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REMEDIAL SYSTEM OPTIMIZATION REPORT

Fort Edward Landfill

Site Number 558001

January 2018

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CONTENTS

TABLES

FIGURES

APPENDICES

EXECUTIVE SUMMARY

This Remedial System Optimization (RSO) report was prepared to provide a summary of the leachate collection system and treatment system upgrades performed at the Fort Edward Landfill located in Fort Edward, New York (hereinafter referred to as the "Site") (Figure 1). This report summarizes the construction activities associated with implementation of the RSO and includes "as-built" Record Drawings for the Treatment System. The Site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program (Site No. 558001) which is administered by the New York State Department of Environmental Conservation (NYSDEC).

General Electric, Inc. (GE) historically disposed of approximately 850 tons of polychlorinated biphenyl (PCB)-containing scrap capacitors at this landfill. This waste represents approximately 79 percent of the total hazardous waste identified at this site (HRP 2014). As a result of the 1980 "Seven Site Agreement" with the NYSDEC, GE produced a report in 1983 recommending encapsulation of the landfill within a slurry wall and cap. However, operation continued until 1991 and the proposed remedy was not initiated. Due to the extended operation of this landfill and the given problems associated with a similar encapsulation remedy taken at the adjacent Kingsbury Landfill (Site 5-58-008), the 1983 Remedial Design proposal was modified. The modified remedy included the construction of a low-permeability landfill cap and a leachate collection system, and the construction of a pre-treatment building with final treatment in three constructed wetland treatment cells (CWTS) and a polishing pond.

Based upon remedial and pre-design investigations (HRP 2015), it was concluded that landfill-derived contaminants, including PCBs, were migrating from the site through the pathways of groundwater and leachate seepage to surface water. PCBs have been noted in wells upgradient, downgradient, and in the footprint of the landfill historically and currently. It was concluded that soil and groundwater at Site had been impacted by volatile organic compounds (VOCs), PCBs, and metals (including, iron, magnesium, and manganese) from the Site's historical use as a landfill.

Based on the 2015 RSO Work Plan (HRP 2015), and in consultation with NYSDEC, a series of leachate collection and treatment system upgrades were implemented in October 2016 through April 2017. The RSO upgrades were fully operational in April 2017. However, based on system monitoring data, the existing remedial measures do not meet Site remedial action objectives (RAOs).

1 SITE OVERVIEW

The Site is a mixed-waste landfill located at 45 Leavy Hollow Lane in the Town of Fort Edward, New York (Figure 1). The Site is roughly 23 acres and is bounded by the Glens Falls Feeder Canal to the northeast; by a wooded area, private residences, and commercial businesses (Burgoyne Avenue) to the northwest; by Leavy Hollow Lane and private residences to the west and southwest; by farm fields to the south and east; and by a bike path to the east (Figure 2).

Topography in the immediate vicinity of the site is characterized by undulating hills, interspersed with slopes and small depressions. The eastern portion of the site is distinguished as a flat, low-lying area which contains several substantial wetlands. A gravel road provides access to the top of the landfill and the wetland expansion areas to the east. Nearby residences are located to the south and the west.

The landfill contains non-hazardous municipal waste and hazardous industrial waste, including PCB-containing electrical components and VOC-containing solvents. The landfill requires continuous site management including operation, maintenance, and monitoring (OM&M) of the leachate collection and treatment system, which has been in operation since late 1998.

1.1 Geology and Hydrogeology

The geology underlying the Site consists of variable thickness of glacially deposited soil underlain by black shale bedrock. The glacial soil consists of delta sands and interbedded sand-clay lenses. The deltaic sediments overlay lacustrine clay and glacial till (HRP, 2015). On site monitoring wells are screened in the shallow delta sands (MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8), the interbedded sand and clay (MW-2A and MW-6A), the deeper lacustrine clays (MW-1A and MW-6B), and shale (MW-1D). The extraction wells (EW-1, EW-2, and EW-3) are screened at the landfill waste/delta sand interface. Perforated piping along the perimeter of the south, and portions of the eastern landfill cell collects groundwater and leachate, which drains by gravity to leachate collection sump EW-4. (HRP 2014).

1.2 Site History

The Fort Edward Landfill was used for the disposal of approximately 70 percent municipal waste and approximately 30 percent PCB-containing scrap capacitor waste from GE, as well as solvents, from 1969 to 1982 (HRP, 2015). Following a rise in public concern regarding the use of PCBs in the late 1970s, investigation began on the Fort Edward Landfill Site among others, and the Site was placed on the New York State Registry of Inactive Hazardous Waste Sites (Site No. 558001).

In 1984, the NYSDEC approved plans and specifications for containment of the landfill waste, while allowing the Town of Fort Edward to receive non-hazardous municipal waste until a waste management system was implemented. The landfill was closed in 1991, and a temporary soil cap was installed over the waste materials between 1990 and 1993 (HRP, 2014).

1.3 Landfill Closure and Remedial Activities

The landfill was covered with a multi-layer cap in 1997 and 1998. Prior to installation of the final cover system, the entire landfill was rough graded. Over 110,000 cubic yards of stripped soils and excavated materials were relocated and compacted along with 46,000 cubic yards of imported structural fill. The landfill consisted of the following major components (HRP, 2014):

- Gas collection system consisting of a 760-feet subsurface cut-off trench, gas cutoff barrier, cap vents, header piping, 120 gas monitoring piezometers, and seven activated carbon vapor treatment vessels;
- Leachate collection system consisting of three extraction wells, stone-filled collection trenches, a 2,300-linear foot watertight polyvinylchloride (PVC) sheet-pile cutoff wall, over 1,000-feet of gravity drain pipe and force mains, and related connections to the leachate treatment system;
- Three 1.5-acre CWTS, configured to operate in parallel, where Phragmites Australis was used to perform phytoremediation of remaining leachate contaminants;
- Wetland disturbance from CWTS construction and landfill closure activities required the construction of an additional 2 acres of wetlands, in addition to the CWTS cells;
- Installation of the 29.75-acre landfill cover included a multi-layered cover system, drainage swales, culverts, channels, down-chutes, slope stabilization, aggregate roadways, gabion basket barriers, and stilling basins; and
- Final restoration work placed topsoil and seed over 32 acres and installed 6,000 feet of security fence.

The leachate collection and treatment system were designed by URS beginning in 1995, and construction began in July 1997, in parallel to the landfill cap construction. The original on-site leachate collection and treatment system, which discharges treated water to the Glens Falls Feeder Canal to the northeast of the Site, consisted of (HRP, 2014):

- Groundwater/leachate collection trench and three extraction wells for plume control;
- Air stripper for treatment of VOCs;
- Holding tank;
- Three CWTS consisting of phragmites and engineered soil;
- Polishing pond; and
- The implementation of site controls, including fencing and groundwater monitoring.

The remedial system began operating in September 1998. In October 1998, the air stripper was taken off-line since the VOCs were sufficiently being removed by the CWTS. The OM&M of the treatment system and groundwater monitoring responsibilities were assigned to AECOM in June 2007. OM&M responsibilities were taken over by Aztech Technologies, Inc. (Aztech) in May 2009. Monitoring and maintenance reporting responsibilities taken over by HRP in 2011, with Aztech still supporting on-site OM&M activities (HRP, 2014).

The leachate collection and treatment system were operational for several years until the system was unable to convey the leachate to the pre-treatment building. The following improvements were implemented between 2011 and 2015 (HRP 2015):

- A new 6-inch high density polyethylene (HDPE) force main was installed from the collection trench sump, EW-4, and the three extraction wells (EW-1 through EW-3) to the pre-treatment building to increase the conveyance capacity of the leachate collection system;
- Repair of the extraction wells and associated controls;
- Re-development of the extraction wells;
- Installation of a new telemetry control system;
- Installation of a new roadway to the polishing pond;
- A new 4-inch HDPE line was installed from the CWTS effluent collection sump (EW-5) to the inlet of the polishing pond;
- The outlet level control structure of the polishing pond was reconstructed to prevent short circuiting of the pond, which included the replacement of existing corrugated metal outlet structure with a polyethylene pipe;
- An approximately 21-foot by 41-foot, pre-engineered steel building addition was constructed to house the new process equipment; and
- An inclined plate clarifier, sludge thickening tank, and clarifier catch tank were placed within the new building addition.

In 2013, HRP completed a Soil Vapor Intrusion (SVI) Investigation to evaluate the potential for gaseous vadose zone contamination to migrate from the Fort Edward Landfill to nearby properties of the surrounding area, located along Leavy Hollow Lane. The SVI Investigation included pre-sampling surveys and analysis of soil vapor, indoor air, and outdoor ambient air samples (HRP, 2013). Analytical results indicate that no VOCs were detected above applicable NYSDOH criteria in the soil vapor, indoor air or outdoor ambient air analyzed.

In August 2015, HRP prepared a RSO Work Plan and Site Management Plan (SMP) which was submitted to NYSDEC. The RSO Work Plan provided recommendations and outlined tasks required to improve the existing leachate pre-treatment system and CWTS. The SMP provided the remedial action objectives (RAOs) for the site. The RAOs are discussed in Section 2.1.

2 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

2.1 Remedial Action Objectives

The RAOs for the Fort Edward Landfill are outlined in the August 2015 SMP. The RAOs are based on NYSDEC DER-10 requirements and include the following elements:

Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore the groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure, from contaminants volatilizing from soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Surface Water RAOs

RAOs for Public Health Protection

- Prevent ingestion of water impacted by contaminants.
- Prevent contact or inhalation of contaminants from impacted water bodies.
- Prevent surface water contamination which may result in fish advisories.

RAOs for Environmental Protection

- Restore surface water to ambient water quality criteria for the COCs.
- Prevent impacts to biota from ingestion/direct contact with surface water causing toxicity and impacts from bioaccumulation through the marine or aquatic food chain.

Sediment RAOs

RAOs for Public Health Protection

- Prevent direct contact with contaminated sediments.
- Prevent surface water contamination which may result in fish advisories.

RAOs for Environmental Protection

- Prevent releases of contaminant(s) from sediments that would result in surface water levels in excess of the ambient water quality criteria.
- Prevent impacts to biota from ingestion/direct contact with sediments causing toxicity or impacts from bioaccumulation through the marine or aquatic food chain.
- Restore sediments to pre-release/background conditions to the extent feasible.

Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

2.2 Institutional and Engineering Controls

An Institutional and Engineering Control (IC/EC) Plan is provided in the SMP. The IC/EC Plan provides procedures for implementation and management of the controls for site.

2.2.1 Institutional Controls

The following Institutional Controls have been implemented at the Site:

- The property may be used for commercial use, provided that the long-term Engineering Controls (ECs) and Institutional Controls (ICs) included in the SMP are employed.
- The SMP and all documents within the SMP must be adhered to.
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDEC and the Health Department to render it safe for use as drinking water or for commercial use, and the user must first notify and obtain written approval to do so from the NYSDEC.
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
- Data and information pertinent to Site management must be reported at the frequency and in a manner defined in the SMP.

- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.
- Operation, maintenance, monitoring, inspection and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP.
- Access to the Site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions and performance of the SMP requirements.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted as the property boundaries noted in the SMP and any potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the Site are prohibited.

2.2.2 Engineering Controls

Engineering Controls at the Site consist of:

- Fencing/access control;
- A landfill cover system; and
- Leachate and Groundwater Collection and Treatment System.

3 OPERATION AND MAINTENANCE PROGRAM

The following section summarizes the collection and treatment system O&M program during implementation of the RSO. The current O&M Plan was prepared by URS in February 2000, and is provided in the SMP.

Aztech performed the Site O&M, including maintenance of the leachate collection and treatment system from May 2009 through August 2016. The Site work transitioned from Aztech to Arcadis between August and September 2016. Arcadis continued with bi-weekly site/system inspections through December 2016. However, the system O&M activities and schedules were modified during the implementation of the RSO upgrades between December 2016 and April 2017. These modifications are summarized below.

The full-scale treatment system was brought online in April 2017 and has been in operation since that time. The treatment system operated continuously, with brief periods of shutdown due to scheduled O&M, and/or alarm conditions, and non-routine maintenance activities.

O&M site visits consisted of system inspection, recording of operating parameters, influent and effluent system sampling, and investigation/troubleshooting of any alarm conditions. System alarm verification was performed remotely via desktop software. The O&M data generated during each monthly visit are summarized in monthly progress reports. A summary of the O&M related tasks is provided below:

Weekly System O&M Inspections:

- Inspection of all vessels, tanks, pipes, and fittings for leaks;
- Checking air compressor oil level and pressure for proper process equipment operation;
- Inspection of pneumatic transfer pumps for proper operation and repair/cleaning, as needed;
- Monitor and record the system gauge readings to determine if the system is operating within the designed operational ranges;
- Maintain chemical metering pumps and change-out chemical drums, as needed;
- Make up 500-gallon batch of flocculant;
- Transfer sludge from inclined plate clarifier (IPC) to thickener tank; and
- Process sludge from thickener through filter press, and drum filter press cake material.

Monthly System O&M Inspections:

- Inspection and cleaning of IPC, as needed;
- Record total volume of leachate recovered and average recovery flow rates;
- Inspect extraction well (EW-1, EW-2, and EW-3) and collection sumps (EW-4 and EW-5) operation, and clean pumps, as needed;
- Collect system influent samples and submit for laboratory analysis of site-specific contaminants of concerns (COCs);

- Collect system mid-treatment samples (Clarifier Catch Tank, Cell 2 and Cell 3 Bypass) and submit for laboratory analysis of site-specific COCs; and
- Collect system effluent (Polishing Pond Effluent) and submit for laboratory analysis of site-specific COCs.

Site Maintenance:

- Mowing of the area around the treatment building and CWTS, and the trimming of phragmites to limit the growth of the plants to within CWTS cells.
- Removal of brush and woody vegetation from landfill swales.
- Mowing of the landfill annually by NYSDEC Operations.
- Inspection and repair of the landfill perimeter fencing and gates, as needed.

Additional O&M Activities:

The following additional O&M activities were also performed concurrently with the RSO activities.

- Based on recommendations in the RSO Work Plan (HRP 2015), the vapor phase carbon treatment vessels for the seven landfill gas exhaust vents were taken offline September 2016. The carbon was sampled and profiled, and transported offsite in drums by Veolia on October 6, 2016. The waste was processed and disposed of at Veolia's incineration facility located in Sauget, Illinois. The landfill vents were reconfigured to allow passive venting and to protect the venting system from the elements.
- A survey was completed in April 2017 to provide revised location and elevation data for monitoring locations and significant site features. This data was used to create a new site plan and as-built of the landfill and major site features (i.e., extraction wells, underground utilities, landfill vents, CWTS).

