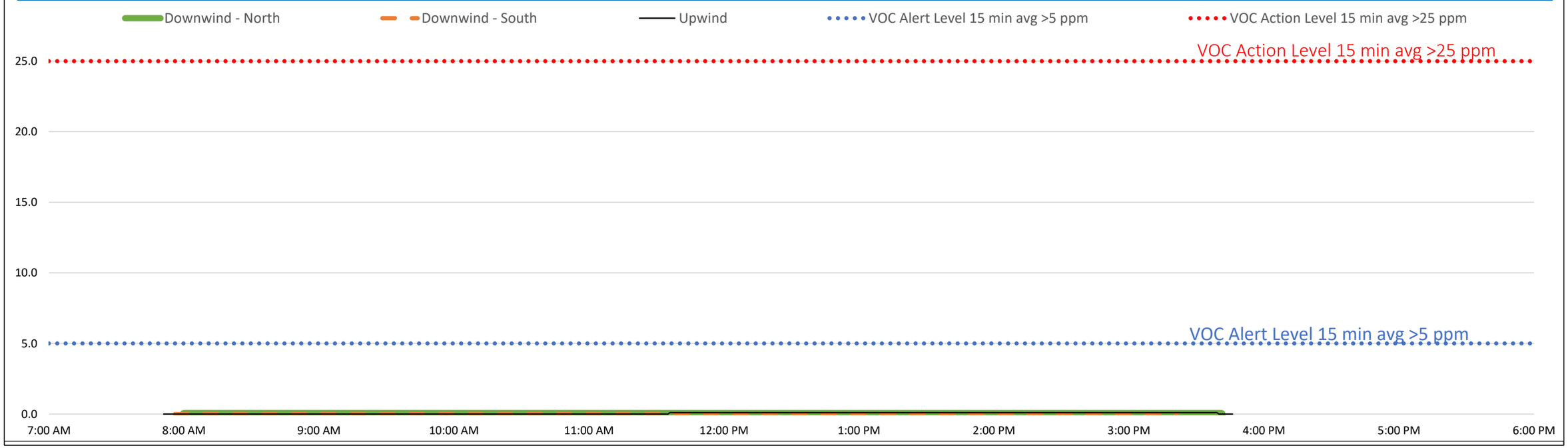


Fixed Station Daily Air Monitoring - March 1, 2022

Dust (mg/m3) 15 min avg

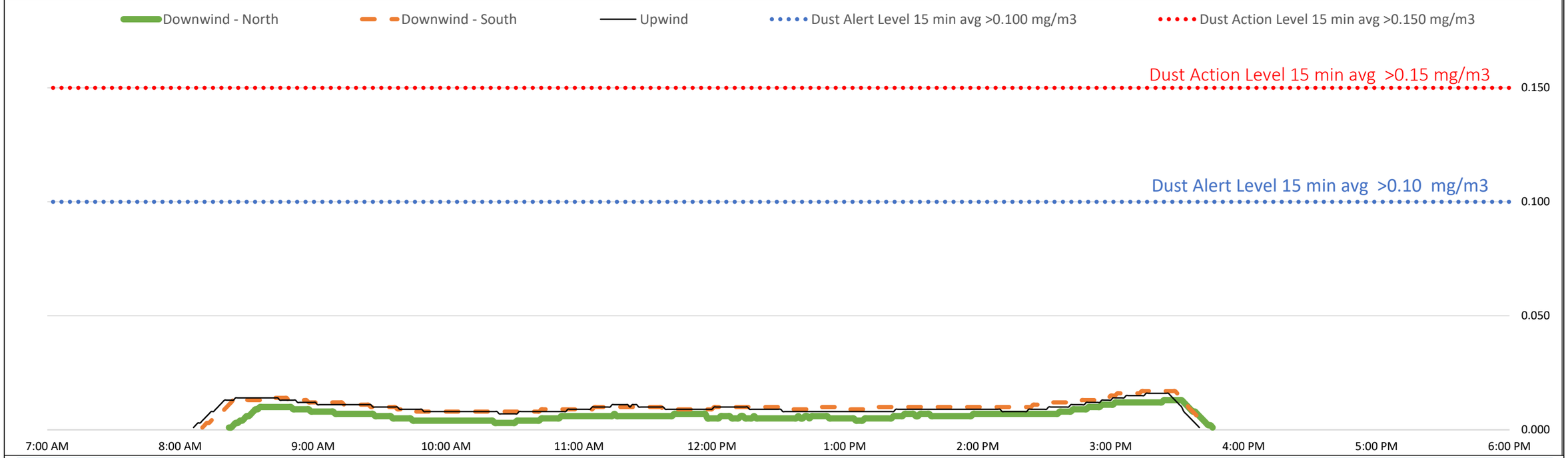


VOC (ppm) 15 min avg

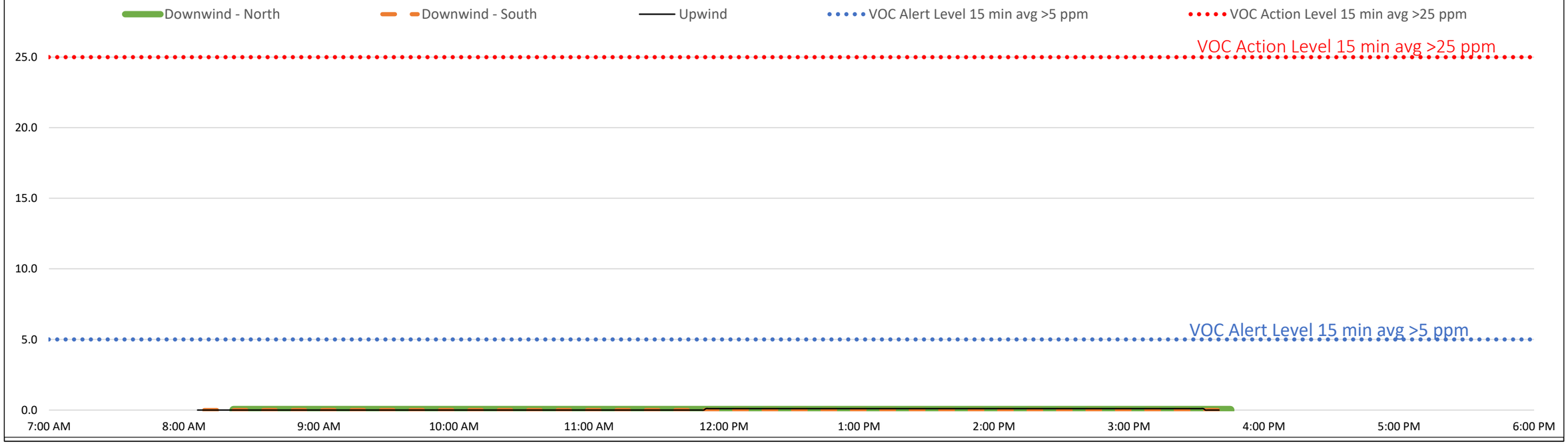


Fixed Station Daily Air Monitoring - March 2, 2022

Dust (mg/m3) 15 min avg

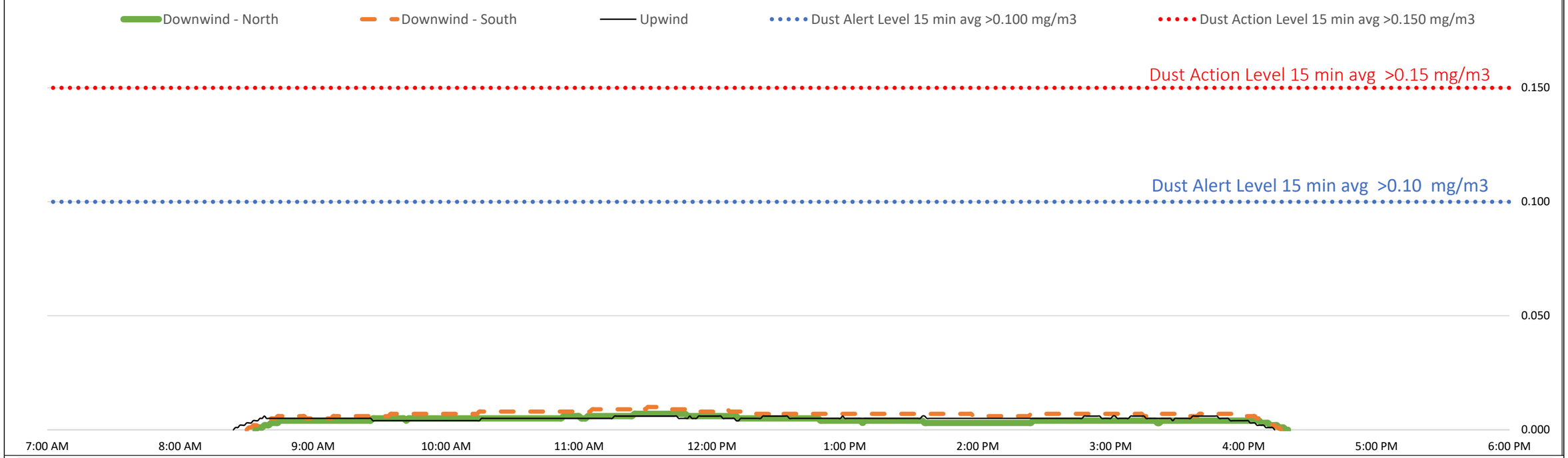


VOC (ppm) 15 min avg

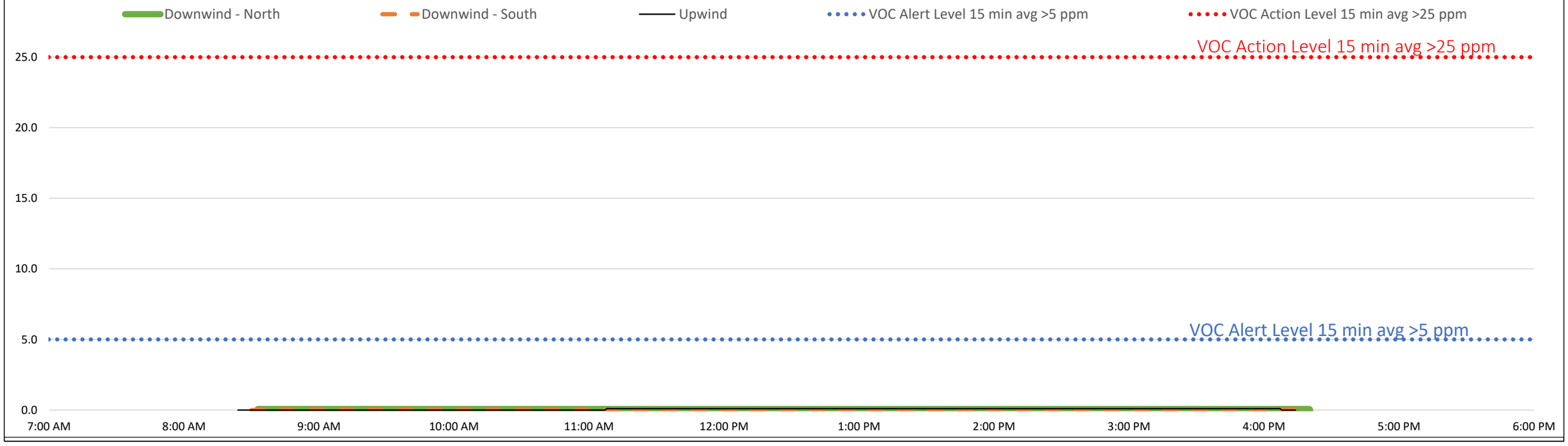


Fixed Station Daily Air Monitoring - March 3, 2022

Dust (mg/m3) 15 min avg

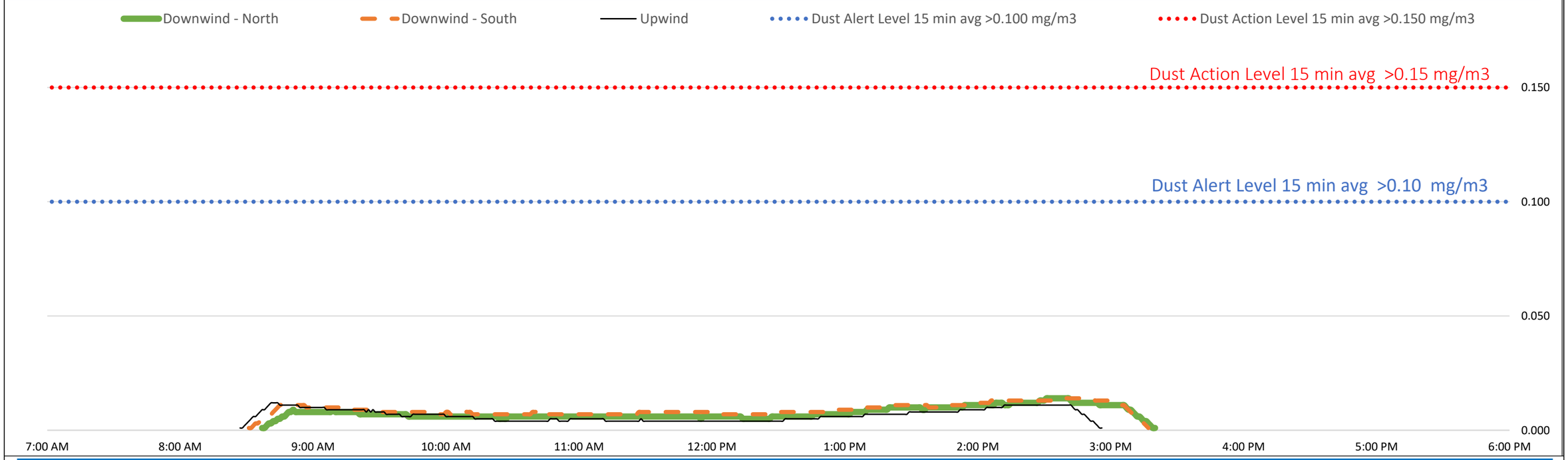


VOC (ppm) 15 min avg

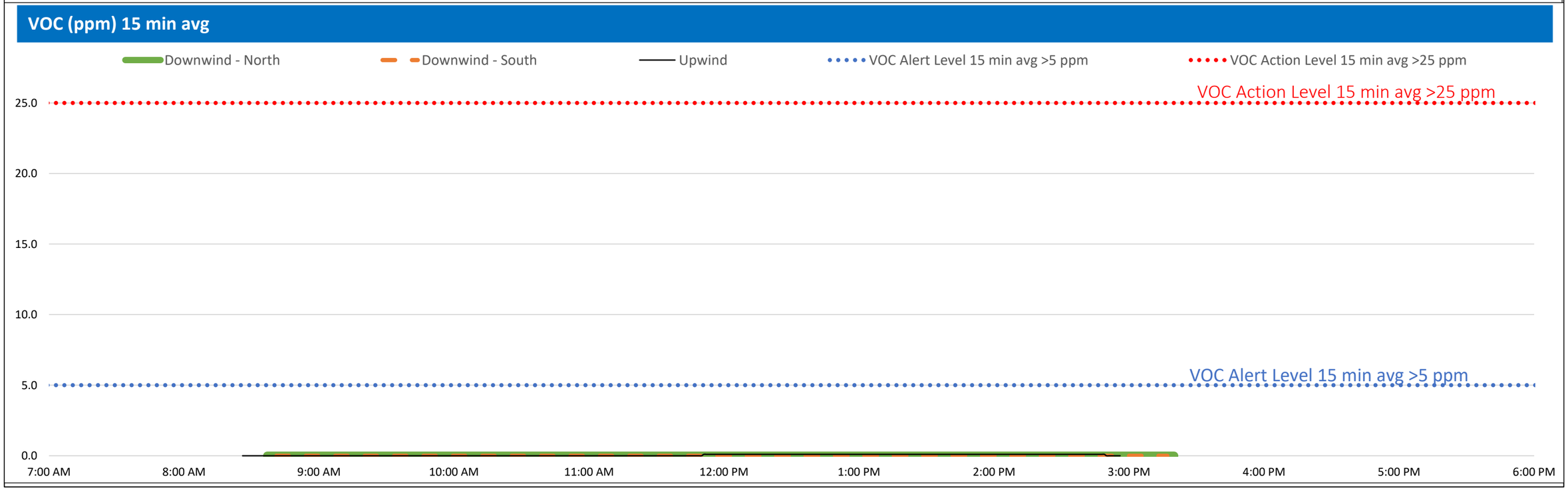


Fixed Station Daily Air Monitoring - March 4, 2022

Dust (mg/m3) 15 min avg

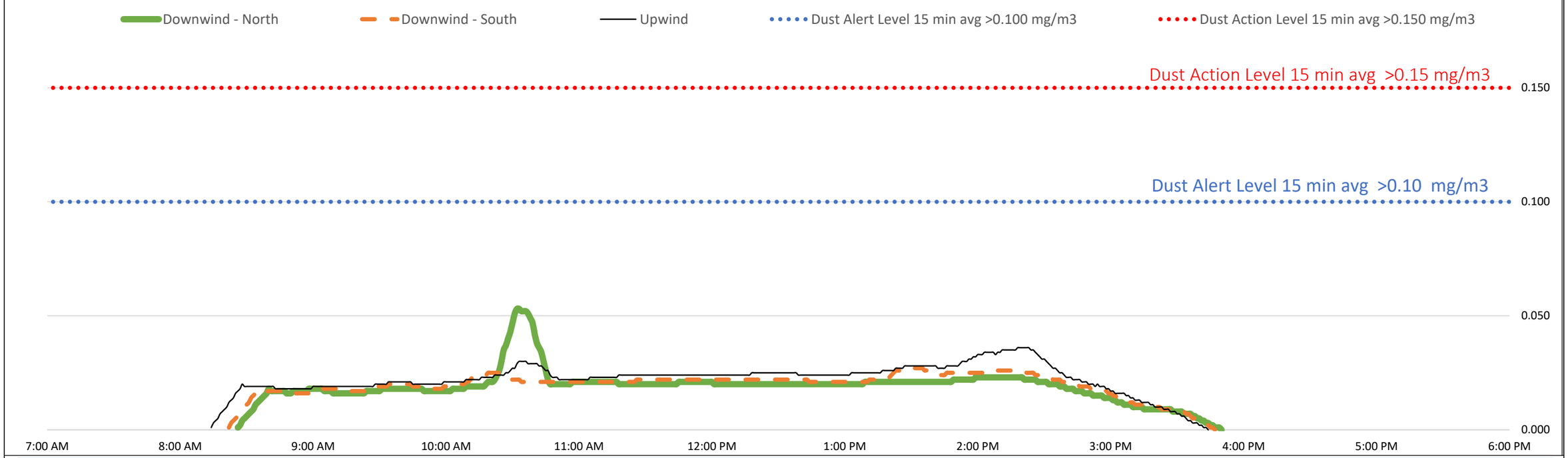


VOC (ppm) 15 min avg

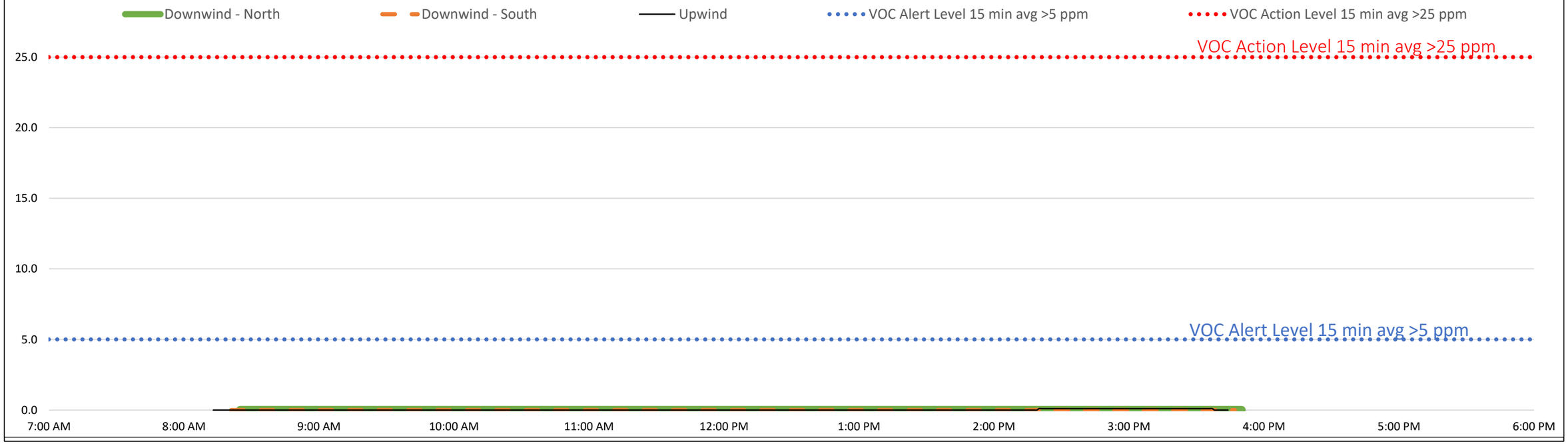


Fixed Station Daily Air Monitoring - March 7, 2022

Dust (mg/m3) 15 min avg

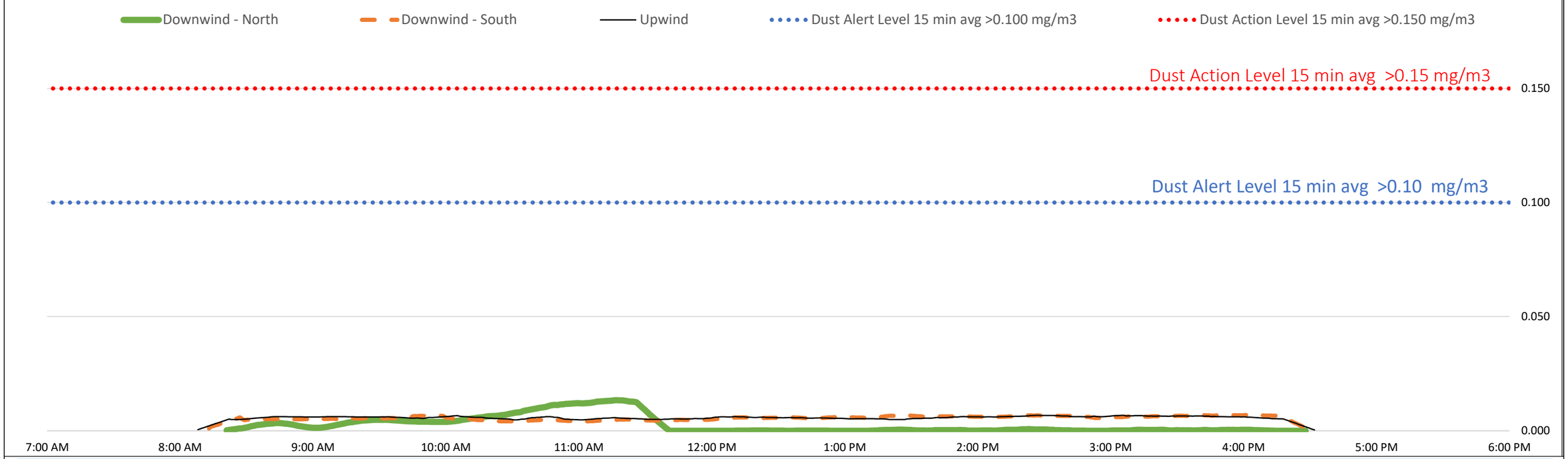


VOC (ppm) 15 min avg

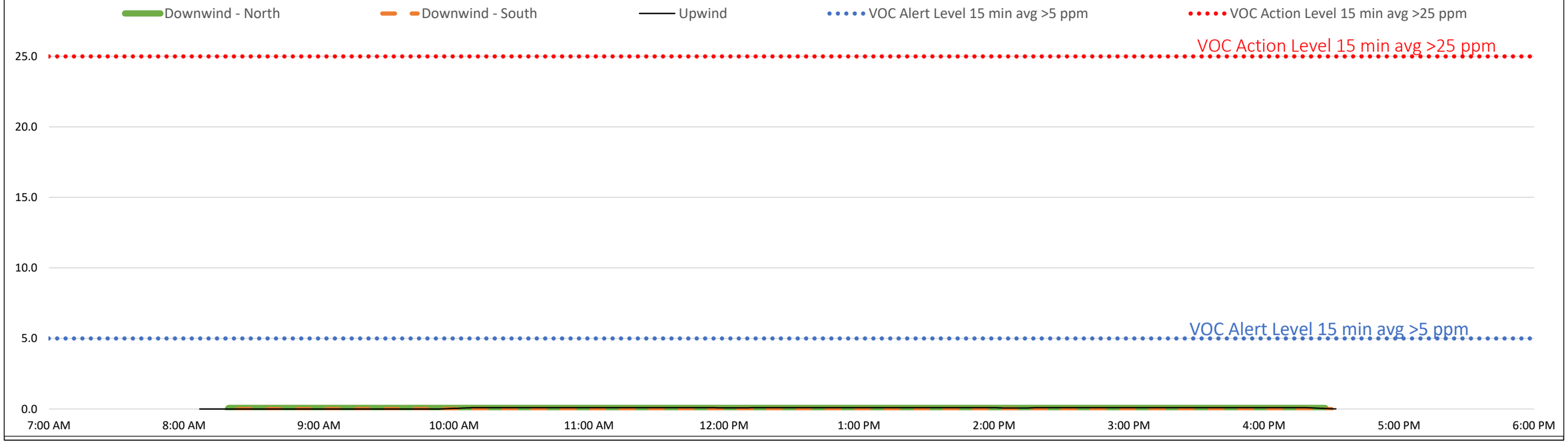


Fixed Station Daily Air Monitoring - March 8, 2022

Dust (mg/m3) 15 min avg