Wild parsnip control efforts on select areas of the landfill cap were initiated in April 2017. The control efforts included selective herbicide application and mowing of select cap areas throughout growing season.

4 REMEDIAL SYSTEM OPTIMIZATION SUMMARY

Upon the assignment of the project, Arcadis evaluated the RSO Work Plan developed by HRP and suggested several modifications to maximize the treatment capabilities of the existing on-site equipment and facilities. These modifications were approved by the NYSDEC and subsequently implemented by Arcadis from October 2016 through April 2017. The following sections summarize the design/construction upgrades that were made to the leachate collection and treatment system as part of the implementation of the modified RSO Work Plan. Record drawings are provided in Appendix A and include the following drawings:

- C-01 – Site Plan I
- C-02 – Site Plan II
- M-01 – Equipment Layout
- M-02 – HVAC Layout and Details
- I-01 – P&ID Legend
- I-02 – Process Flow Diagram
- I-03 – Piping and Instrumentation Diagram (P&ID)
- E-01 – Electrical Legend and Load Calculations
- E-02 – Electrical Single Line Diagram

4.1 Constructed Wetland Treatment System (CWTS) Upgrades

The following modifications were made to the constructed wetland treatment cells.

- Two-inch diameter HDPE force main piping was installed from the new treatment building addition and connected to the existing CWTS force mains. The existing CWTS force mains at the original treatment building were abandoned in place, and all associated floor penetrations were sealed with hydraulic cement.
- Two-inch diameter HDPE cleanouts were installed in each of the CWTS force mains to allow for camera inspection/jetting and cleaning of the CWTS cell infiltration pipe galleries.
- A new six-inch diameter HDPE gravity bypass pipe was installed between CWTS Cells 2 and 3 to allow the cells to operate in series. Operating CWTS Cells 2 and 3 in series allows more residence time of leachate within the treatment cells to reduce concentrations of COCs before discharging to the Polishing Pond and Glens Falls Feeder Canal.
- The level control piping for the CWTS Cells 1, 2 and 3 effluent chambers were modified to provide easier and safer access for sampling. Modifications included moving the discharge location to beneath the access hatch so that confined space entry is not required for level adjustments or during sampling.

- A 2-inch diameter HDPE CWTS bypass line and control valves were installed between the treatment building and Cell 2. This allows the flexibility to by-pass the CWTS and discharge pre-treated leachate directly to collection sump EW-5.
- A new 4-inch diameter HDPE cleanout was installed in the EW-5 force main, adjacent to extraction sump EW-5, to allow additional access for inspection and cleaning.

4.2 Treatment System Upgrades

The following upgrades were made to the pre-treatment system and building. The building and equipment layout is provided on Record Drawings M-01 and M-02 in Appendix A

Building Upgrades

- The floor sump (Sump #2) in the new treatment building addition was repaired and sealed due to gap between cast-in-place concrete base and sidewalls of the sump, which was allowing process water to drain into sub-grade material underneath the building slab.
- A new propane heating system and 500-gallon propane storage tank were installed to heat the treatment building. Three Reznor unit heaters were installed in the building each with adjustable thermostats.
- A gravel ramp for the treatment building overhead door was installed in preparation of equipment deliveries and drum loadouts.
- Geotextile and crushed stone was placed around the perimeter of the treatment building and access roads to fill low-lying areas prone to ponding and improve areas for vehicle access.

System Decommissioning

The following original treatment system components were decommissioned and dismantled:

- Four discharge transfer pumps.
- 500-gallon steel influent holding tank.
- All piping and valves associated with the equipment above were also decommissioned from the original treatment system.
- Wipe samples were collected from the dismantled system components. Sampling results indicated that the components did not contain VOCs or PCBs. The equipment was transported off-site in a 10-cubic yard roll-off container by Casella on February 22, 2017. The waste was disposed of at the Casella Landfill located in Clinton County, New York.

System Upgrades

The updated process flow, and process and instrumentation diagrams for the treatment system is provided on Record Drawings I-01, I-02, and I-03 in Appendix A.

- Process piping, and ancillary equipment were installed for the following new process equipment:
    - Inclined Plate Clarifier (IPC)

  - Lanco Model C1912
  - Maximum capacity of 200 gallons per minute (GPM)
  - Liquid storage volume of 2,940 gallons
- IPC Pneumatic Sludge Transfer Pump
  - Wilden Pump Model M4
  - Maximum pressure of 125 pounds per square inch gauge (PSIG)
  - Maximum flowrate of 73 GPM
- Sludge Thickener Tank
  - Terracon Model T-7
  - Liquid storage volume of 2,400 gallons
- Sludge Thickener Tank Pneumatic Sludge Transfer Pump
  - Wilden Pump Model M8
  - Maximum pressure of 125 PSIG
  - Maximum flowrate of 155 GPM
- Decant Tank
  - Saint-Gobain Model 11200-0055
  - Liquid storage volume of 55 gallons
- Decant Tank Submersible Centrifugal Pump
  - Goulds Model WE0538H; 1-Phase (P) 120 volts alternating current (VAC), 0.5 horsepower (HP)
  - Maximum flowrate of 22 GPM
  - Maximum total dynamic head (TDH) of 35 feet
- Clarifier Catch Tank
  - Terracon Model 71020-5
  - Liquid storage volume of 1,200 gallons
- Clarifier Catch Tank Discharge Pumps
  - Goulds Model 2BF21534; 3P, 208VAC 1.5 HP
  - Maximum flowrate of 84 GPM
  - Maximum TDH of 61 feet
- Building Sump Pumps

  - Liberty Pump Model LE41M; 1P, 120VAC, 0.4 HP
  - Maximum flowrate of 65 GPM
- Filter Press
  - Filtration Systems Division Model EPG630/32-20
  - Maximum pressure of 100 PSIG
  - Net filter volume of 6.1 cubic feet
  - 21 total chambers
- Air Compressor
  - Ingersoll Rand Model 2475; 1P, 208VAC, 7.5 HP
  - Tank capacity of 80 gallons
  - Maximum pressure of 175 pounds per square inch (PSI)
  - Maximum flowrate of 24 cubic feet per minute (CFM) @ 100 PISG

Electrical Upgrades

As part of the system upgrades, electrical modifications and updates were initiated in January 2017. The electrical single line diagram is provided on Record Drawing E-02 in Appendix A.

- Electrical power wiring/conduits and switches were installed from the existing main motor control cabinets (MCC) to the new process equipment (e.g., electric pump and mixer motors, and air compressor).
- Electrical control and instrumentation wiring/conduit were also installed from the main control panel (MCP) to the new process equipment (e.g., chemical feed pumps, pressure and level transmitters, and level switches).
- Programmable logic controller (PLC) programming for the existing updated treatment system components.

Iron Treatability Testing

The influent to the treatment system has an iron concentration that ranges from approximately 20 to 150 milligrams per liter (mg/L). To enhance the iron removal efficiency of the system a treatability study was conducted on November 14, 2016. The treatability study looked at enhancing the leachate treatment system through additional iron removal by precipitation, coagulation, and flocculation in conjunction with the existing IPC for clarification.

Four treatability tests were conducted for iron precipitation, which included addition of the following chemicals:

A. Caustic soda at a concentration of 100 parts per million (ppm) to raise the pH for oxidation of iron, coagulant at a concentration of 100 ppm, and flocculant at a concentration of 5 ppm.

B. Chlorine bleach at a concentration of 200 ppm to raise the pH for oxidation of iron, add coagulant at a concentration of 100 ppm, and add flocculant at a concentration of 5 ppm.

C. Hydrogen peroxide at a concentration of 200 ppm for oxidation of iron, coagulant at a concentration of 100 ppm, and flocculant at a concentration of 10 ppm.

D. Hydrogen peroxide and caustic soda at a concentration of 200 ppm for oxidation of iron, coagulant at a concentration of 100 ppm, and flocculant at a concentration of 10 ppm.

The treatability bulk sample had a base iron concentration of approximately 24 ppm. The bench scale treatability studies showed that iron levels can be reduced approximately by 93 percent with traditional chemical oxidation precipitation, coagulation, and flocculation.

Based on the results of the treatability testing, chlorine bleach was recommended as an oxidant because it was more effective (faster reacting) than hydrogen peroxide. The selected iron removal process would add chlorine bleach as an oxidant along with a polyaluminum chloride (PAC) coagulant to precipitate iron from solution followed by an anionic flocculant to solids formation.

Chemical Addition

Following on-site bench-scale and operational testing, chemical amendments and metering equipment were procured for the treatment system.

The following chemical treatment equipment were installed in March 2017:

- Oxidizer Peristaltic Pump
  - Blue-White Model A1N20V-6T, 120VAC
  - Maximum pressure of 100 PSI
  - Maximum flowrate of 24 gallons per day (GPD)
- IPC Influent Chamber Impeller Mixer
  - SEW-EURODRIVE Model FAF27; 3P, 208VAC, 0.5 HP
- IPC Mixing Chamber Picket Fence Mixer
  - SEW-EURODRIVE Model FAF37; 3P, 208VAC, 0.75 HP
- Coagulant Diaphragm Metering Pump
  - Walchem Model EWN-B16VEUR, 120VAC
  - Maximum pressure of 105 PSI
  - Maximum flowrate of 1.0 gallons per hour (GPH)
  - Maximum stroke rate of 360 strokes per minute (SPM)
- Flocculant Mixing Tank
  - Assmann PE Model IOT-500-N L19
  - Tank capacity of 500 gallons

- Flocculant Impeller Mixer
  - SEW-EURODRIVE Model FAF37; 3P, 208VAC, 0.75 HP
- Flocculant Metering Pump
  - Walchem Model EHE46E1-HV, 120VAC
  - Maximum pressure of 60 PSI
  - Maximum flowrate of 8.0 GPH
  - Maximum stroke rate of 360 SPM

Startup Testing

Startup testing of treatment system, with only collection sump EW-4 online, was completed between January and February 2017. Following the startup and testing of the chemical dosing and mixing systems, the new leachate treatment system was fully operational in March 2017; however, optimization of the chemical dosing continued throughout the summer and fall of 2017 to maximize iron removal rates.

4.3 Leachate Collection and Extraction System Upgrades

After startup and testing of the new treatment system was completed, additional system evaluations were performed on the leachate collection system. The pumps and controls for extraction wells EW-1 through EW-3, and collection sump EW-4, were inspected and tested. The pumps were removed and cleaned/or replaced, depending on their condition.

The following observations, enhancement and/or maintenance activities were implemented after the extraction wells were operational:

- During the initial RSO evaluations, leachate was observed to be discharging to the ground surface on the east side of the landfill from leachate collection system cleanout CO-FD-2. Leachate was discharging from cleanout CO-FD-2 because the pump for EW-4 was unable to achieve pumping rates greater than the infiltration rates into the collection well. Therefore, the leachate level was able to rise to a level in EW-4, greater than the elevation of the CO-FD-02.
- Approximately eight feet of sludge was identified in leachate collection well EW-4 during initial operation. Based on discussion with NYSDEC, Arcadis constructed a sludge drying bed in Cell 1 (Record Drawing C-02, Appendix A) and installed a new two-inch diameter above-grade HDPE forcemain between EW-4 and the Cell 1 drying bed. The sludge was removed from EW-4 and pumped through the forcemain and allowed to settle on the drying bed.
- Following removal of the sludge from EW-4, the leachate within the collection sump was pumped down below the southern and eastern leachate collection pipe inverts. Based on the combined inlet flow, the discharge pump was upgraded from a 0.5 HP pump capable of 16 GPM, to a 1 HP pump capable of 25 GPM.
- Extraction well EW-2 was brought online on March 30, 2017 after replacing the level transducer. Extraction wells EW-1 and EW-3 were brought online on May 12, 2017 after inspection and replacement of the level transducers and flow transmitters were completed.

Pipeline Inspections

In January 2017, Arcadis performed a camera survey inspection to evaluate and gain a better understanding of both the current condition and potential improvement of the southern and eastern leachate collection piping, and CWTS Cell 3 inlet distribution piping. The cleanouts are called out on Record Drawings C-1 and C-2 in Appendix A, and photographs from the camera inspection are provided in Appendix B. The following observations were recorded during the camera inspection.

EW-4 Perforated Leachate Collection Lines:

- CO FD-1: The camera was advanced approximately 18 feet (ft) before visibility was hindered by turbid water present in the pipe, blockage was encountered at 19 ft.
- CO FD-2: The camera was advanced approximately 4 ft where blockage (e.g., rip rap gravel) was encountered.
- CO FD-3: The camera was advanced approximately 111 ft, visibility was hindered by turbid/standing water present in the pipe from 90 ft to 111 ft.
- CO FD-4: The camera was advanced approximately 98 ft, moving water was observed along the entire camera length, trace iron precipitate/flocculant observed pipe.
- CO FD-5: The camera was advanced approximately 74 ft, moving water was observed along the entire camera length, increased iron precipitate/flocculant observed in pipe.
- CO FD-6: The camera was advanced approximately 53 ft, moving water was observed along the entire camera length, increased iron precipitate/flocculant observed in pipe.
- CO FD-7: The camera was advanced approximately 22 feet (ft) where blockage was encountered, visibility was hindered by turbid water present in the pipe.

CWTS Cell 3:

- CO 3-3: The camera was advanced approximately 45 ft when partial blockage was encountered, the camera was further advanced to 100 ft where complete blockage was encountered. The 100 ft corresponds to approximately 35 ft into the cell, visibility was hindered by turbid water over the entire length of pipe.
- CO 3-4: The camera was advanced approximately 52 ft when partial blockage was encountered, the camera was further advanced to 94 ft where complete blockage was encountered. The 94 ft corresponds to approximately 30 ft into the cell, visibility was hindered by turbid water over the entire length of pipe.

Arcadis attempted to remove the rip-rap on June 8, 2017 by excavating the area around the cleanout and cutting the cleanout riser where the blockage was observed. Approximately four-feet of rip-rap stone was removed from the cleanout stand pipe. However, additional rip-rap was identified within the stand pipe, which could not be removed, due to physical limitations. Therefore, the impacts of the remaining rip-rap within the cleanout is unknown.

The southern collection trench piping was jetted and inspected via camera in December 2017. Jetting removed leachate scaling within the pipeline and allowed leachate to flow through previously blocked perforations. Photos of the collection piping prior to, and following, jetting is provided in Appendix B. After jetting of the southern collection trench, flow into leachate collection sump EW-4 increased from an average of approximately 10 GPM to 24 GPM, which is at the maximum sustainable flow rate of the EW-4 pump. Because of the increased flow and limitations of the pump, the level of leachate in EW-4 is currently greater than the optimal operating level. Therefore, the pump will need to be upgraded to maintain the proper operating level in the gravity leachate collection system.