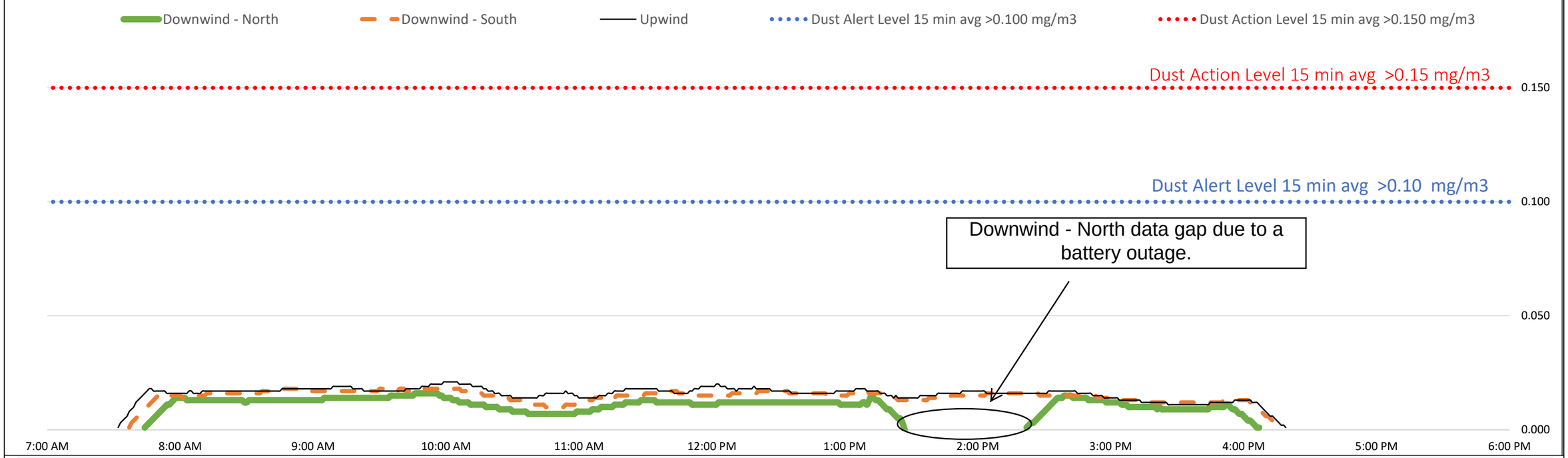


VOC (ppm) 15 min avg

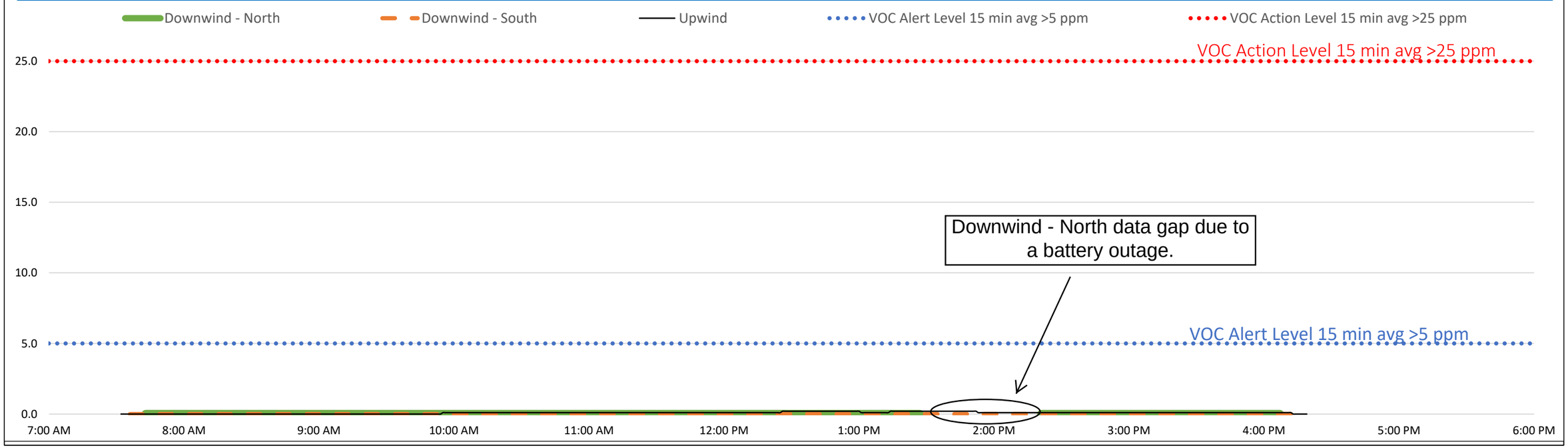


Fixed Station Daily Air Monitoring - March 9, 2022

Dust (mg/m3) 15 min avg

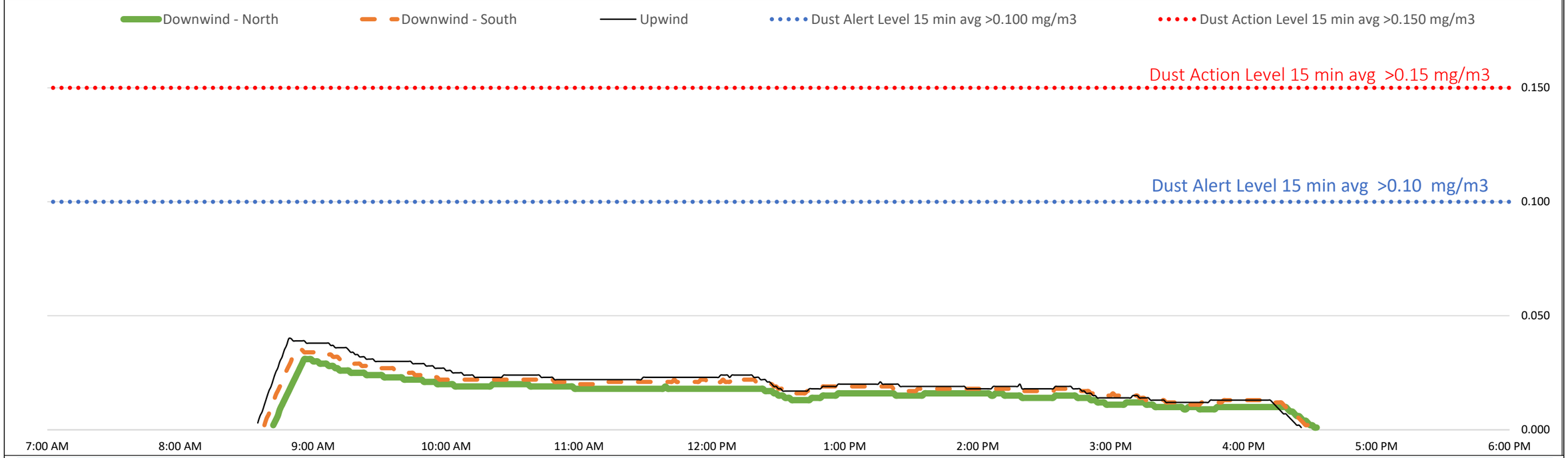


VOC (ppm) 15 min avg

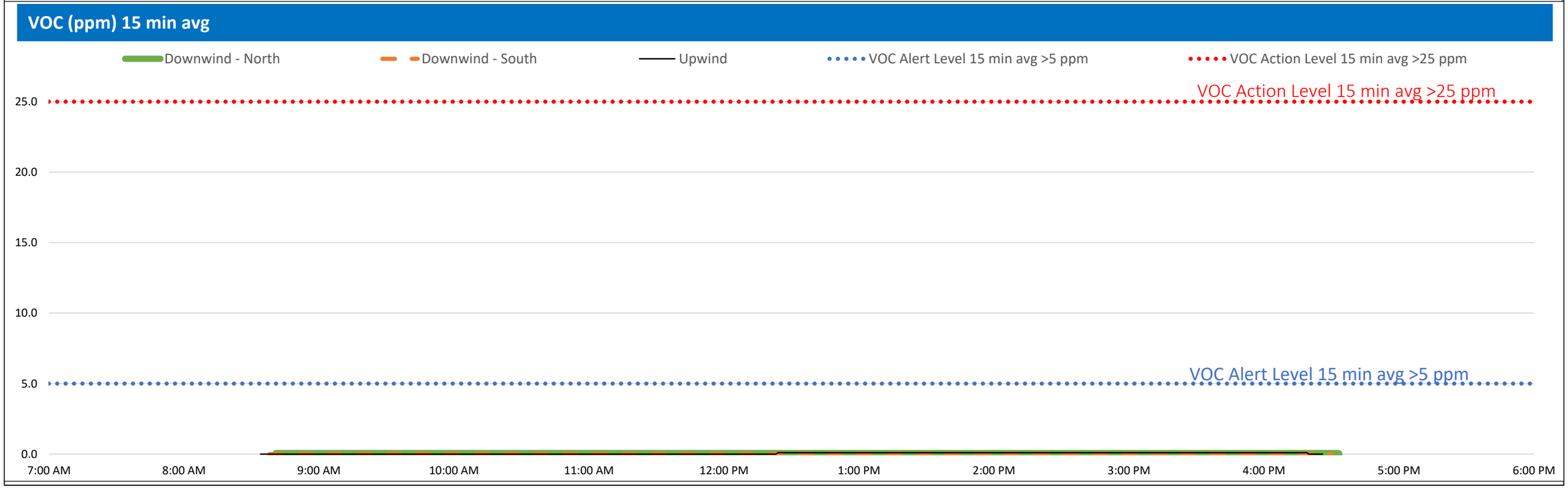


Fixed Station Daily Air Monitoring - March 10, 2022

Dust (mg/m3) 15 min avg

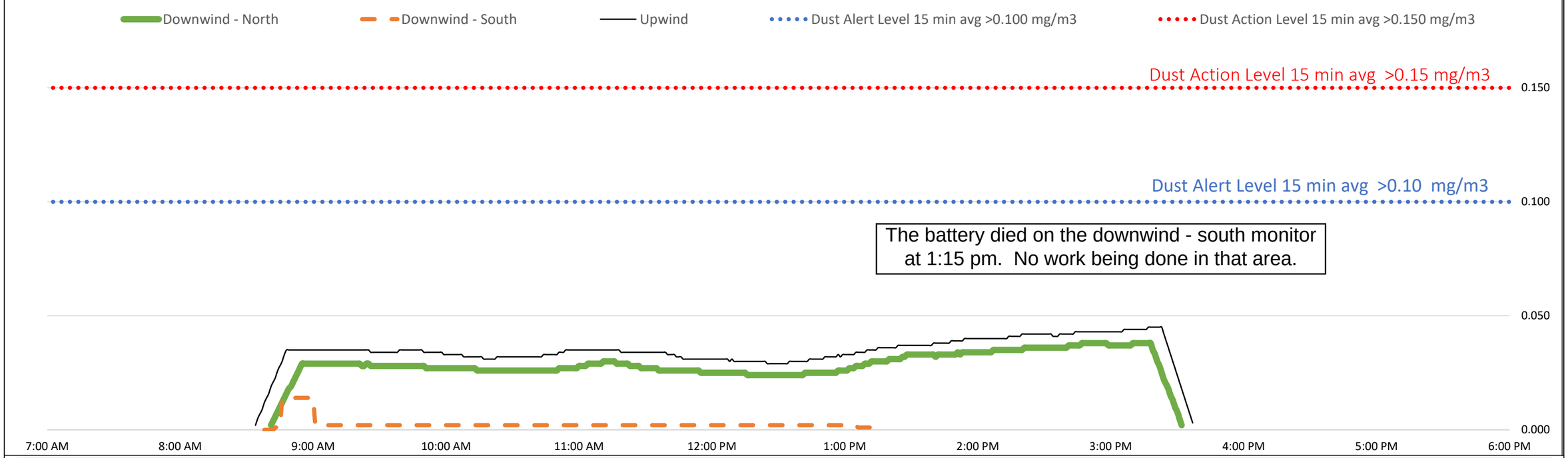


VOC (ppm) 15 min avg

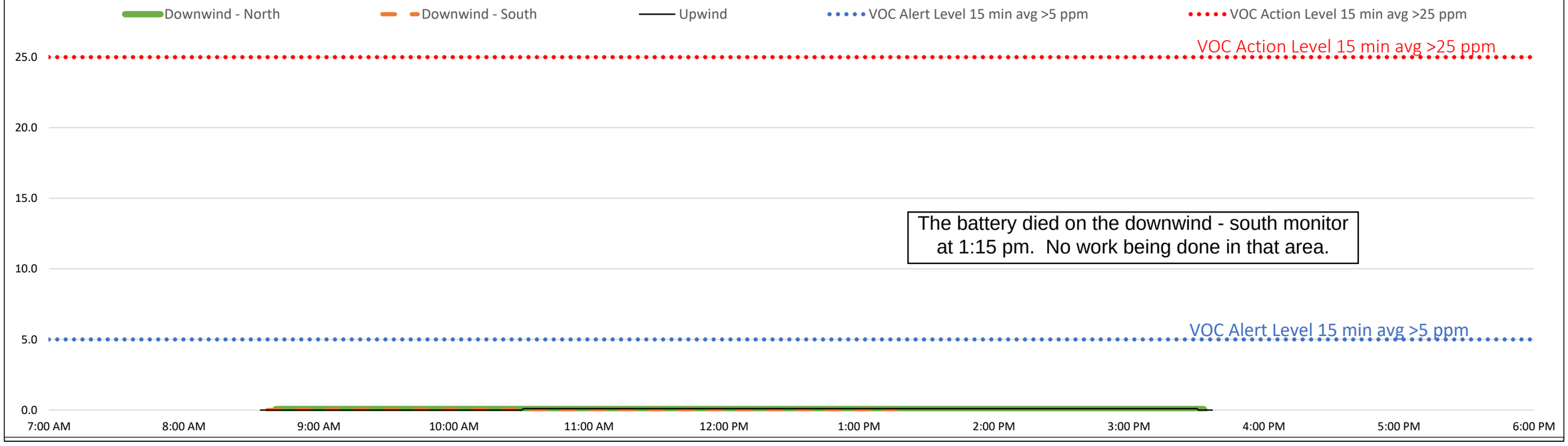


Fixed Station Daily Air Monitoring - March 11, 2022

Dust (mg/m3) 15 min avg

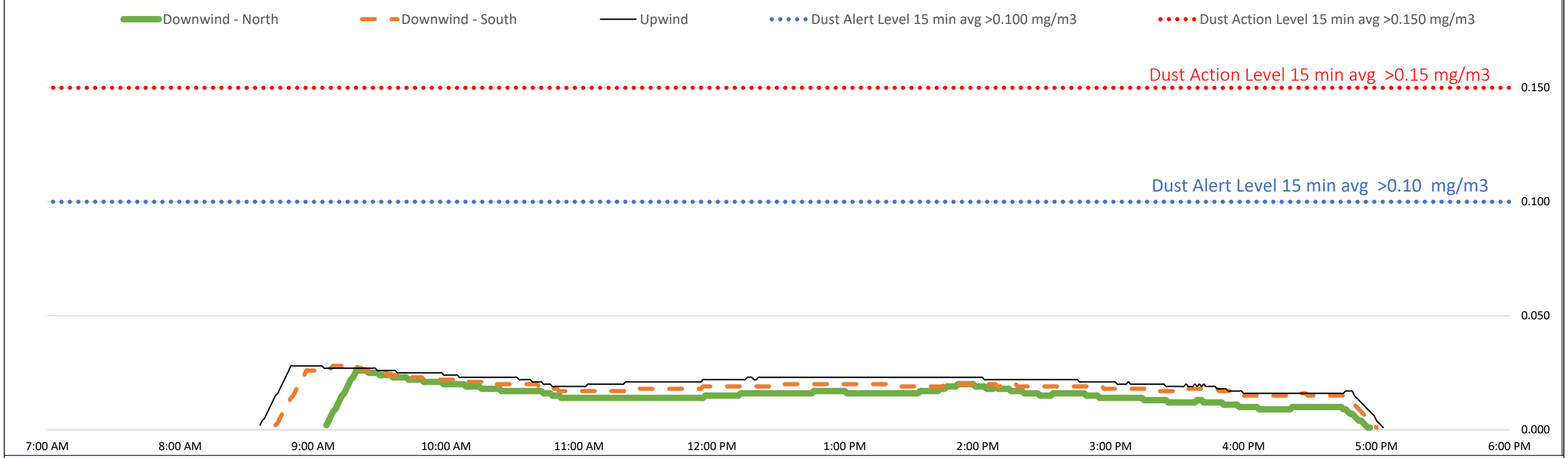


VOC (ppm) 15 min avg

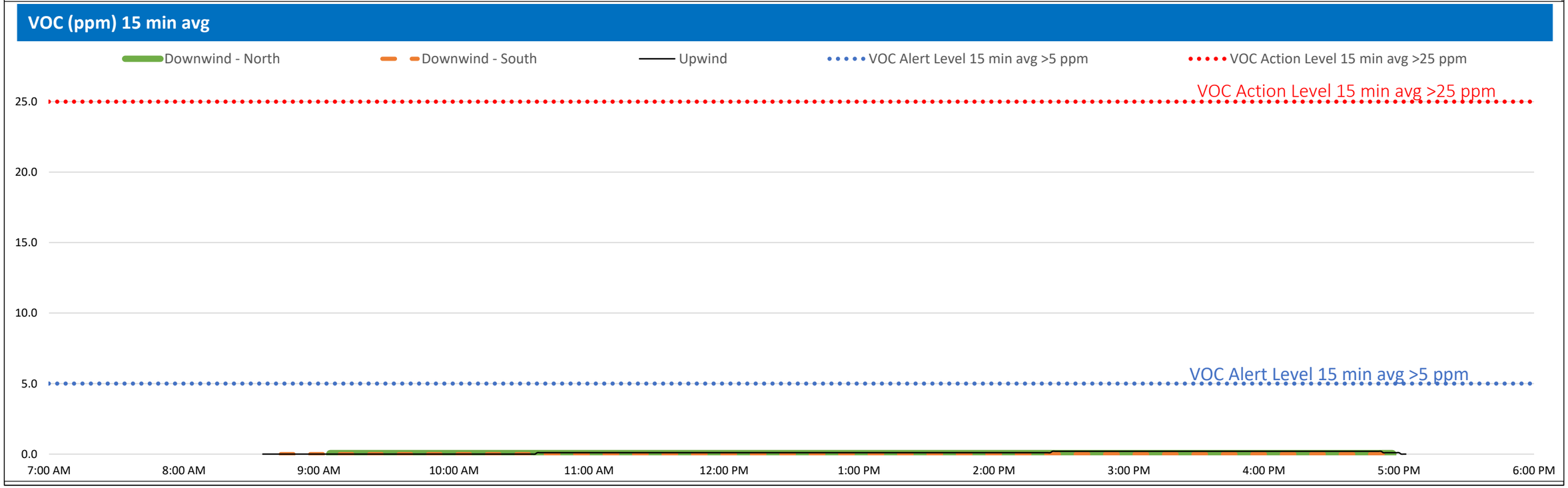


Fixed Station Daily Air Monitoring - March 14, 2022

Dust (mg/m3) 15 min avg

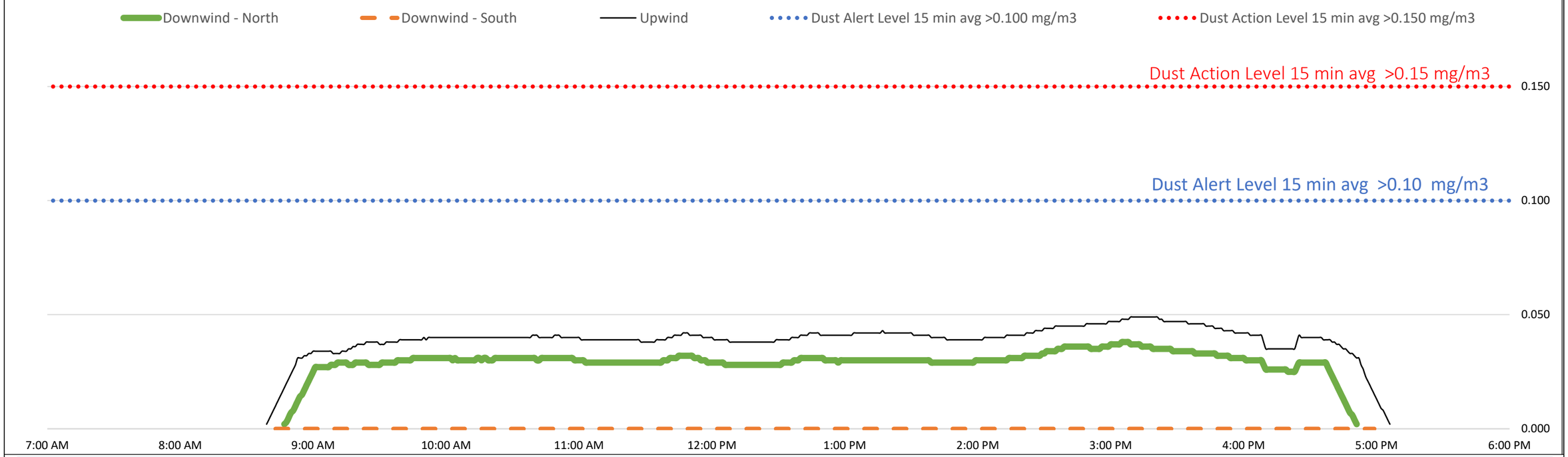


VOC (ppm) 15 min avg

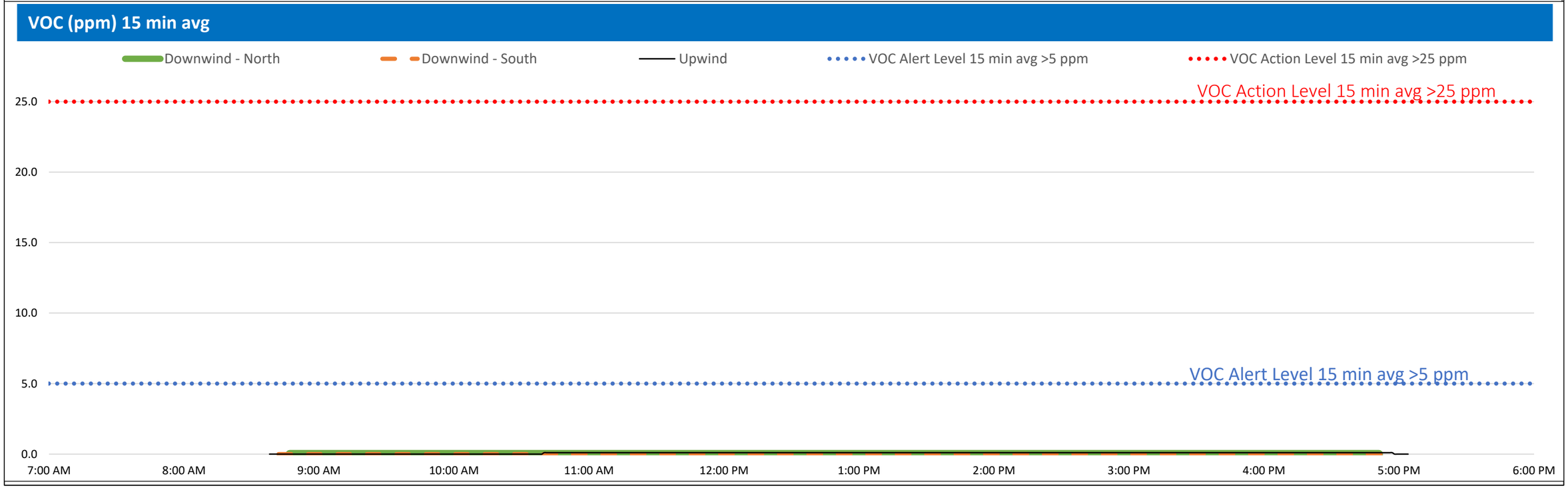


Fixed Station Daily Air Monitoring - March 15, 2022

Dust (mg/m3) 15 min avg

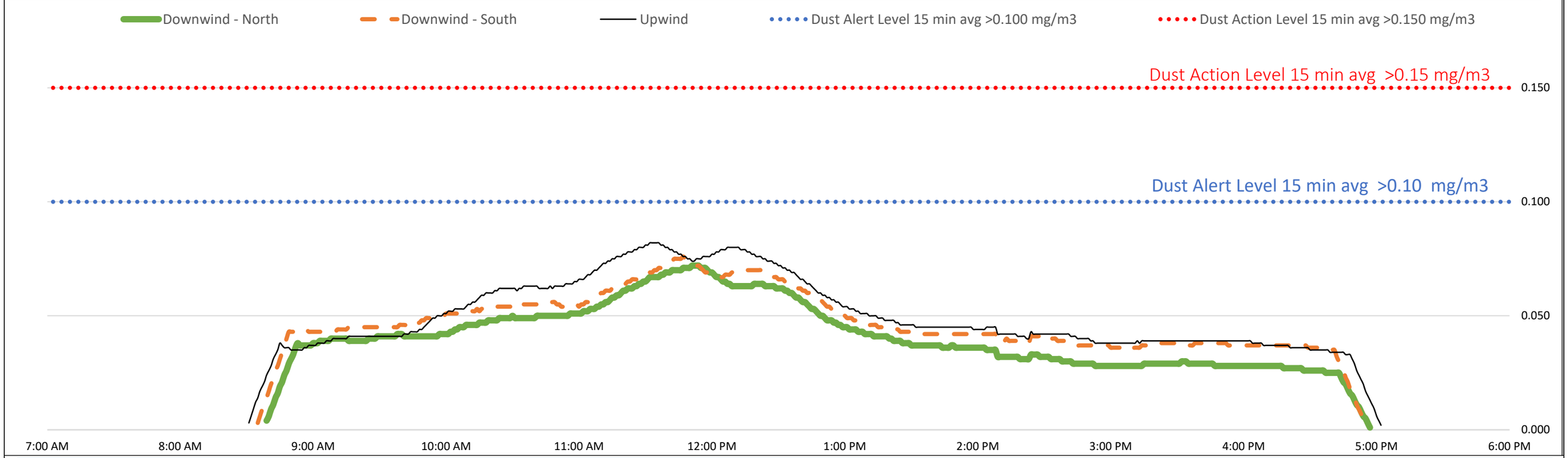


VOC (ppm) 15 min avg

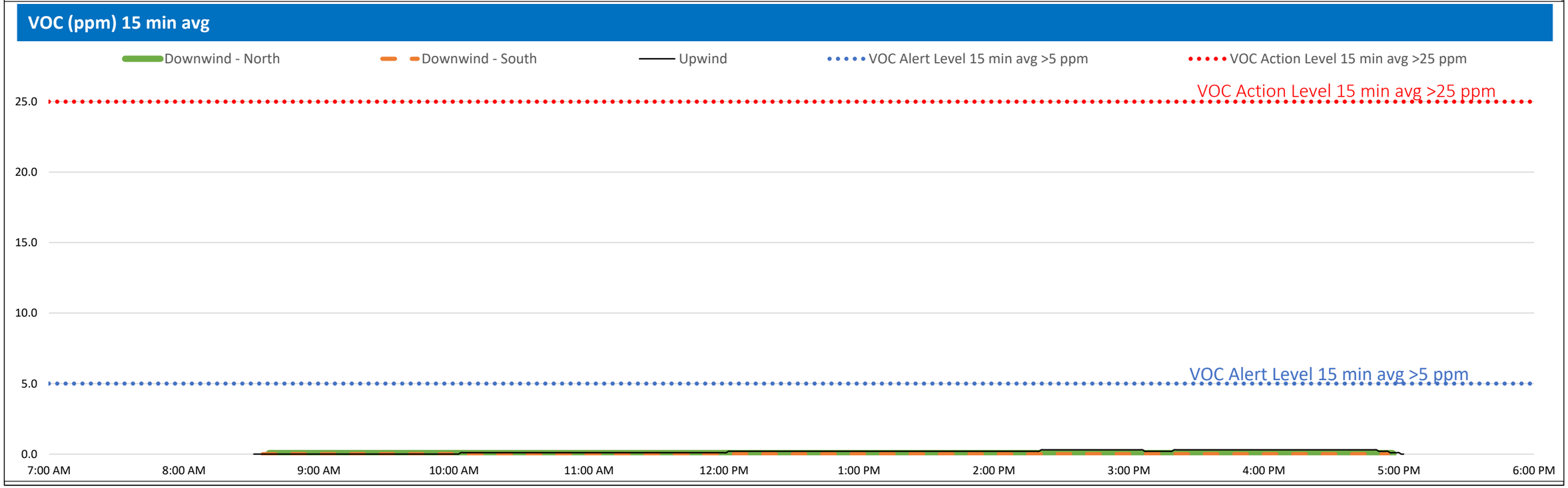