4.4 Treatment System Description

Leachate and groundwater recovered from extraction wells EW-1, EW-2, EW-3, and leachate collection sump EW-4, are pumped to the pre-treatment system at a combined average total flow rate that has ranged from approximately 8 GPM (October 2017) to 24 GPM (December 2017) since January 2017. As shown on the P&ID (Appendix A), when the leachate enters the pre-treatment system, it is first treated with bleach to oxidize the iron. The leachate then enters the inlet of the IPC where coagulant and flocculant amendments are added. After passing through the clarifier, the treated water is discharged via gravity to the Clarifier Catch Tank. From there, the water is pumped to the CWTS. In the CWTS, water passes through a matrix of phragmites. According to original design documents (HRP 2014), the phragmites are planted in high organic topsoil. The soil is designed to provide chelation and ion exchange. The plants increase horizontal permeability of the soil, provide organic matter to promote biodegradation, and promote oxygen-carbon dioxide exchange through porous tissue. Treated water that discharges from the CWTS collects in a common collection sump (EW-5). Treated water is pumped from EW-5 to the Polishing Pond, where it gravity discharges to the Glens Fall Feder Canal.

4.5 Sludge Processing

As shown in the P&ID, sludge that accumulates in the IPC is pumped by a feed pump to the Sludge Thickener Tank. The sludge is retained in the tank until the solids settle to the bottom. Water is then decanted from the sludge and directed to the Decant Tank, where it is then pumped back to the inlet of the of the IPC. After system startup, air agitation lines were installed in the sludge thickener tank and IPC to dislodge sludge that routinely adheres to the sidewalls of the tank and IPC.

Solids in the Sludge Thickener Tank are pumped to the Filter Press for processing. The sludge is pumped into the filter press at increasing step pressures up to 90 psi. The filter press retains the solids and returns the filtrate to the Decant Tank. For final sludge processing, compressed air (up to 100 psi) is applied to the sludge that is retained in the filter press plates during the blow down process. The blow down procedure compresses the sludge to remove additional filtrate liquid. Blow down is continued (approximately one hour) until the volume water being returned from the filter press approaches zero. At the end of the blow down cycle, the filter press is opened and the dried filter cakes (approximately 20 percent solids) are removed and placed into UN-approved 55-gallon drums for off-site transportation and disposal.

Sludge generation began in March-April 2017. The total volume of sludge cake generated and processed through the treatment system through December 2017 is approximately 1,650 gallons. Based on the

concentrations of PCBs in the sludge, the sludge cakes are profiled and disposed as a Toxic Substances Control Act (TSCA) waste. The sludge cakes are transported off-site in drums by Veolia Environmental Services at a maximum frequency of every 90 days. The waste stream is currently processed and disposed at Veolia's incineration facility in Port Arthur, Texas.

5 SITE MONITORING AND SYSTEM PERFORMANCE

The following sections summarize the groundwater data conclusions for the 2016 - 2017 reporting period and leachate collection and treatment system operation and performance.

5.1 Summary of Monitoring Program Results

The tables and figures referenced in Section 5.1 are from the 2017 Annual Monitoring Report (Arcadis, 2017) and provided in Appendix C. A detailed review and analysis of this data is provided in the Annual Groundwater Monitoring Report (Arcadis, 2017).

Groundwater monitoring was conducted in August 2017 in accordance with the five-quarter sampling frequency defined in the site SMP and in consultation with NYSDEC. At the request of the NYSDEC, Perfluorinated Alkyl Substances (PFAS) and 1,4-dioxane were included in the analytical parameters for the August 2017 sampling event.

During the sampling event, monitoring wells (MW-1, MW-1A, MW-1D, MW-2, MW-2A, MW-5, MW-6, MW-6A, MW-6B, MW-7, MW-8, MW-9 (formerly MW-NEW), and MW-11), three extraction wells (EW-1 through EW-3), and leachate collection sump EW-4 (Appendix C, Figure 2) were sampled. What had been called monitoring well MW-4 was not sampled because Arcadis determined that it is a clean-out for the abandoned force main, and not a monitoring well, as presumed by previous Site operators. Monitoring well MW-10 was sampled during this event, however it was also later determined to be a clean-out for the abandoned force main.

Groundwater

Based on the results of the sampling event, total concentrations of VOCs appear to be decreasing within the monitoring well network. In addition, PCB concentrations have dropped to non-detect levels in all upgradient and downgradient monitoring wells. However, it should be noted that the previous site operators utilized Monsoon pumps for groundwater sampling, which can create a turbid environment within a monitoring well. Arcadis switched to a peristaltic pump to employ low flow sampling techniques at each monitoring well location. This change in groundwater sampling technique may explain the absence of PCBs reported in samples from groundwater monitoring wells across the site. VOCs and/or PCBs were detected in the samples from extraction wells EW-1 thorough EW-3 and leachate collection sump EW-4. Consistent with previous years, the maximum concentrations of VOCs and PCBs were reported in the samples from EW-1.

A total of five metals were detected in groundwater at concentrations exceeding the NYSDEC Class GA Standards, with iron and sodium concentrations exceeding in the majority of the monitoring wells. In general, most of the detected metals in groundwater remain consistent with historical results.

PFAS sampling was conducted in 2017 at the request of the NYSDEC. The NYSDEC has adopted the United States Environmental Protection Agency's (USEPA) health advisory limit (HAL) of 70 nanograms per liter (ng/L) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA were detected at concentrations greater than the USEPA HAL in monitoring wells MW-5 (90 ng/L) and MW-9 (110 ng/L). PFOA was detected at extraction well EW-1 at a concentration of 1,300 ng/L.

Surface Water

None of the surface water samples collected from the site or the Glens Fall Feeder Canal contained VOCs at concentrations greater than the applicable NYSDEC Standards or PCBs at concentrations greater than the laboratory quantitation limits. Surface water samples contained iron, magnesium, and sodium concentrations greater than the NYSDEC Class GA Standards.

PFOA was detected at concentrations above the USEPA HAL in Unnamed Pond (130 ng/L).

Sediment

The sediment samples from Cell 1 and Cell 3 were the only samples to contain detectable levels of VOCs. The only sediment sample to contain detected levels of PCBs was in the upgradient sample from the Glens Falls Feeder Canal (GFFC1).

5.2 Treatment System Flow Data

The treatment system operational data for January through November 2017 were previously presented in the 2017 Periodic Review Report (Arcadis 2018). The tables and figures referenced in Section 5.2 and 5.3 are from the 2017 Periodic Review Report and provided in Appendix D.

The system operational data for January through November 2017 is summarized in Tables 1 and 2 of Appendix D. These data include the extracted leachate flow readings collected from individual extraction well/sump flowmeters.

Total extracted leachate flow readings are summarized in Table 1 of Appendix D. A cumulative total of 4,595,300 gallons of leachate was recovered by the system from January 2017 through November 2017. This total flow corresponds to an average recovery rate of approximately 9.6 GPM. Cumulative and average recovery flowrates, respectively, for each extraction well/sump is provided in Table 2 of Appendix D and summarized below:

- EW-1 – 89,114 gallons, 0.3 GPM
- EW-2 – 90,832 gallons, 0.2 GPM
- EW-3 – 307,320 gallons, 0.9 GPM
- EW-4 – 4,108,034 gallons, 8.5 GPM

5.3 Treatment System Analytical Results

5.3.1 Influent Analytical Results

The monthly influent concentrations of VOCs, PCBs, Metals, and total dissolved solids (TDS), and total suspended solids (TSS) in leachate are provided in Table 8 of Appendix D.

Influent COC concentrations during 2017 ranged from non-detect (ND) to 21 µg/L for cis-1,2-dichloroethene (DCE), ND to 19 µg/L for vinyl chloride (VC), and ND to 80 µg/L for total PCBs. Select metal influent concentrations were as follows; 10 to 71 mg/L for iron and ND to 2.1 mg/L for manganese. Influent concentrations of TDS and TSS ranged from 220 mg/L to 620 mg/L, and 12 mg/L to 110 mg/L,

respectively. As shown in Table 8 of Appendix D, the concentrations of VOCs, PCBs, iron, and TSS/TDS all increased beginning in May 2017, which corresponds to when extraction well EW-1 was brought online. PFAS samples were only collected during the July monthly sampling event. Total PFAS was detected at a concentration of 59.7 ng/L.

5.3.2 Mid-Treatment Analytical Results

5.3.2.1 Clarifier Catch Tank

As shown in Table 9 of Appendix D, iron concentrations in samples from the Clarifier Catch Tank, following the completion of the RSO upgrades (March 2017), ranged from 0.89 mg/L to 13 mg/L. In comparison to the influent iron concentrations, this represents an average iron reduction of approximately 60 percent.

Tables 8 and 9 of Appendix D show that, compared to influent concentrations, there is no significant reduction in VOCs or PCBs resulting from treatment in the IPC.

Since December 2016, TDS concentrations have ranged from 380 mg/L (October 2017) to 550 mg/L (May 2017); TSS concentrations have ranged from ND (February 2017) to 120 mg/L (December 2017).

PFAS samples were only collected during the July monthly sampling event. Total PFAS was detected at a concentration of 88.8 ng/L.

5.3.2.2 Cell 3

Samples from Cell 3 can be collected from two locations; where water discharges Cell 3 and enters the bypass pipe that connects Cell 3 to Cell 2 (Cell 3 Bypass), or from the Cell 3 level control chamber (Cell 3 Chamber) (Figure 2). Prior to installation of the bypass pipe, and prior to the Cell 3 water level reaching the invert of the newly installed bypass pipe, no samples were collected from this location. Therefore, samples from Cell 3 prior to June 2017 were collected from Cell 3 Chamber and are not representative of current operational conditions. A summary of data from each location are provided below and presented in Table 10 (Cell 3 Chamber) and Table 11 (Cell 3 Bypass) of Appendix D.

Cell 3 Chamber

As shown in Table 10 of Appendix D, between September 2017 and June 2017, the concentrations of DCE and VC in the samples from Cell 3 Chamber have ranged from ND to a maximum of 3.2 µg/L and 1.3J µg/L, respectively. No PCBs were detected in any of the samples between September 2016 and June 2017.

Iron and manganese concentrations ranged from ND and 0.053 mg/L, respectively (April 2017) to a maximum of 19 mg/L and 2.3 mg/L, respectively in May 2017.

Between September 2016 and June 2017, TDS concentrations ranged between 210 mg/L and 490 mg/L and TSS concentrations ranged from ND to 41 mg/L.

Cell 3 Bypass

As shown in Table 11 of Appendix D, since July 2017, the concentrations of DCE in the Cell 3 Bypass samples have ranged from 0.85J µg/L to a maximum of 9.2 µg/L, and VC concentrations have ranged

from ND to 4.2 µg/L. The November 2017 samples from Cell 3 Bypass contained 1,2-dichlorethane (0.74J µg/L) and 1,1,2-trichloroethane (1.1 µg/L) at concentrations greater than the respective NYSDEC Standards. Benzene (0.14J µg/L), bromodichloromethane (1µg/L), and chlorodibromomethane (0.16J µg/L) were detected for this first time in the November 2017 samples from Cell 3 Bypass.

Since June 2017, total PCB concentrations have ranged from 0.44 µg/L (June 2017) to 3.9 µg/L (September 2017).

Between June and November 2017, iron and manganese concentrations decreased from a maximum of 16 mg/L and 1.9 mg/L, respectively, to 1.7 mg/L and 0.61 mg/L, respectively. However, these results continue to exceed the corresponding NYSDEC Class GA Standards.

Since June 2017, TDS concentrations have ranged from 240 mg/L to 590 mg/L and TSS concentrations have ranged from ND to 54 mg/L.

PFAS samples were only collected during the July monthly sampling event. Total PFAS was detected at a concentration of 24 ng/L.

5.3.2.3 Cell 2

Samples from Cell 2 are collected where Cell 2 discharges into the Cell 2 level control chamber. Water that is discharged from the pre-treatment system enters Cell 2 from the Cell 2/3 Bypass pipe. However, water did not start flowing through the Cell 2/3 Bypass pipe until June 2017. Therefore, samples collected from the Cell 2 chamber prior to June 2017 do not represent current operating conditions. Analytical data from Cell 2 are provided in Table 12 of Appendix D.

Prior to June 2017, the only VOCs detected in the samples from Cell 2 was 1,2-dibromo-3-chloropropane. This compound was detected in September and November 2016 samples at estimated concentrations 8.2J µg/L and 15J µg/L, respectively. Since June 2017, none of the samples from Cell 2 have contained 1,2-dibromo-3-chloropropane above the indicated quantitation limits. In June 2017, the concentrations of DCE was 2.3 µg/L. The concentrations of DCE increased to a maximum of 6.7 µg/L in September 2017 then decreased to 1.5 µg/L in November 2017. VC concentrations increased from ND in June 2017 to a maximum of 1.6J in the August 2017 samples from Cell 2.

5.3.2.4 Cell 1

Cell 1 has not been used as part of the leachate treatment system since prior to September 2016. Therefore, analytical samples are not collected from this cell on a regular basis. However, due to precipitation events and potential groundwater infiltration into the treatment cell through the linear, Cell 1 continues to discharge into collection well EW-5. Therefore, discharge from Cell 1 is still contributing to the Polishing Pond. As shown in Table 13 of Appendix D, none of the 2017 samples from Cell 1 contained detectable concentrations of VOCs or PCBs. The last time samples were collected form Cell 1 (July 2017), Iron (8.2 mg/L) and manganese (0.85 mg/L) were the only metals detected at concentrations greater than the applicable NYSDEC Class GA Standards.

In July 2017, the TDS and TSS concentrations were 380 mg/L and ND, respectively PFAS samples were only collected during the July monthly sampling event. Total PFAS was detected at a concentration of 41.4 ng/L.

5.3.2.5 Effluent Analytical Results

As shown in Table 14 of Appendix D, DCE was detected in the June and November 2017 Polishing Pond effluent samples at 0.17 µg/L and 0.20 µg/L, respectively. With the exception of acetone (a common laboratory contaminant) and one detection of toluene (0.2 µg/L) in February 2017, no other VOCs have been detected in the effluent samples between September 2016 and November 2017.

As shown in Table 14 of Appendix D, PCBs were not detected in the Polishing Pond effluent samples between September 2016 and November 2017.