Fixed Station Daily Air Monitoring - March 16, 2022

Dust (mg/m3) 15 min avg

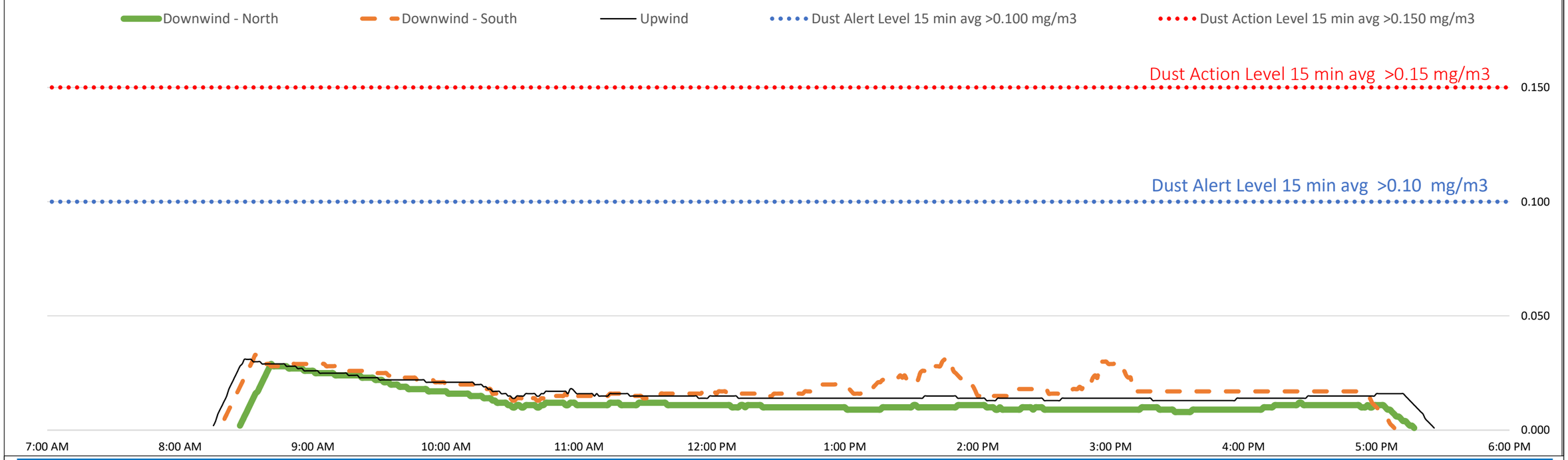


VOC (ppm) 15 min avg

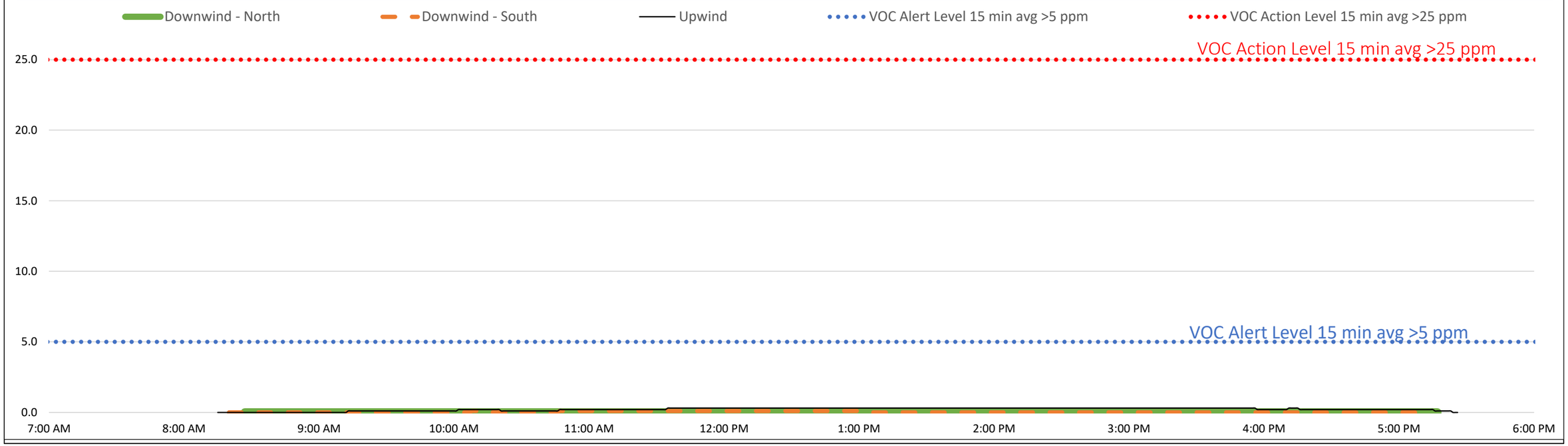


Fixed Station Daily Air Monitoring - March 17, 2022

Dust (mg/m3) 15 min avg

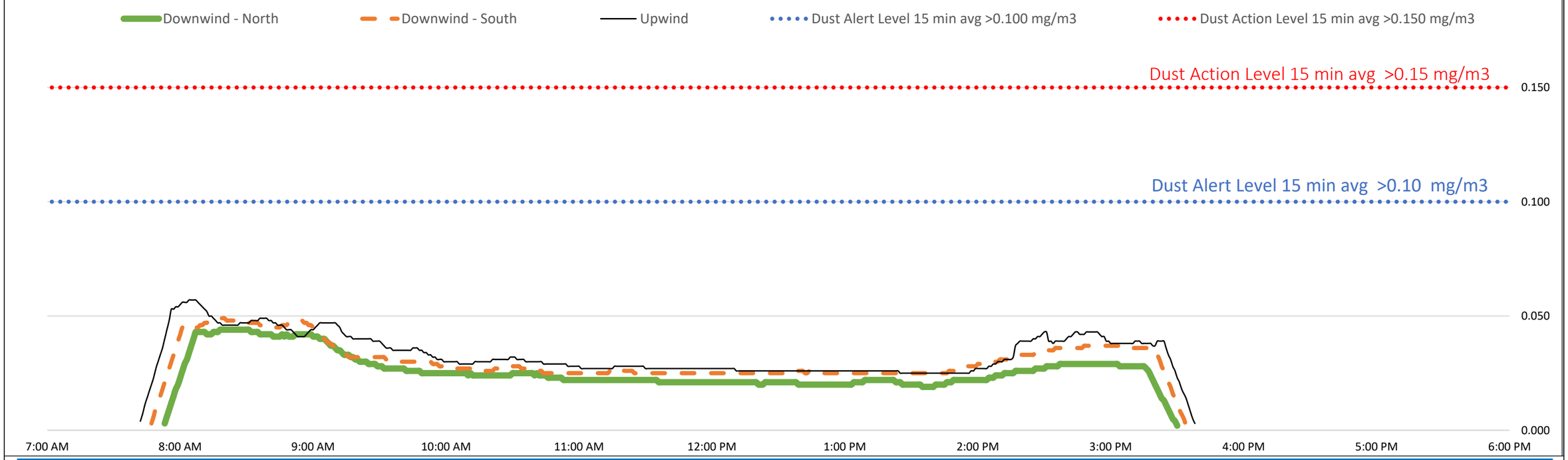


VOC (ppm) 15 min avg



Fixed Station Daily Air Monitoring - March 18, 2022

Dust (mg/m3) 15 min avg

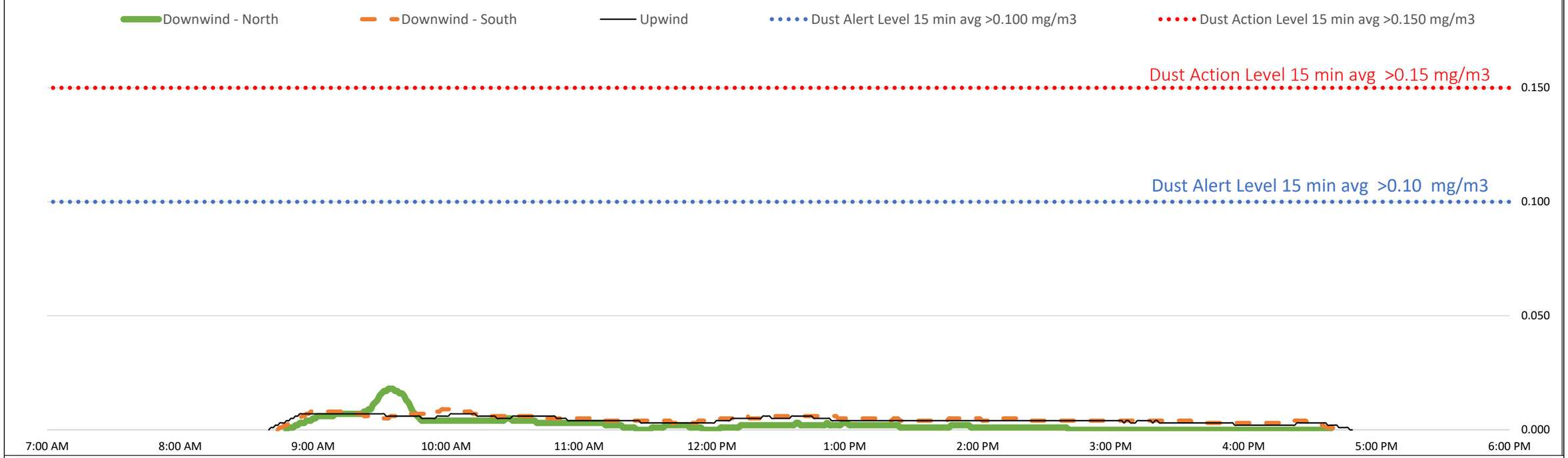


VOC (ppm) 15 min avg

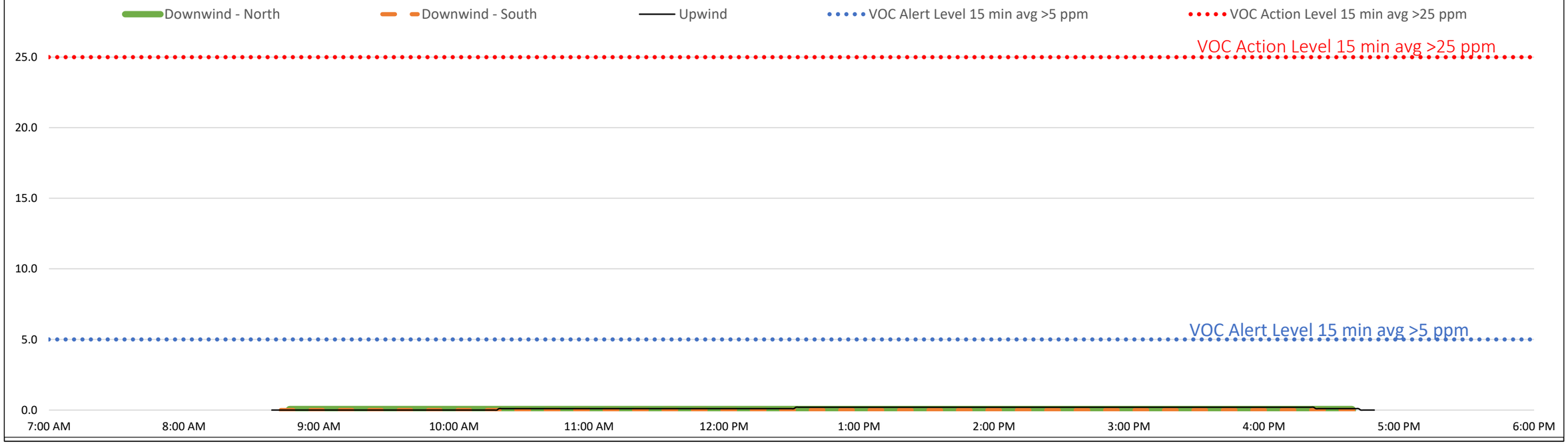


Fixed Station Daily Air Monitoring - March 21, 2022

Dust (mg/m3) 15 min avg

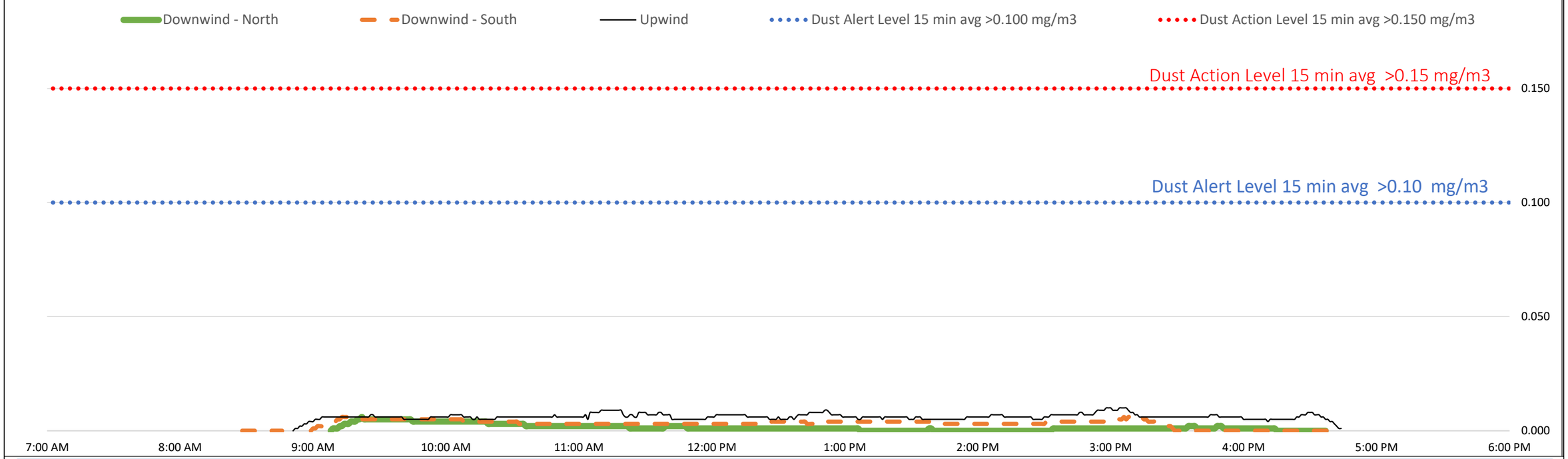


VOC (ppm) 15 min avg

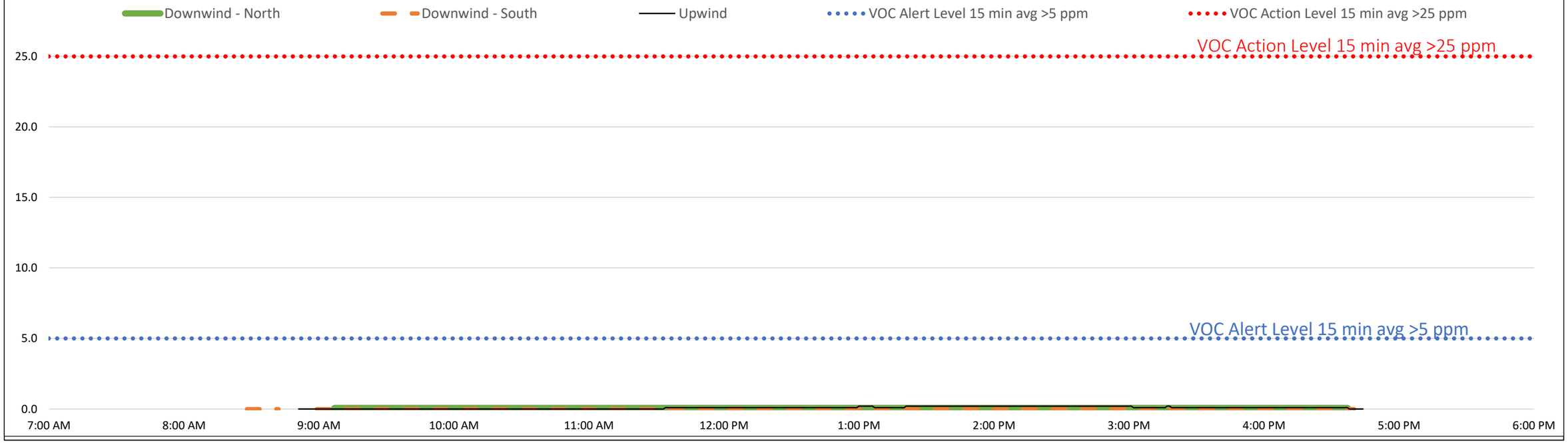


Fixed Station Daily Air Monitoring - March 22, 2022

Dust (mg/m3) 15 min avg

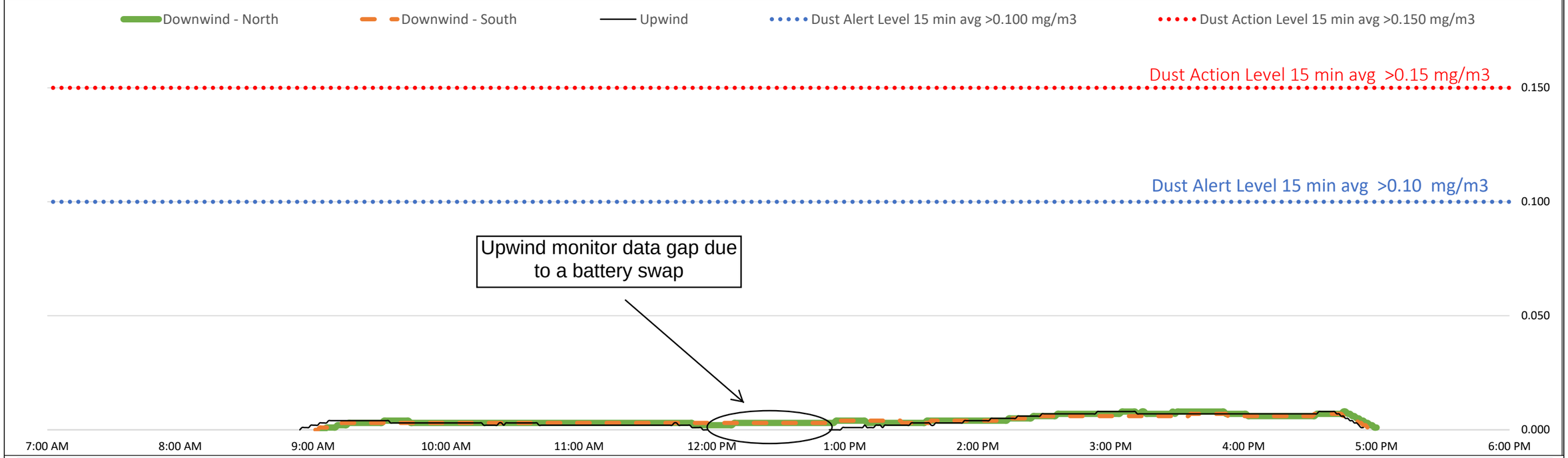


VOC (ppm) 15 min avg

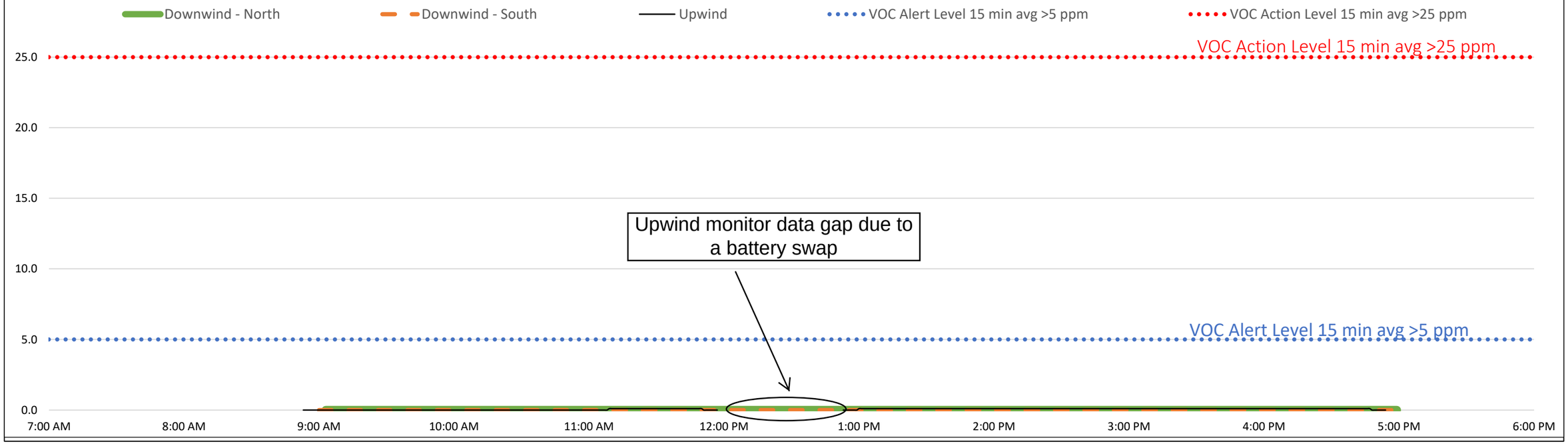


Fixed Station Daily Air Monitoring - March 23, 2022

Dust (mg/m3) 15 min avg

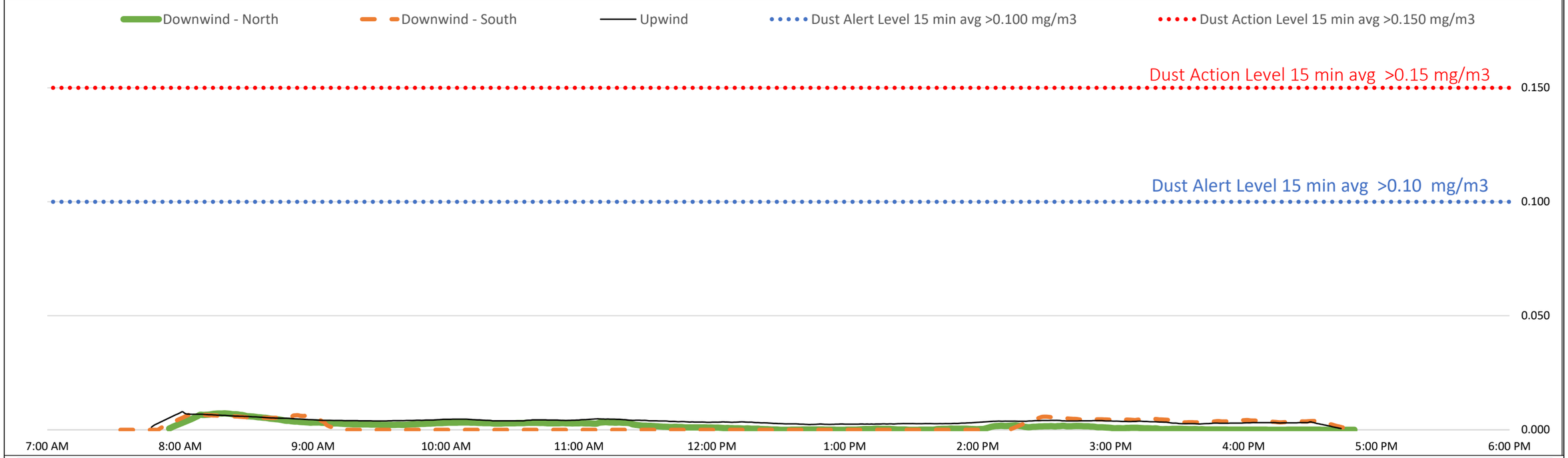


VOC (ppm) 15 min avg