Between September 2016 and November 2017, iron concentrations have ranged from ND (October 2017) to 6.0 mg/L in September 2016. Since the RSO upgrades were implemented, the maximum iron concentration observed was 4.4 mg/L (June 2017). Since then, the concentrations of iron have fluctuated. The November 2017 iron concentration was 1.5 mg/L, which represents an approximately 95 percent reduction in iron compared to the November 2017 influent concentration (28 mg/L). However, as shown in Table 14 of Appendix D, this result is still more than twice the corresponding SPDES Effluent Limit.

Since September 2016, the concentration of manganese has ranged from 0.29 mg/L (October 2016) to a maximum of 2.4 mg/L (September 2017). However, since September 2017, the concentrations of manganese have decreased. The November 2017 manganese concentration was 0.85 mg/L, which is greater than the corresponding SPDES Effluent Limit.

Since September 2016, TDS concentrations have ranged from 190 mg/L (February 2017) to 520 mg/L (November 2017) and the concentrations of TSS have fluctuated between ND and a maximum of 42 mg/L (June 2017).

PFAS samples were only collected during the July monthly sampling event. Total PFAS was detected at a concentration of 38.2 ng/L.

5.4 Leachate Collection and Treatment System Performance

Since the RSO upgrades have been implemented, the rate of leachate being collected and treated through the treatment system has increased from approximately 3 GPM (December 2016) to an average of 24 GPM (December 2017).

The main COCs identified at the site are iron, PCBs, and VOCs. Removal rates for each COC were evaluated based on a reduction of concentrations through each process in the treatment system as described in Section 5.4. Removal rates are presented in Tables 3 through 6 and based on analytical results from the November 2017 monthly system sampling event.

Influent to Clarifier Catch Tank – Treatment via IPC and Chemical Amendments

As shown in Table 3, the concentrations of iron, total PCBs, and total VOCs, in the system influent were 28 mg/L, 17 µg/L, and 28 µg/L, respectively in November 2017. After the Clarifier Catch Tank, the leachate concentrations were reduced to 12 mg/L (iron) and 18 µg/L (total VOCs), respectively. Iron and total VOCs were reduced by 57 percent and 36 percent, respectively, from the Influent to the Clarifier Catch Tank. Total PCBs increased 35 percent to a concentration of 23 µg/L, which is most likely due to the PCBs adsorbed to suspended solids sampled at the Clarifier Catch Tank.

Clarifier Catch Tank to Cell 3 Bypass – Treatment via Chelation, Filtration, and Phytoremediation

In November 2017, COC concentrations through treatment in Cell 3 reduced the Clarifier Catch Tank concentrations to 1.7 mg/L (iron), 0.97 µg/L (total PCBs), and 12.3 µg/L (total VOCs), respectively (Table 4). Iron was reduced by 86 percent from the Clarifier Catch Tank to the Cell 3 bypass with reduction of PCBs and total VOCs at 96 percent and 32 percent, respectively.

Cell 3 Bypass to Cell 2 Effluent Chamber - Treatment via Chelation, Filtration, and Phytoremediation

As shown in Table 5, compared to the Cell 3 Bypass sample, Cell 2 effluent iron concentrations increased 288 percent to 6.6 mg/L. Total PCBs were reduced to non-detect (100 percent) and total VOCs were reduced 85 percent to 1.20 µg/L. Since August 2017, iron concentrations in the discharge from Cell 2 were greater than compared to Cell 3 Bypass, with a decrease in PCBs and total VOCs.

Cell 2 Effluent Chamber to Polishing Pond – Treatment via settling and filtration

In November 2017, Cell 2 effluent concentrations were 1.5 mg/L for iron, non-detect for total PCBs, and 0.17 µg/L for total VOCs (Table 6). Iron was reduced by 77 percent and total VOCs 91 percent in the Polishing Pond. Contaminant reductions through the Polishing Pond effluent have remained consistent since March 2017.

6 REGULATORY COMPLIANCE

6.1 Subsurface Performance

Groundwater, surface water, and sediment sampling was conducted at the site in July and August 2017. Total concentrations of VOCs appear to be decreasing within the monitoring well network. In addition, PCB concentrations have dropped to non-detect levels in all upgradient and downgradient monitoring wells. However, as noted previously, the recent change in groundwater sampling technique may explain the absence of PCBs reported in samples from groundwater monitoring wells across the site. VOCs and/or PCBs were detected in the samples from extraction wells EW-1 thorough EW-3 and leachate collection sump EW-4. Consistent with previous years, the maximum concentrations of VOCs and PCBs were reported in the samples from EW-1. None of the surface water samples collected from the site or the Glens Fall Feeder Canal contained VOCs at concentrations greater than the applicable NYSDEC Standards or PCBs at concentrations greater than the laboratory quantitation limits. The sediment samples from Cell 1 and Cell 3 were the only samples to contain detectable levels of VOCs. The only sediment sample to contain detected levels of PCBs was in the upgradient sample from the Glens Falls Feeder Canal (GFFC1).

A total of five metals were detected in groundwater at concentrations exceeding the NYSDEC Class GA Standards, with iron and sodium concentrations exceeding in the majority of the wells. In general, most of the detected metals in groundwater remain consistent with historical results. Surface water samples contained iron, magnesium, and sodium concentrations greater than the NYSDEC Class GA Standards. Surface water and sediment will continue to be analyzed in accordance with the SMP and NYSDEC's request.

PFAS sampling was conducted in 2017 at the request of the NYSDEC. PFAS were detected at concentrations greater than the USEPA HAL of 70 ng/L for PFOA and PFAS in samples from two downgradient monitoring wells, one extraction well, and the surface water sample from Unnamed Pond. The maximum concentration of PFOA and PFAS was collected in the sample from EW-1 (1,300 ng/L), and the sample from MW-5 (90 ng/L), respectively.

6.2 Treatment System Performance

As part of the corrective measures process, leachate collection and treatment system upgrades were completed in 2017. These system upgrades are fully functional and operating as designed.

Pre-treatment system upgrades account for an average iron reduction of 60 percent through the IPC, with up to 95 percent iron removal through additional treatment in the CWTS and Polishing Pond. However, iron results from Cell 2 and Cell 3 indicate that the historical iron loading into the CWTS will likely result in continued exceedances for iron (and other metals) from the Polishing Pond. Additionally, sludge accumulations observed in collection sump EW-4; Cells 1, 2, and 3 level control chambers; and CWTS collection sump EW-5, will also contribute to contaminant loading. VOC and PCB data show that there is generally no significant reduction in concentrations through treatment in the IPC. VOC and PCB mass removal are generally accomplished through treatment in the CWTS (Cell 2 and Cell 3). However, since

EW-1 was brought back online, the concentrations of VOCs and PCBs in samples from Cell 2 and Cell 3 have generally increased. Therefore, continued contaminant loading of VOCs and PCBs from EW-1 in Cell 2 and Cell 3 may result in future detections of these compounds in the Polishing Pond.

6.3 Comparison to RAOs

In general, the RAOs presented in Section 3.1 of this report are being met with respect to human health because the ICs for the site prohibit the use of groundwater from the site and the EC (landfill cap and perimeter fence) prevent exposure, ingestion, or direct contact with contaminated media. However, surface water samples from the Polishing Pond have contained low-level VOCs, concentrations of iron, manganese, and sodium greater than the respective NYSDEC Standards; and PFAS at concentrations greater than the USEPA HAL.

The RAOs are not being met for environmental protection since there continue to be concentrations of VOC, PCBs, metals and/or PFAS greater than the respective NYSDEC Standards or USEPA HAL in groundwater and surface water samples from the site.

The following conclusions discuss the effectiveness, and deficiencies, of the Site's remedial system in comparison to the applicable Site RAOs:

- RAO 1 - Prevent ingestion of groundwater outside of the landfill boundaries with contaminant levels exceeding drinking water standards:
    - Residential and commercial properties adjacent to the landfill have been connected to the municipal water supply, thereby preventing the ingestion of impacted groundwater from private wells immediately adjacent to the Site. However, the downgradient monitoring well samples have contained concentrations that exceed the applicable standards for VOCs, PCBs, and metals (most commonly iron, manganese, magnesium, and sodium) and the extent of the groundwater plume beyond those wells is unknown.
- RAO 2 - Prevent contact with or inhalation of volatiles from contaminated groundwater:
    - Inhalation and contact with impacted vapors has been minimized by supplying homes adjacent to the landfill with municipal water. Groundwater or vapor intrusion impacts have not been observed in the vicinity of the homes adjacent to the landfill, based on the soil vapor intrusion investigation (HRP, 2013).
- RAO 3 - Prevent the discharge of contaminants to surface water:
    - Data from the 2013 - 2017 reporting period indicate that the leachate collection and treatment system has only been partially effective at recovering leachate from the subsurface at the Site, this is demonstrated through the following metrics:
        - Groundwater quality in the monitoring well network continues to indicate that leachate is not being fully captured by the collection system and continues to impact the surrounding groundwater; and
        - The metals concentrations (primarily iron) in the leachate treatment system effluent continue to exceed the SPDES equivalent discharge limitations.

7 MAJOR COST COMPONENTS OR PROCESSES

The following items are major cost components or maintenance processes of the current above grade pre-treatment system:

- Chemical dosing for iron reduction and removal.
- Sludge removal from collection sumps EW-4 and EW-5 and Level Control Chambers for Cells 1, 2 and 3.
- Sludge handling and transport.

7.1 Chemical Addition

Chemical addition of oxidant, coagulant, and flocculant were implemented to reduce iron concentrations within leachate. The oxidant and coagulant chemicals are purchased in 55-gallon drums and the dry flocculant is purchased in 55-pound bags. Based on the current chemical usage rates, the annual chemical costs are estimated to be approximately $35,000.

7.2 Sludge Removal

As stated in Section 4.3, approximately eight feet of sludge was identified and removed in leachate collection sump EW-4 in late January 2017. The initial effort to remove and handle the sludge recovered from leachate collection well EW-4 in January 2016 was approximately $11,500.

During pipeline jetting of the southern collection force main in November 2017, sludge deposits were transported to leachate collection sump EW-4. The force main jetting and sludge removal via vacuum was approximately $14,400.

In early December 2017, the EW-5 pump was unable to maintain the design level in the collection sump. It is presumed that sludge within the well has fouled the pump intake and will need to be removed to restore proper flow from EW-5. Routine sludge removal at EW-4 will reduce contaminant transport to the system influent and downstream treatment system sampling locations. This work performed in conjunction with sludge removal from collection sump EW-5, and Cell 1, 2 and 3 level control chambers are estimated to cost $17,600 annually.

In total, sludge removal for leachate collection wells, sumps, and cell level control chambers is estimated to cost $32,000 annually.

7.3 Sludge Transport and Disposal

Sludge cakes produced via the Filter Press have been characterized as TSCA waste. Approximately 10 drums are transported offsite every 90 days for incineration in Port Arthur, Texas. The total cost for transportation, disposal, and regulatory fees is approximately $600 per drum. At this rate, the annual costs for sludge cake transportation and disposal is approximately $24,000.

8 RECOMMENDATIONS

The recommendations and planned action items for future site operations are presented below. System operation and performance monitoring will continue to focus on optimizing the iron removal and overall treatment efficiency of existing collection system network and the associated treatment systems.

8.1 Recommendations to Improve Operation & Maintenance

The following items should be considered to improve the long-term operation and maintenance of the site:

8.1.1 Maintenance Improvements

The following items are recommended to further optimize the leachate recovery and treatment system:

- Perform pipe inspections and jetting on all leachate collection lines on an annual basis to improve and maintain leachate collection from the landfill cell.
- Perform pipe inspection and jetting on force main and inlet gallery to Cell 3. This could remove decades of accumulated iron that have fouled the inlet piping and may result in improved treatment efficacy of the treatment Cell.
- Remove accumulated sludge in leachate collection sump EW-4, to maintain leachate recovery and flow rates.
- Remove iron sludge from CWTS level control chambers for Cells 1, 2, and 3; and collection sump EW-5. The accumulated iron sludge in these locations contributes to iron loading of the Polishing Pond.
- Enhance the pumping capacity of EW-4 since pipe jetting has resulted in increased flow rates to the EW-4 leachate collection well.
- Replace current remote monitoring system to reduce need for onsite visits. In October and November of 2017, multiple site visits were needed to reset system manually as the remote connection to the existing PLCs continually failed. Update of the remote system will provide real-time data to view collection and treatment system operation, and reduce visits and costs.
- Evaluate options for monitoring and protecting the treatment system electrical components from power surges or partial loss of power (i.e., loss of one leg of three phase power). The October 2017 power failure resulted in down-time and equipment damage. Installation of a phase monitor or other device could prevent future equipment damage and reduce system downtime.
- Evaluate if VOC removal is possible within the IPC. Air diffusers placed in the IPC, for example, may volatize VOCs before they are discharged to the CWTS. This would reduce contaminant loading of the CWTS and the potential for VOCs impacts to the Polishing Pond.
- Evaluate if post-IPC filtration can result in lower concentrations of iron and PCBs. Reduced concentrations of iron and PCBs would reduce contaminant loading of the CWTS and the potential for future impacts to the Polishing Pond.

- Evaluate discharge pump options for EW-5. This pump is occasionally overwhelmed during high run-off and/or precipitation events. Therefore, it may be necessary to upgrade the pump in EW-5.
- Maintain operation and maintenance to once a week during weekly site visits.

8.1.2 Process Modifications

The following recommendations are suggested to improve control processes:

- Optimize chemical dosing and consumption to effectively dose for variable influent flow rates. Installation of additional control logic inputs on the monitoring system would allow greater optimization of chemical dosing based on the Influent flow rate. This would reduce chemical consumption and appropriately treat Influent flow rates.

If VOC, PCB, and metals removal can be accomplished in the pre-treatment system, such that discharge concentrations meet the required effluent criteria, then the following items should be considered:

- Change the location of the SPDES discharge point to the collection sump EW-5 gravity overflow pipe. During the RSO upgrades, a bypass pipe was installed that allows the pre-treatment system to discharge directly to the EW-5 sump. If the level in EW-5 is permitted to increase, it can discharge from the EW-5 overflow, which discharges to the Glens Falls Feeder Canal. This would eliminate the need to operate and maintain the CWTS (Cell 1, Cell 2 or Cell 3), EW-5 pump station, and the Polishing Pond.
- Evaluate options for closure of the CWTS. Phragmites plants should be eliminated and treatment cells abandoned.
- Evaluate options for additional capture of leachate along the eastern side of the landfill cell to reduce or eliminate surface water discharges. Options may include extending the leachate collection trench along the eastern side of the landfill and/or installing additional extraction wells.