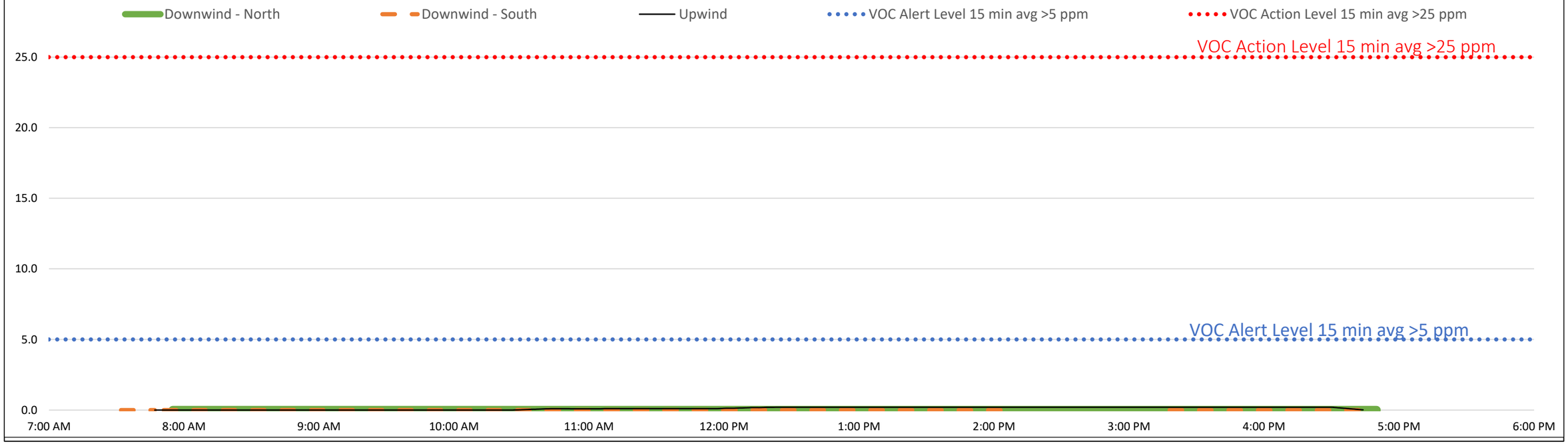


Fixed Station Daily Air Monitoring - March 24, 2022

Dust (mg/m3) 15 min avg

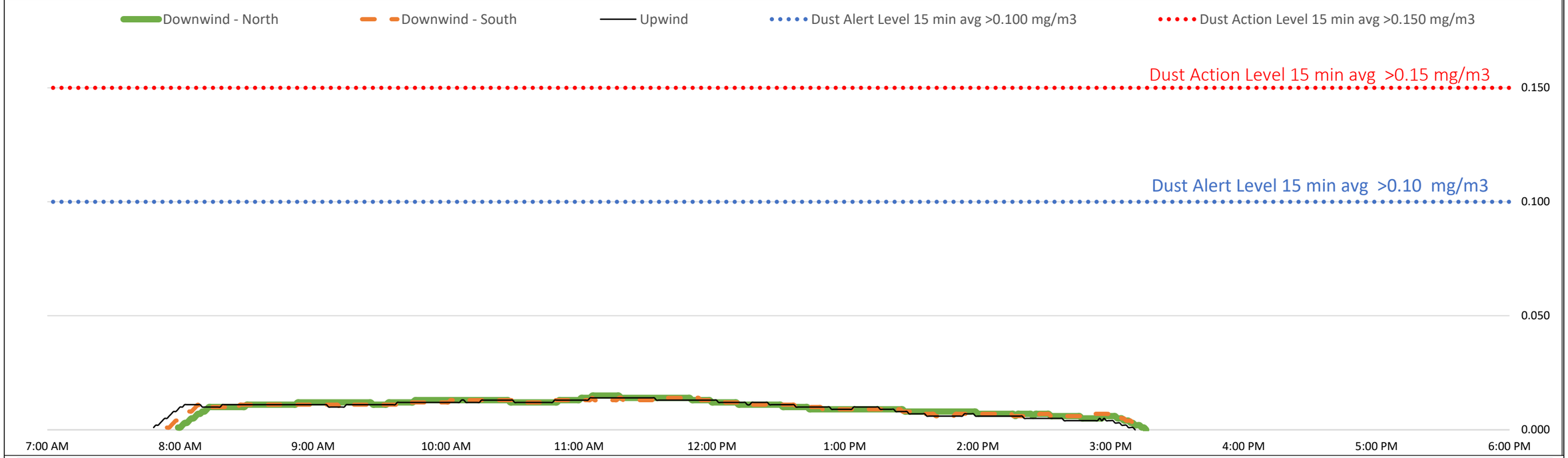


VOC (ppm) 15 min avg

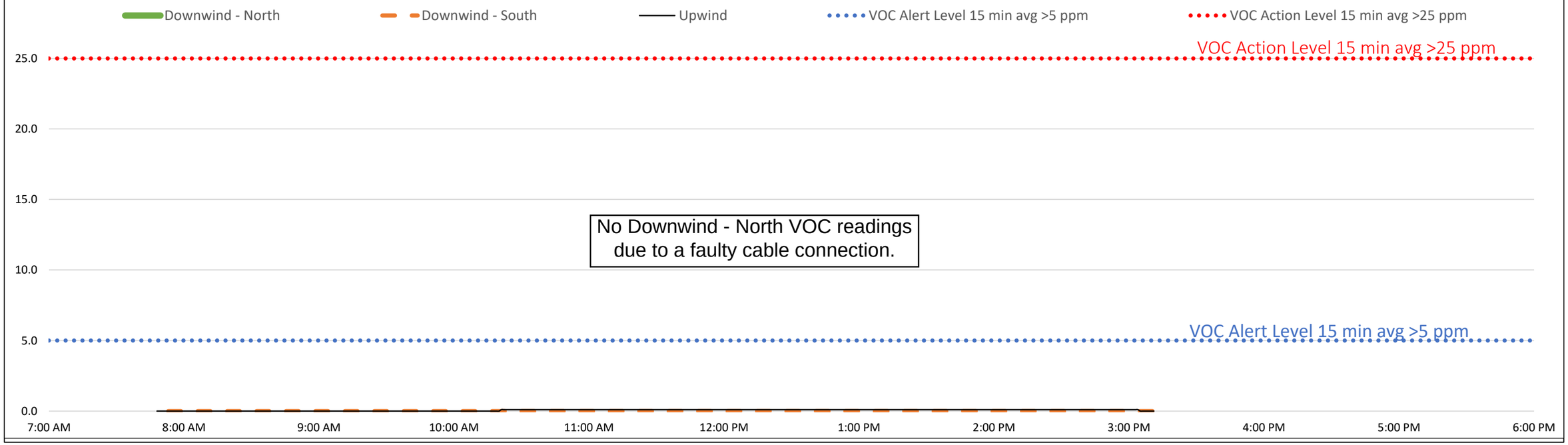


Fixed Station Daily Air Monitoring - March 25, 2022

Dust (mg/m3) 15 min avg

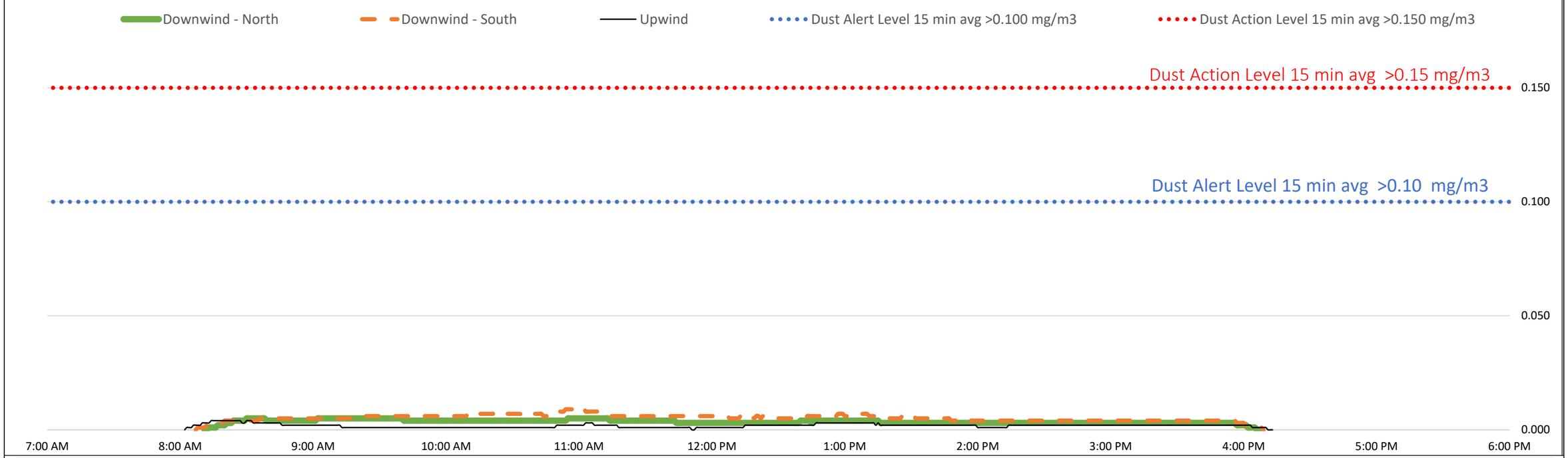


VOC (ppm) 15 min avg

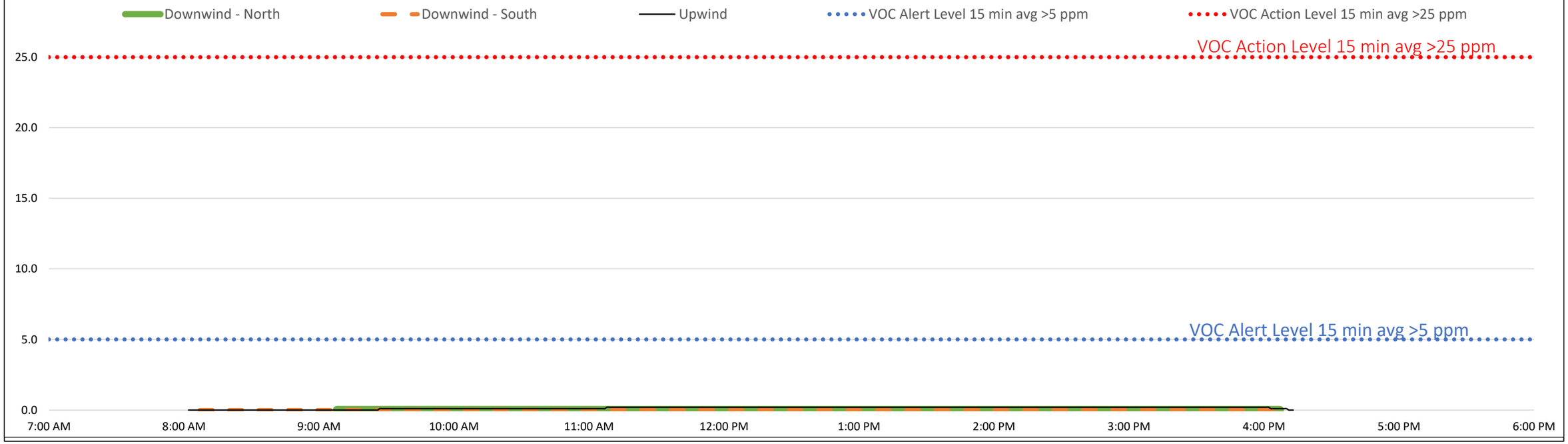


Fixed Station Daily Air Monitoring - March 28, 2022

Dust (mg/m3) 15 min avg

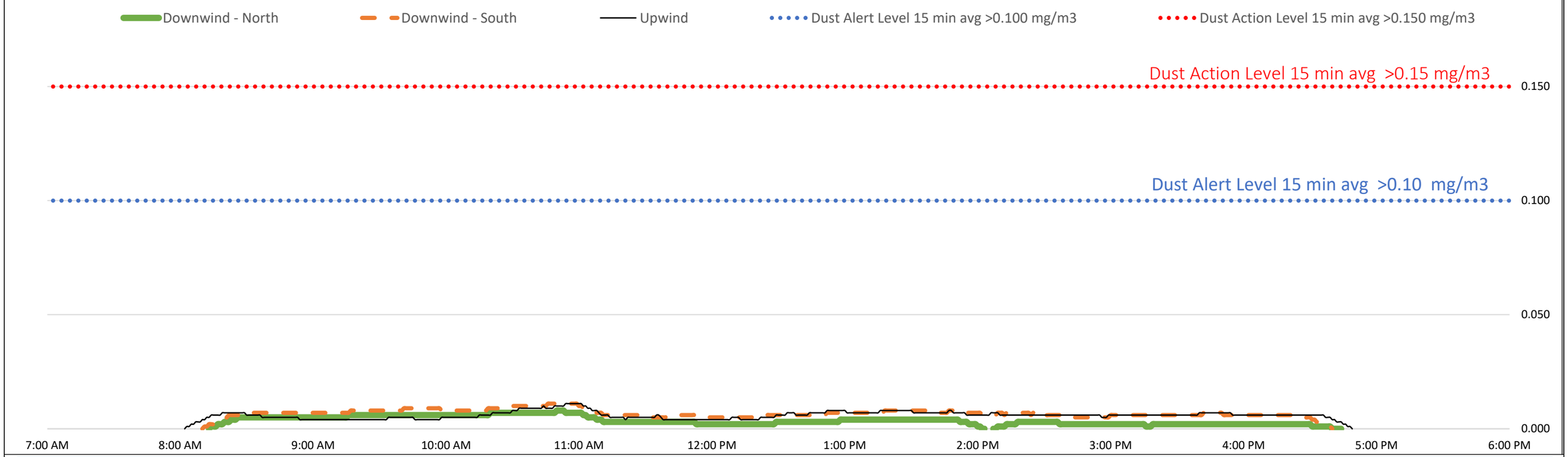