8.2 Recommendations to Improve the Monitoring Program

Performance and effectiveness monitoring are currently completed in accordance with the 2015 SMP and in consultation with NYSDEC. The Monitoring Plan will be revised and updated in 2018 to reflect the RSO upgrades and will include revised sampling locations and requirements for evaluation of the leachate collection and treatment system, groundwater, surface water, and sediment.

The following recommendations are suggested for the Monitoring Program:

- Due to fluctuations in PCB results for groundwater, re-develop all monitoring wells and landfill piezometers to improve hydraulic properties and data quality.
- Install additional monitoring wells to evaluate down gradient groundwater impacts along the eastern side of the landfill cell. Currently, there is only one groundwater monitoring well along the eastern edge of the landfill cell (MW-5). Additional groundwater data should be collected to evaluate the horizonal and vertical extent of groundwater contamination.

8.3 Recommendations to Reduce Costs

The following recommendations are suggested to reduce costs at the site.

- Evaluate disposal facilities closer to Site to minimize transportation and disposal costs.
- Replace the existing PLC and optimize chemical dosing based on real-time influent flow rates to the pre-treatment system. Adjustments to chemical dosing to meet variable flow rates would reduce chemical consumption and associated costs.
- Achieve NYSDEC Class GA groundwater standards at the Clarifier Catch Tank effluent to discharge leachate directly to EW-5 and bypass CWTS Cells 2 and 3. Bypassing CWTS Cells 2 and 3 would reduce sampling and laboratory costs.
- Sample extraction wells EW-1 to EW-3, extraction sump EW-4, and Cell 1 effluent on a quarterly basis rather than a monthly basis as listed in SMP. This data will be used to monitor leachate and groundwater movement to the extraction wells and Cell 1. Reducing the sampling frequency would reduce sampling and laboratory costs.

8.4 Implementation

Based on the current work assignment, the following will be implemented in 2018:

- Install a new PLC and remote monitoring system to enhance real-time view of treatment system operations and reduce on-site visits for system troubleshooting and data logging collection. In addition, the PLC will allow the chemical dose rate to be proportional to the flow into the treatment system.
- Upgrade the pump (and electrical power supply) at EW-4 to handle the increased flow rates observed post-jetting, and to have increased capacity to dewater the system during routine/non-routine maintenance events.
- Evaluate discharge pump options for EW-5. This pump is occasionally overwhelmed during high run-off and/or precipitation events. Therefore, it may be necessary to upgrade the pump in EW-5.
- Perform pipe inspections and jetting on leachate collection lines to improve leachate collection from the landfill cell.
- Perform pipe inspection and jetting of the force main and Cell 3 inlet distribution piping. This could remove decades of accumulated iron that have fouled the inlet piping and may result in improved treatment efficacy of the treatment Cell.
- Remove accumulated sludge in leachate collection sump EW-4.
- Remove iron sludge from CWTS level chambers for Cells 1, 2, and 3; and collection sump EW-5. The accumulated iron sludge in these locations contributes to iron loading of the Polishing Pond.

9 REFERENCES

Arcadis, 2017. Fort Edward Landfill 2017 Annual Groundwater Monitoring Report, Site Number 558001. Arcadis CE, Inc., December 2017.

Arcadis, 2018. Fort Edward Landfill Site Periodic Review Report, Site Number 558001. Arcadis CE, Inc., January 2018.

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HRP, 2014. Periodic Review Report, Fort Edward Landfill, Leavy Hollow Lane, Fort Edward, New York 12828. Site ID #558001. HRP Engineering P.C., May 2013.

HRP, 2015. Site Management Plan, Fort Edward Landfill, Washington County, Fort Edward, New York. NYSDEC Site #558001, HRP Engineering P.C., August 2015.

URSG, 1999. Final Remediation Report, Work Assignment D003825-1. URS Greiner Consultants, Inc., August 1999.

TABLES

Table 1
Leachate Collection System Recovery Volumes
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Month	EW-1	EW-2	EW-3	EW-4	Gallons Per Month
January 2017	-	-	-	377,622	**377,622**
February 2017	-	-	-	365,085	**365,085**
March 2017	-	790	-	378,187	**378,977**
April 2017	-	12,893	284	321,751	**334,928**
May 2017	13,225	11,833	21,556	358,482	**405,096**
June 2017	15,799	13,986	46,800	366,488	**443,073**
July 2017	15,039	17,556	48,360	445,614	**526,569**
August 2017	13,341	14,956	48,360	412,728	**489,385**
September 2017	12,929	12,353	46,800	385,943	**458,025**
October 2017	7,324	254	48,360	289,752	**345,690**
November 2017	11,457	6,211	46,800	406,382	**470,850**
Jan - Nov 2017 Total	**89,114**	**90,832**	**307,320**	**4,108,034**	**4,595,300**

Table 2
Extraction Well Flow Rates
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Month	EW-1	EW-2	EW-3	EW-4	Gallons Per Minute Per Month
January 2017	-	-	-	8.5	**8.5**
February 2017	-	-	-	9.1	**9.1**
March 2017	-	0.0	-	8.5	**8.5**
April 2017	-	0.3	0.0	7.4	**7.8**
May 2017	0.3	0.3	0.5	8.0	**9.1**
June 2017	0.4	0.3	1.1	8.5	**10.3**
July 2017	0.3	0.4	1.1	10.0	**11.8**
August 2017	0.3	0.3	1.1	9.2	**11.0**
September 2017	0.3	0.3	1.1	8.9	**10.6**
October 2017	0.2	0.0	1.1	6.5	**7.7**
November 2017	0.3	0.1	1.1	9.4	**10.9**
Jan - Nov 2017 Total	**0.3**	**0.2**	**0.9**	**8.5**	**9.6**

Table 3
Treatment System Removal Rate: Clarifier Catch Tank
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Treatment System Component	Influent	Clarifier Catch Tank	Removal Rate (%)
Iron (mg/L)	28	12	57%
Total PCBs (µg/L)	17	23	-35%
Total VOCs (µg/L)	28	18	36%

Notes:
Analytical results are from the November 2017 monthly sampling.

Definitions:
mg/L - milligrams per liter
µg/L - micrograms per liter
ND - Non-detect

Table 4
Treatment System Removal Rate: Cell 3 Bypass
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Treatment System Component	Clarifier Catch Tank	Cell 3 Bypass	Removal Rate (%)
Iron (mg/L)	12	1.7	86%
Total PCBs (µg/L)	23	0.97	96%
Total VOCs (µg/L)	18	12.3	32%

Notes:
Analytical results are from the November 2017 monthly sampling.

Definitions:
mg/L - milligrams per liter
µg/L - micrograms per liter
ND - Non-detect

Table 5
Treatment System Removal Rate: Cell 2 Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Treatment System Component	Cell 3 Bypass	Cell 2 Effluent	Removal Rate (%)
Iron (mg/L)	1.7	6.6	-288%
Total PCBs (µg/L)	0.97	0.39	60%
Total VOCs (µg/L)	12.3	1.89	85%

Notes:
Analytical results are from the November 2017 monthly sampling.

Definitions:
mg/L - milligrams per liter
µg/L - micrograms per liter
ND - Non-detect

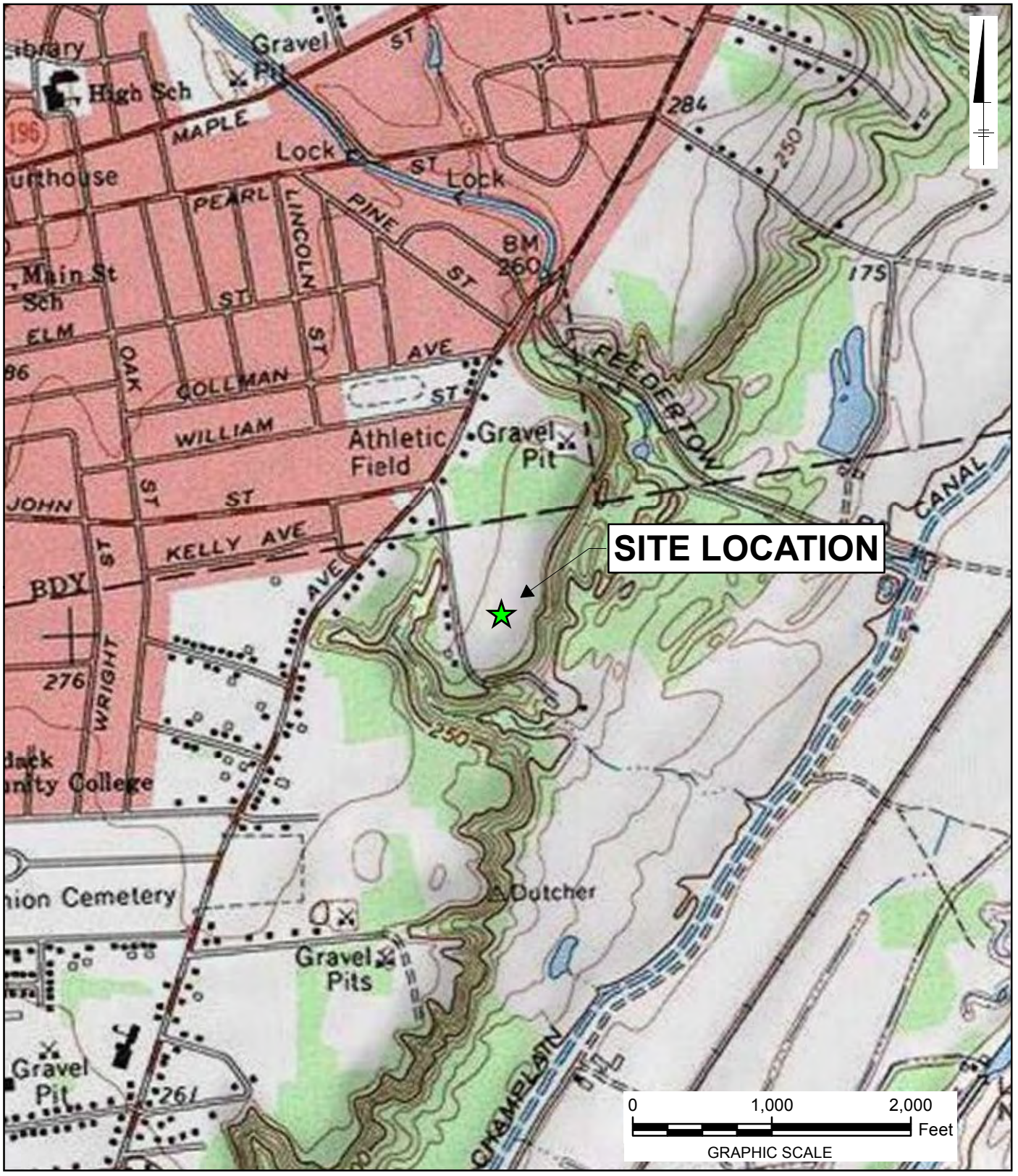
Table 6
Treatment System Removal Rate: Polishing Pond Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

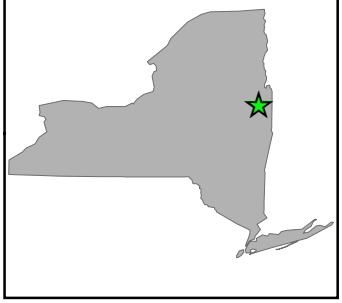
Treatment System Component	Cell 2 Effluent	Polishing Pond Effluent	Removal Rate (%)
Iron (mg/L)	6.6	1.5	77%
Total PCBs (µg/L)	0.39	ND	100%
Total VOCs (µg/L)	1.89	0.17	91%

Notes:
Analytical results are from the November 2017 monthly sampling.

Definitions:
mg/L - milligrams per liter
µg/L - micrograms per liter
ND - Non-detect

FIGURES





NOTE:

1. USGS QUADRANGLE INFORMATION
   QUAD ID: 43073-C5
   NAME: HUDSON FALLS, NEW YORK
   DATE PUB: 1968

FORT EDWARD LANDFILL
45 LEAVY HOLLOW LANE
FORT EDWARD, NEW YORK

PERIODIC REVIEW REPORT 2017

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Fort Edward (00266434.0000)
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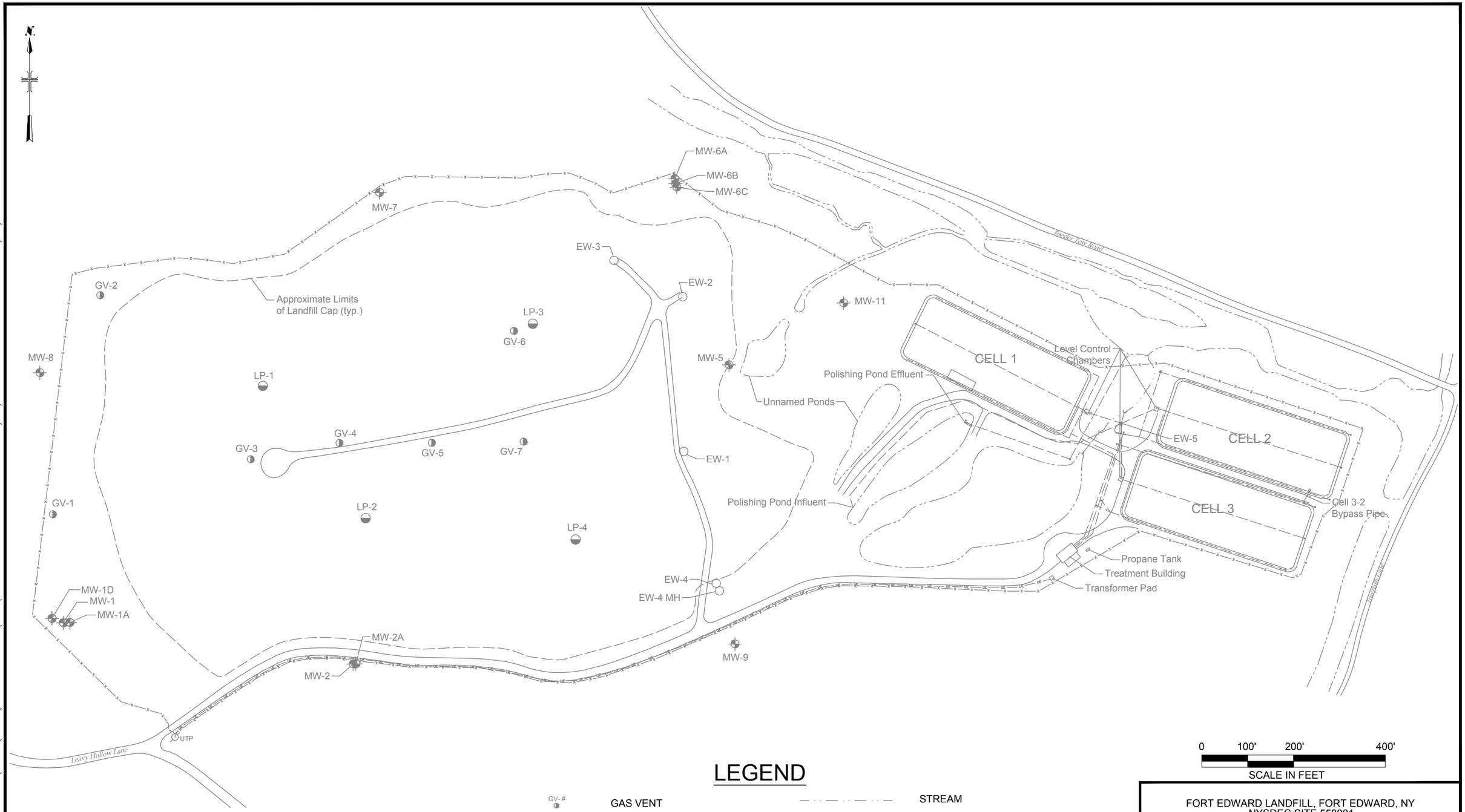