VOC (ppm) 15 min avg

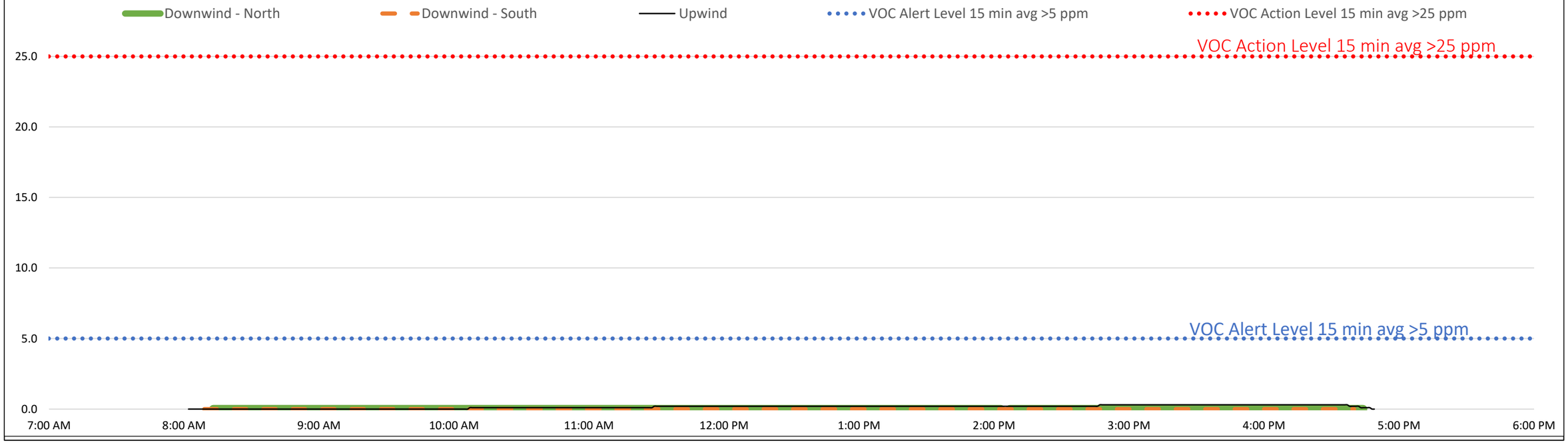


Fixed Station Daily Air Monitoring - March 29, 2022

Dust (mg/m3) 15 min avg

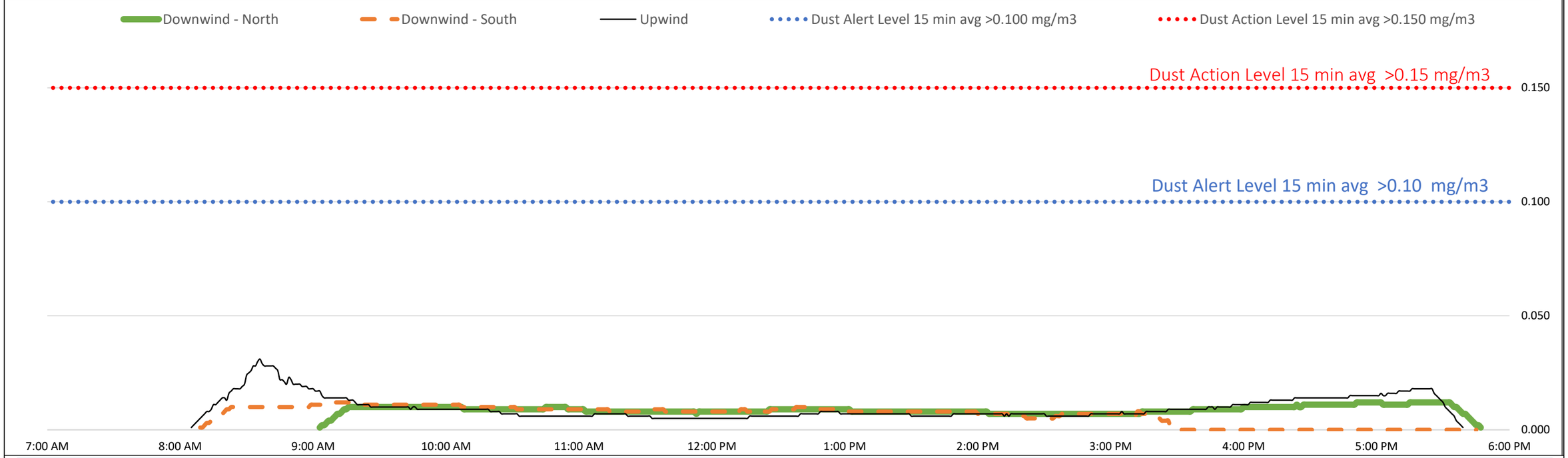


VOC (ppm) 15 min avg

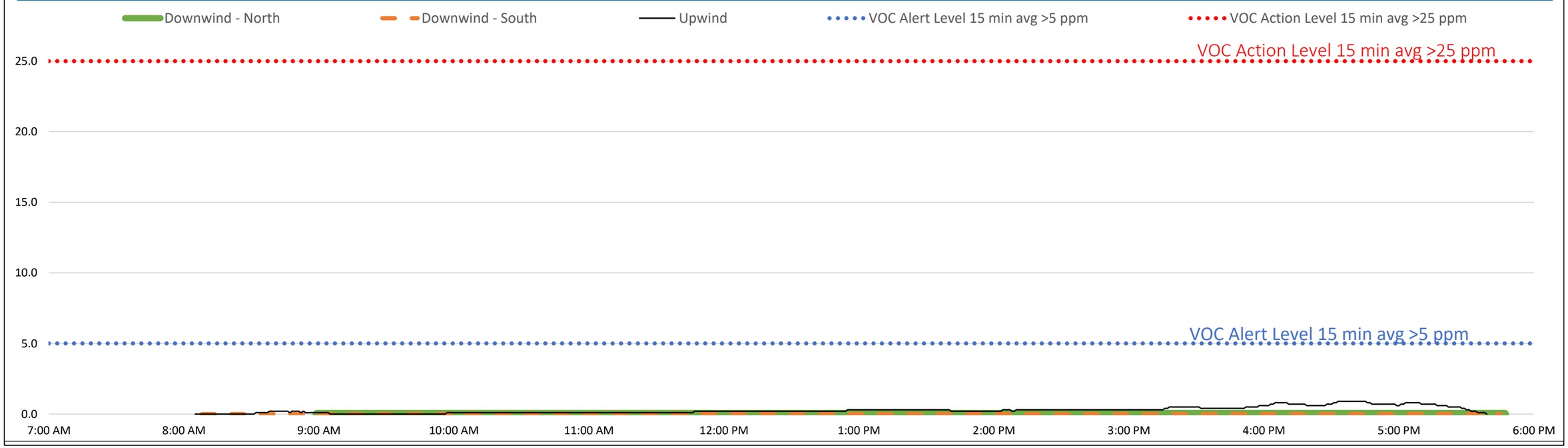


Fixed Station Daily Air Monitoring - March 30, 2022

Dust (mg/m3) 15 min avg

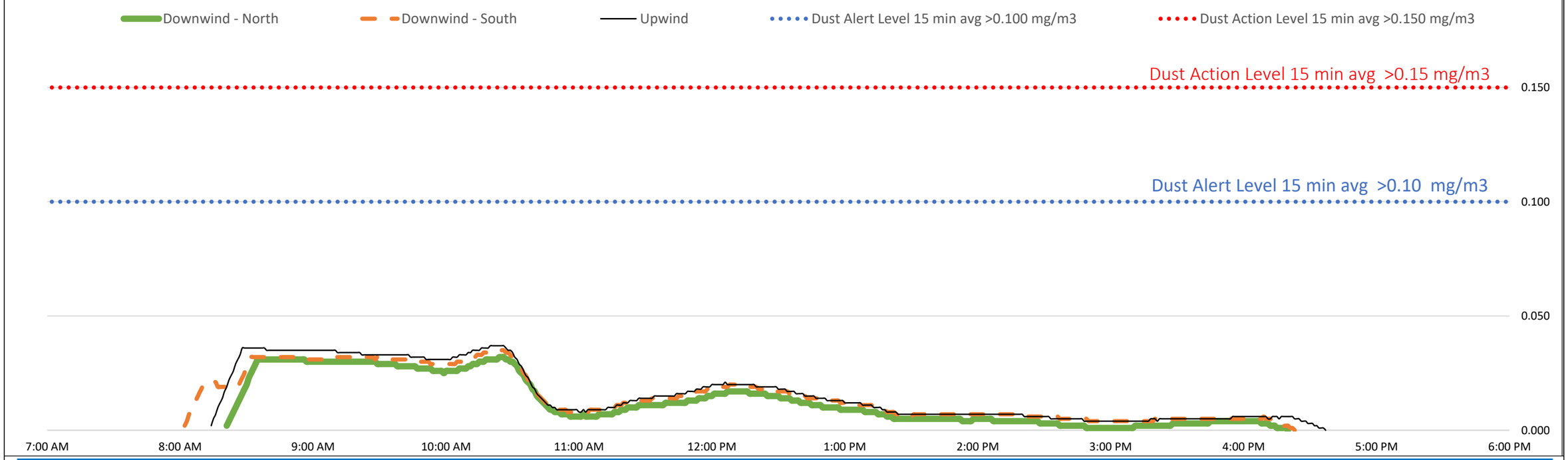


VOC (ppm) 15 min avg



Fixed Station Daily Air Monitoring - March 31, 2022

Dust (mg/m3) 15 min avg



VOC (ppm) 15 min avg