LEGEND

GV-#	GAS VENT
MW-#	MONITORING WELL
LP-#	PIEZOMETER
UTP	UTILITY POLE
	EXTRACTION WELL
	STREAM
	ROAD
	EDGE OF POND
	UNDERGROUND TREATMENT PIPING
UE	UNDERGROUND ELECTRIC
	FENCE

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017.
AND ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

FORT EDWARD LANDFILL, FORT EDWARD, NY
NYSDEC SITE 558001

SITE MAP

ARCADIS | **FIGURE 2**

APPENDIX A

Record Drawings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

FORT EDWARD LANDFILL
SITE NO. 558001
45 LEAVY HOLLOW LANE, TOWN OF FORT EDWARD
WASHINGTON COUNTY, NEW YORK

REMEDIAL SYSTEM OPTIMIZATION

JANUARY 2018

SITE LOCATION MAP

0 2000' 4000'
APPROX. SCALE

INDEX TO DRAWINGS	
GENERAL	
SHEET NO.	**TITLE**
G-00	COVER SHEET
INSTRUMENTATION	
I-01	INSTRUMENTATION LEGEND AND SYMBOLS
I-02	PROCESS FLOW DIAGRAM
I-03	PIPING AND INSTRUMENTATION DIAGRAM
CIVIL	
C-01	SITE PLAN I
C-02	SITE PLAN II
MECHANICAL	
M-01	EQUIPMENT LAYOUT
M-02	HVAC LAYOUT AND DETAILS
ELECTRICAL	
E-01	ELECTRICAL LEGEND AND LOAD CALCULATIONS
E-02	ELECTRIC SINGLE LINE DIAGRAM

DRAFT

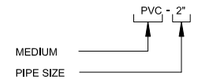
APPROVED FOR
ARCADIS CE, INC. _____

LEGAL ENTITY: ARCADIS CE, INC.

ARCADIS

NOTE:
SCALES SHOWN HEREIN ARE FOR FULL SIZE PLOTS.
CONTRACTOR SHALL BE RESPONSIBLE FOR CONVERTING
SCALES ON REDUCED OR ENLARGED PLOTS.

LINE IDENTIFICATION



EQUIPMENT DESCRIPTIONS / TYPES

AC-601 AIR COMPRESSOR
MAKE: INGERSOLL RAND
MODEL: 2475
TYPE: 3P, 200VAC
SPEC: 24 CFM @ 100PSI

CFP-503 CHEMICAL FEED PUMP
MAKE: WALCHEM
MODEL: EHE46E1-HV
TYPE: DIAPHRAGM
SPEC: 8 GPH @ 60 PSI
MOTOR: 115 VAC

CFP-502 CHEMICAL FEED PUMP
MAKE: WALCHEM
MODEL: EWN-B16VEUR
TYPE: DIAPHRAGM
SPEC: 1 GPH @ 105 PSI
MOTOR: 115 VAC

CFP-501 CHEMICAL FEED PUMP
MAKE: BLUE WHITE
MODEL: A1N20V-6T
TYPE: PERISTALTIC
SPEC: 24 GPD @ 50 PSI
MOTOR: 115 VAC

FP-301 FILTER PRESS
MAKE: AQUACARE
MODEL: EPG 6030/32-20

IPC-201 INCLINED PLATE CLARIFIER (200 GPM)

MX-201 MIXER: 8" IMPELLER
MAKE: SEW-EURODRIVE
MODEL: FAF27-350-0.5-8
MOTOR: 3P, 230VAC, 1/2HP, 350 RPM

MX-501 MIXER: 11" IMPELLER
MAKE: SEW-EURODRIVE
MODEL: KAF37-0.75-350-11
MOTOR: 3P, 230VAC, 3/4HP, 350 RPM

MX-202 MIXER: PICKET FENCE
MAKE: SEW-EURODRIVE
MODEL: FAF37-0.5-20PF
MOTOR: 3P, 230VAC, 1/2HP, 350 RPM

P-301 SLUDGE TRANSFER PUMP
MAKE: WILDEN
MODEL: M4, 1.5"ø
TYPE: PNEUMATIC DIAPHRAGM

P-302 SLUDGE TRANSFER PUMP
MAKE: WILDEN
MODEL: M8, 2"ø
TYPE: PNEUMATIC DIAPHRAGM

P-303 TRANSFER PUMP
MAKE: GOULDS
MOTOR: 1.5 HP, 1P, 120 VAC

P-401 DISCHARGE PUMP #1
MAKE: GOULDS
MODEL: 3642
MOTOR: 1.5 HP, 3P, 200 VAC

P-402 DISCHARGE PUMP #2
MAKE: GOULDS
MODEL: 3642
MOTOR: 1.5 HP, 3P, 200 VAC

T-301 SLUDGE THICKENER TANK (2,400 GAL)

T-302 FILTRATE/DECANT TANK (55 GAL)

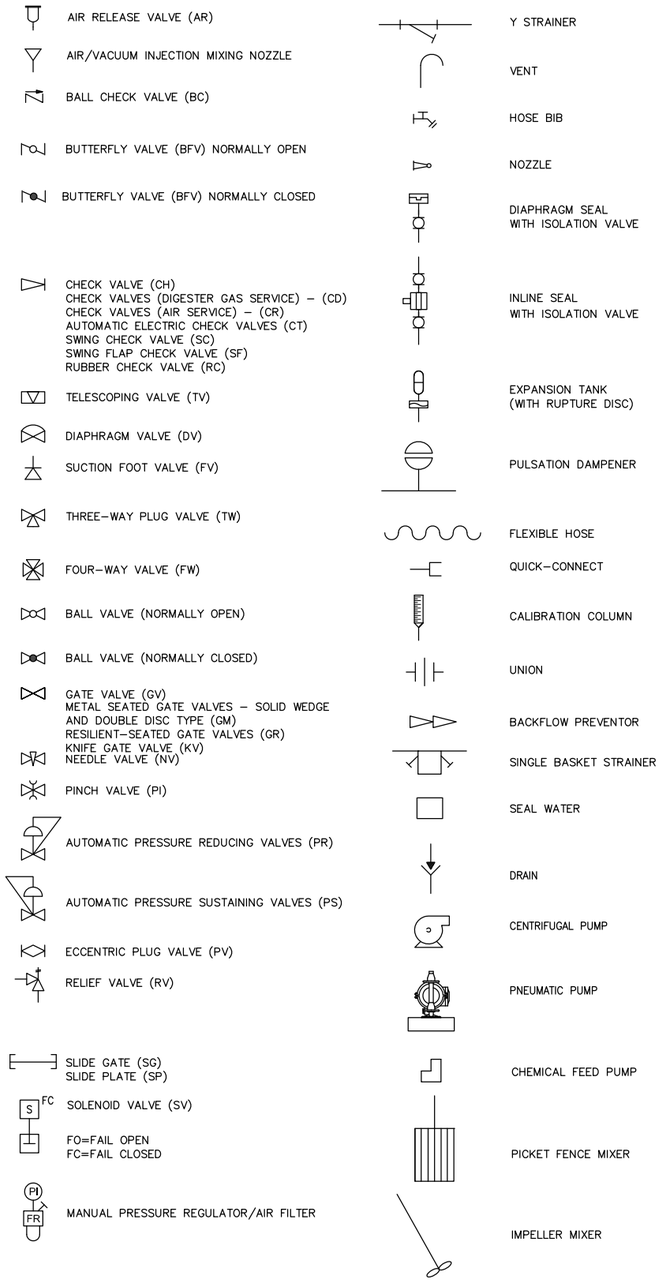
T-401 CLARIFIER CATCH TANK (1,200 GAL)

T-501 FLOCULANT MIX TANK (500 GAL)

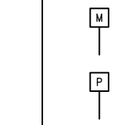
V-201 4"ø PVC PNEUMATIC ACTUATED FLANGED BUTTERFLY VALVE

V-202 2"ø PVC PNEUMATIC ACTUATED FLANGED BUTTERFLY VALVE

PIPING & VALVE SYMBOLS



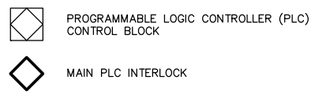
ACTUATOR TYPES



ABBREVIATIONS

AC	AIR COMPRESSOR
AI	ANALOG INPUT SIGNAL
AO	ANALOG OUTPUT SIGNAL
BC	BELT CONVEYOR
BF	BIOFILTER
BST	BULK STORAGE TANK
BW	BLOWER
CF	CENTRIFUGE
CL	CLARIFIER
CFP	CHEMICAL FEED PUMP
CP	COMPRESSOR
CT	COLLECTOR
DAF	DISSOLVED AIR FLOTATION THICKENER
DIG	DIGESTER
DS	DRUM SCREEN
DT	DRY TANK
E	ELECTRIC
FP	FILTER PRESS
FC	FLOCULANT
FL	FILTER
FN	FAN
FR	FILTER REGUALTOR
FS	FINE SCREEN
FT	FLAME TRAP
GD	GRINDER
GH	GAS HOLDER
GN	GENERATOR
GPM	GALLONS PER MINUTE
H	HOIST
HP	HOPPER
HS	HAND SWITCH
HX	HEAT EXCHANGER
IPC	INCLINED PLATE SEPARATOR
IMLR	INTERNAL MIXED LIQUOR RETURN
LT	LEVEL TRANSMITTER
LSH	LEVEL SENSOR HIGH
M	MOTOR
MCP	MAIN CONTROL PANEL
MX	MIXER
P	PUMP
PAH	PRESSURE ALARM HIGH
PSH	PRESSURE SWITCH HIGH
PE	PNEUMATIC EJECTOR
PI	PRESSURE INDICATOR
PT	PRESSURE TRANSMITTER
PVC	POLYVINYL CHLORIDE
RO	REVERSE OSMOSIS MEMBRANE EQUIPMENT
S	SILENCER
SA	SURFACE AERATORS
SB	SCRUBBER
SC	SCREW CONVEYOR
SCH	SCHEDULE
SK	STORAGE TANK
ST	STRAINER
SV	SOLENOID VALVE
T	TANK
V	VALVE

BASE INSTRUMENTATION SYMBOLS



TREATMENT PLANT CONTROL SYSTEM INTERLOCKS

TREATMENT SYSTEM CONTROL SYSTEM INTERLOCKS

INTERLOCK #	DESCRIPTION
1	IF THERE IS A LOSS OF POWER THEN RUN TREATMENT SYSTEM SHUT DOWN SEQUENCE AND TURN ON PWR FAILURE ALARM
2	BUILDING LOW TEMPERATURE -40F, TURN ON LOW TEMP ALARM
3	IF LSH-201 IS ON THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON LSH-201 ALARM
4	IF LSH-202 IS ON THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON LSH-201 ALARM
5	IF LSH-203 IS ON THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON LSH-201 ALARM
6	IF LSH-204 IS ON THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON LSH-201 ALARM
7	IF LSH-301 IS ON THEN SWITH OFF SV-604 TO TURN OFF P-301, AND TURN ON LSH-301 ALARM
8	IF LSH-302 IS ON THEN SWITH OFF SV-604 TO TURN OFF P-301, AND TURN ON LSH-302 ALARM
9	IF LSH-401 IS ON, TURN ON LSH-401 HIGH ALARM, AND TURN OFF SV-501, SV-602, P-101, P-102, P103, AND P-104
10	IF LT-401 LEVEL IS GREATER THAN 58 INCHES, THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON HIGH TANK ALARM
11	IF PT-401 IS HIGH OR LOW AND P-401 IS ON, THEN TURN P-401 OFF, THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND P-401 ALARM ON
12	IF PT-402 IS HIGH OR LOW AND P-402 IS ON, THEN TURN P-402 OFF, THEN SWITCH OFF SV-601/SV-602, CLOSE V-201, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND P-402 ALARM ON
13	IF P-401 ALARM IS ON AND LT-401 IS HIGH, THEN TURN ON P-402
14	IF P-402 ALARM IS ON AND LT-401 IS HIGH, THEN TURN ON P-401
15	IF PT-601 IS HIGH AND SV-605 IS ON, THEN SWITH SV-602 OFF, THEN TURN AC-601 OFF, TURN OFF P-101, P-102, P-103, P-104, CFP-501, CFP-502, CFP-503, MX-201 AND MX-202, AND TURN ON PT-601 HIGH ALARM
16	IF PT-602 IS HIGH AND SV-605 IS ON, THEN SWITH SV-605 OFF AND TURN ON PT-602 HIGH ALARM
17	IF P-701 IS CALLED TO RUN BUT THE P-701 RUN SIGNAL IS OFF, THEN TURN P-701 OFF, RUN TREATMENT SYSTEM SHUT DOWN SEQUENCE, AND TURN ON P-701 ALARM

TREATMENT SYSTEM CONTROL SYSTEM INTERLOCKS

EQUIPMENT	DESCRIPTION
P-101, P-102, P-103, P-104	WELL PUMPS P-101, P-102, P-103, P-104 NORMAL OPERATION ARE CONTROLLED BY A SEPARATE PLC AND SET OF PERMISSIVES.
P-101, P-102, P-103, P-104	IF P-101, P-102, P-103, OR P-104 ARE ON, THEN TURN MX-201 AND MX-202 ON AND CFP-501, CFP-502, AND CFP-503.
P-201, P-202	BUILDING SUMP PUMP OPERATION SHALLE BE AUTOMATIC BASED ON LOCAL SUMP LEVEL SWITCH.
MX-201, MX-202	MIXERS MX-201 AND MX-202 OPERATION SHALL BE CONTROLLED BY VFD BASED SPEED SETPOINT. PERMISSIVE CONDITIONS ARE IDENTIFIED IN THE INTERLOCK LIST.
P-301	SLUDGE TRANSFER PUMP SHALL BE MANUALLY INITIATED BY OPERATOR. PUMP PERMISSIVE CONDITIONS ARE INDENTIFIED IN THE INTERLOCK LIST.
P-302	SLUDGE TRANSFER PUMP SHALL BE MANUALLY INITIATED BY OPERATOR. PUMP PERMISSIVE CONDITIONS ARE INDENTIFIED IN THE INTERLOCK LIST.
P-303	TANK SUMP PUMP OPERATION SHALLE BE AUTOMATIC BASED ON LOCAL LEVEL SWITCH.
FP-301	FILTER PRESS SHALL BE MANUALLY INITIATED BY OPERATOR. PERMISSIVE CONDITIONS ARE INDENTIFIED IN THE INTERLOCK LIST.
P-401	IF LT-401 IS HIGH AND THERE ARE NO ALARMS FROM VFD-401, THEN TURN ON P-401 (00:01 TO 11:59).
P-402	IF LT-401 IS HIGH AND THERE ARE NO ALARMS FROM VFD-402, THEN TURN ON P-402 (00:01 TO 11:59).
P-401, 402	IF LT-401 IS LOW THEN TURN P-401 AND P-402 OFF.
T-401	IF LT-401 INDICATES A NORMAL RANGE, THEN SWITH SV-601, SV-602, P-101, P-102, P-103, AND P-104 ON.
P-401, P-402	DISCHARGE TRANSFER PUMP OPERATION SHALL BE ALTERNATING LEAD/LAG. PUMPS TO ALTERNATE ON/OFF ON 12 HOUR RUN TIME SCHEDULES. PUMP OPERATION SHALL BE CONTROLLED BY VFD BASED FLOW SETPOINT. PERMISSIVE CONDITIONS ARE IDENTIFIED IN THE INTERLOCK LIST.
MX-501	MIXER MX-501 SHALL BE MANUALLY INITIATED BY OPERATOR.
CFP-501, CFP-502, CFP-503	CHEMCIAL FEED PUMP OPERATION SHALL BE CONTROLLED BY PLC BASED SPEED SETPOINTS. PERMISSIVE CONDITIONS ARE IDENTIFIED IN THE INTERLOCK LIST.
AC-601	AIR COMPRESSOR OPERATION SHALL BE CONTROLLED BY AN INTERNAL PRESSURE SWITCH, AND THE PERMISSIVE CONDITIONS ARE IDENTIFIED IN THE INTERLOCK LIST. PRESSURE REGULATOR SET AT MAXIMIM 90 PSIG.
SV-601, SV-602, SV-603, SV-604, SV-605	ALL SOLENOID ACTUATED VALVES ARE NORMALLY CLOSED EXCEPT SV-201.
SYSTEM SHUTDOWN	IF SYSTEM SHUTDOWN IS ACTIVATED, THEN SWITCH OFF ALL PUMPS, MIXERS, AIR COMPRESSOR, CLOSE ALL SOLENOID VALVES.
ALARM RESET KEYPAD	IF ALARM RESET IS DEPRESSED, THEN SWITCH OFF ALL LSH, PT, P, AND MX ALARMS AND TURN OFF SHUTDOWN SEQUENCE.
P-701	IF LT-701 IS HIGH AND P-701 IS OFF THEN TURN OFF P-701 ON.
P-701	IF LT-701 IS LOW AND P-701 IS ON THEN TURN P-701 OFF.

ARCADIS

LEGAL ENTITY:
ARCADIS CE, INC.

CONSULTANTS

DRAFT

SEALS

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

NO.	DATE	ISSUED FOR	BY

DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: I-01_V2
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

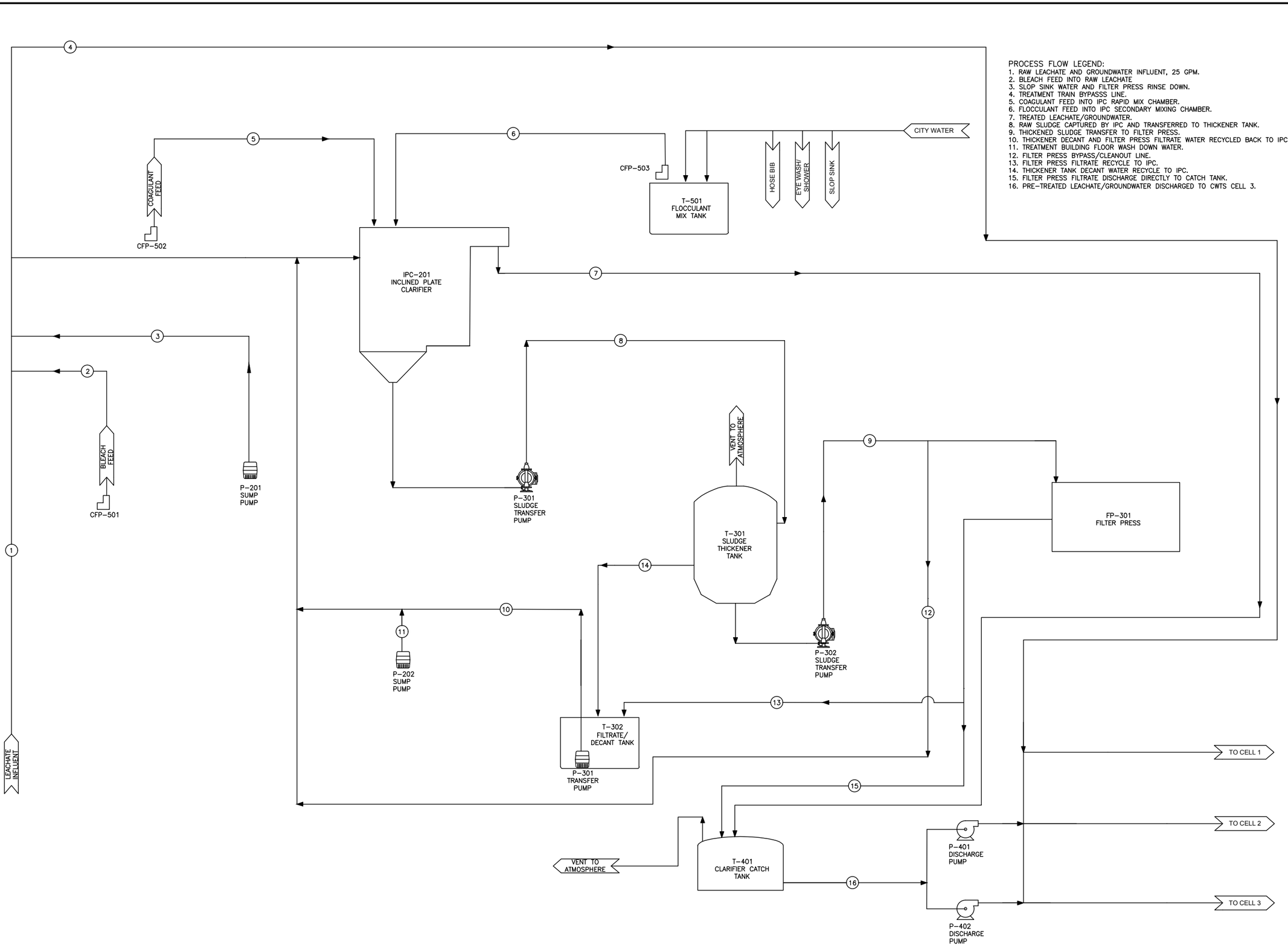
INSTRUMENTATION LEGEND AND SYMBOLS

SCALE: NOT TO SCALE

I-01

SHEET 1 OF 9

User: TCARIGNAN Spec: AUS-NCSM0D File:G:\ACAD\PROJ\00266434.0000\RSO\I-01_V2.DWG Scale:1:1 SavedDate:1/31/2018 Time:18:55 Plot Date: Carignan, Todd: 1/31/2018; 18:55 ; Layout:I-01



PROCESS FLOW LEGEND:

1. RAW LEACHATE AND GROUNDWATER INFLUENT, 25 GPM.
2. BLEACH FEED INTO RAW LEACHATE
3. SLOP SINK WATER AND FILTER PRESS RINSE DOWN.
4. TREATMENT TRAIN BYPASSS LINE.
5. COAGULANT FEED INTO IPC RAPID MIX CHAMBER.
6. FLOCCULANT FEED INTO IPC SECONDARY MIXING CHAMBER.
7. TREATED LEACHATE/GROUNDWATER.
8. RAW SLUDGE CAPTURED BY IPC AND TRANSFERRED TO THICKENER TANK.
9. THICKENED SLUDGE TRANSFER TO FILTER PRESS.
10. THICKENER DECANT AND FILTER PRESS FILTRATE WATER RECYCLED BACK TO IPC.
11. TREATMENT BUILDING FLOOR WASH DOWN WATER.
12. FILTER PRESS BYPASS/CLEANOUT LINE.
13. FILTER PRESS FILTRATE RECYCLE TO IPC.
14. THICKENER TANK DECANT WATER RECYCLE TO IPC.
15. FILTER PRESS FILTRATE DISCHARGE DIRECTLY TO CATCH TANK.
16. PRE-TREATED LEACHATE/GROUNDWATER DISCHARGED TO CWTS CELL 3.

ARCADIS

LEGAL ENTITY:
ARCADIS CE, INC.

CONSULTANTS

DRAFT

SEALS

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

FORT EDWARD LANDFILL
LEAVY HOLLOW ROAD
FORT EDWARD, NEW YORK

NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: I-02
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

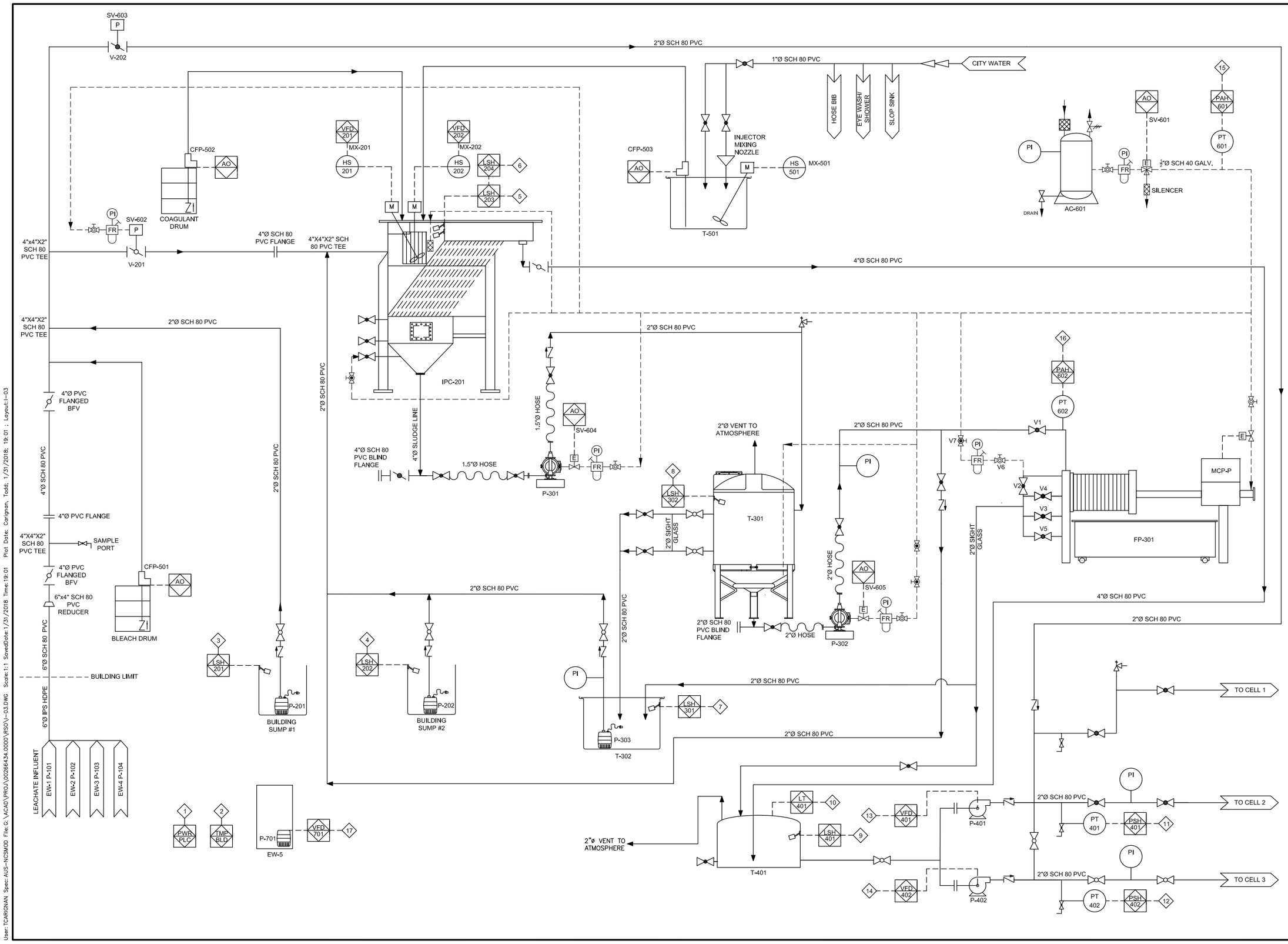
PROCESS FLOW DIAGRAM

SCALE: NOT TO SCALE

I-02

SHEET 2 OF 9

User:HAUSMANN Spec:AUS-NCSMOD File:G:\ACAD\PROJ\00266434.0000\RSO\I-02.DWG Scale:1:1 SavedDate:1/31/2018 Time:14:01 Plot Date: Housmann, Steve; 1/31/2018; 15:02 ; Layout:I-02



ARCADIS

LEGAL ENTITY:
ARCADIS CE, INC.

CONSULTANTS

DRAFT

SEALS

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

FORT EDWARD LANDFILL
LEAVY HOLLOW ROAD
FORT EDWARD, NEW YORK

NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE:	JANUARY 2018
PROJECT NO.:	00266434.0000
FILE NAME:	I-03
DESIGNED BY:	T. CARIGNAN
DRAWN BY:	S. HAUSMANN
CHECKED BY:	.

SHEET TITLE

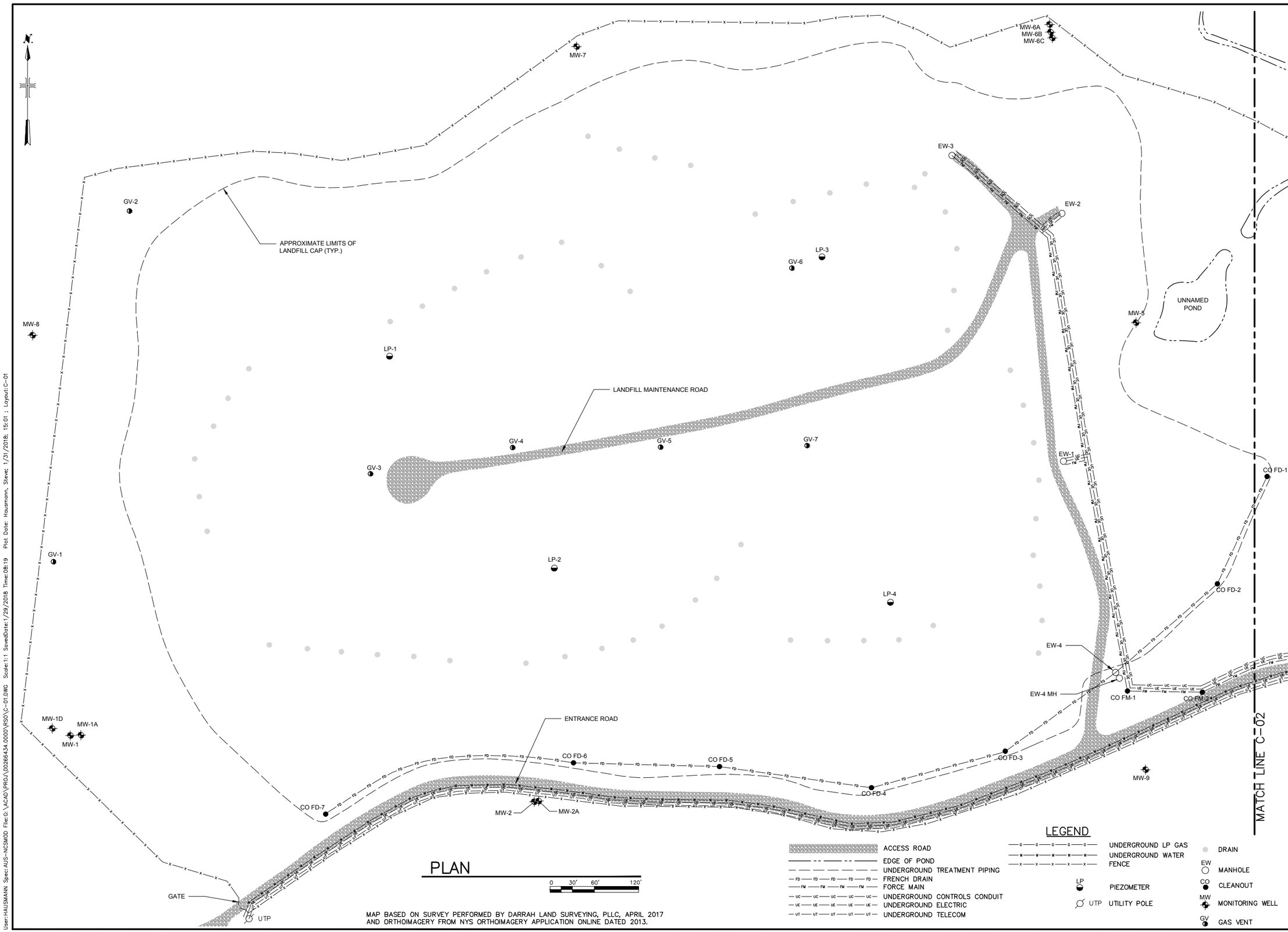
PIPING AND INSTRUMENTATION DIAGRAM

SCALE: NOT TO SCALE

I-03

SHEET 3 OF 9

User: TCARIGNAN Spec: AUS-NCSMOD File: G:\ACAD\PROJ\00266434.0000\RSO\I-03.DWG Scale: 1:1 SavedDate: 1/31/2018 Time: 19:01 Plot Date: Carignon, Todd, 1/31/2018; 19:01 ; Layout:I-03



PLAN

0 30' 60' 120'

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017 AND ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

LEGEND

- ACCESS ROAD
- EDGE OF POND
- UNDERGROUND TREATMENT PIPING
- FRENCH DRAIN
- FORCE MAIN
- UNDERGROUND CONTROLS CONDUIT
- UNDERGROUND ELECTRIC
- UNDERGROUND TELECOM
- UNDERGROUND LP GAS
- UNDERGROUND WATER
- FENCE
- PIEZOMETER
- UTP UTILITY POLE
- DRAIN
- EW MANHOLE
- CO CLEANOUT
- MW MONITORING WELL
- GV GAS VENT

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FORT EDWARD, NEW YORK

NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE:	JANUARY 2018
PROJECT NO.:	00266434.0000
FILE NAME:	C-01
DESIGNED BY:	J. MULLINS
DRAWN BY:	S. HAUSMANN
CHECKED BY:	.

SHEET TITLE

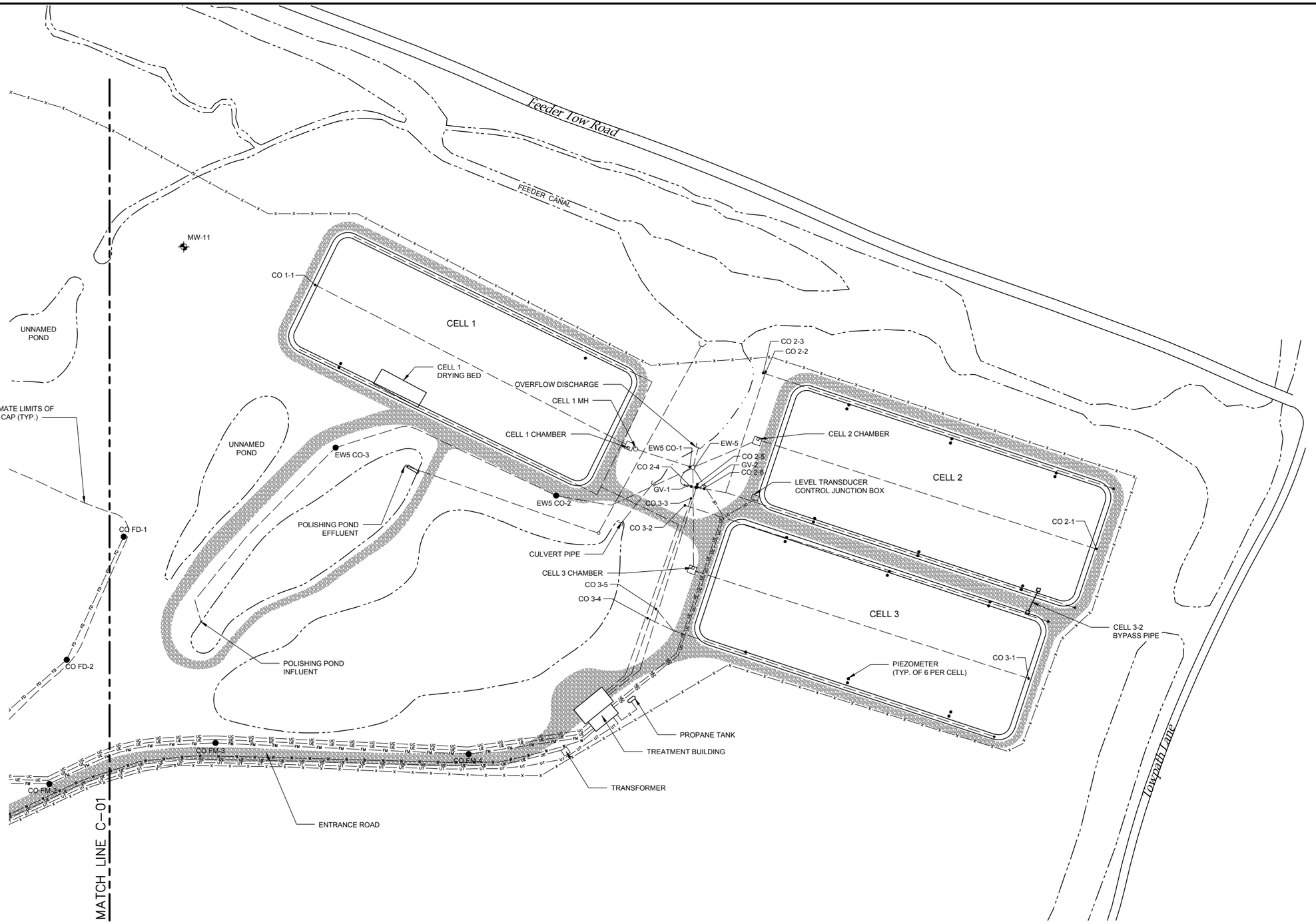
SITE PLAN I

SCALE: 1" = 60'

C-01

SHEET 3 OF 9

User:HAUSMANN Spec:AUS-NCSMOD File:G:\ACAD\PROJ\00266434.0000\RSO\C-01.DWG Scale:1:1 SavedDate:1/29/2018 Time:08:19 Plot Date: Housmann, Steve; 1/31/2018; 15:01 ; Layout:C-01



PLAN

0 30' 60' 120'

LEGEND

- ACCESS ROAD
- EDGE OF POND
- UNDERGROUND TREATMENT PIPING
- FD — FD — FD — FD — FD — FRENCH DRAIN
- FM — FM — FM — FM — FORCE MAIN
- UC — UC — UC — UC — UC — UNDERGROUND CONTROLS CONDUIT
- UE — UE — UE — UE — UE — UNDERGROUND ELECTRIC
- UT — UT — UT — UT — UT — UNDERGROUND TELECOM
- G — G — G — G — G — UNDERGROUND LP GAS
- W — W — W — W — W — UNDERGROUND WATER
- X — X — X — X — X — FENCE
- LP PIEZOMETER
- UTP UTILITY POLE
- DRAIN
- EW MANHOLE
- CO CLEANOUT
- MW MONITORING WELL
- GV GAS VENT

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017 AND ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

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NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE:	JANUARY 2018
PROJECT NO.:	00266434.0000
FILE NAME:	C-02
DESIGNED BY:	J. MULLINS
DRAWN BY:	S. HAUSMANN
CHECKED BY:	.

SHEET TITLE

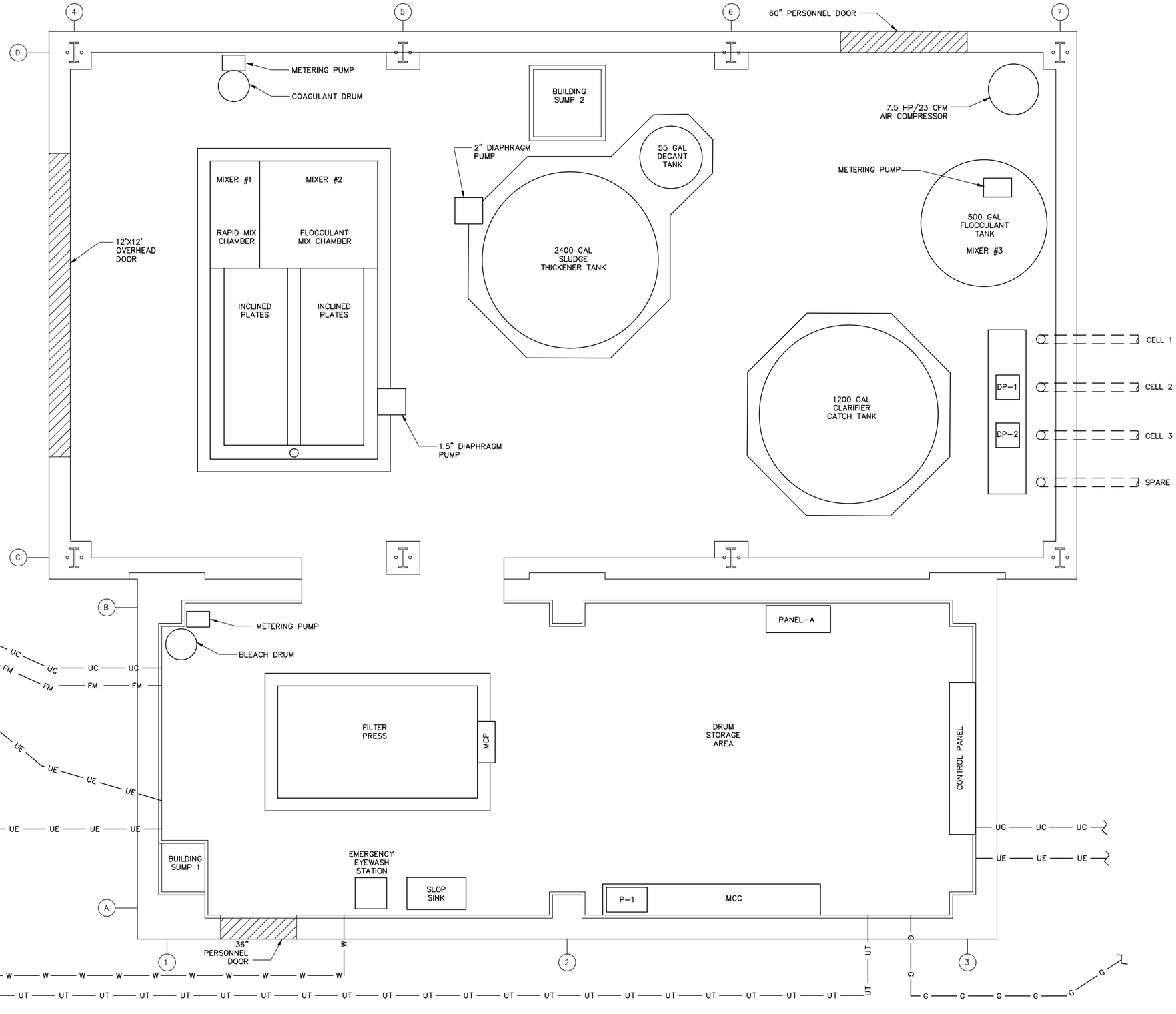
SITE PLAN II

SCALE: 1" = 60'

C-02

SHEET 4 OF 9

User:HAUSMANN Spec:AUS-NCSMOD File:G:\ACAD\PROJ\00266434.0000\RSO\C-02.DWG Scale:1:1 SavedDate:1/29/2018 Time:08:20 Plot Date: Hausmann, Steve; 1/31/2018; 15:01 ; Layout:C-02



FLOOR PLAN

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REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

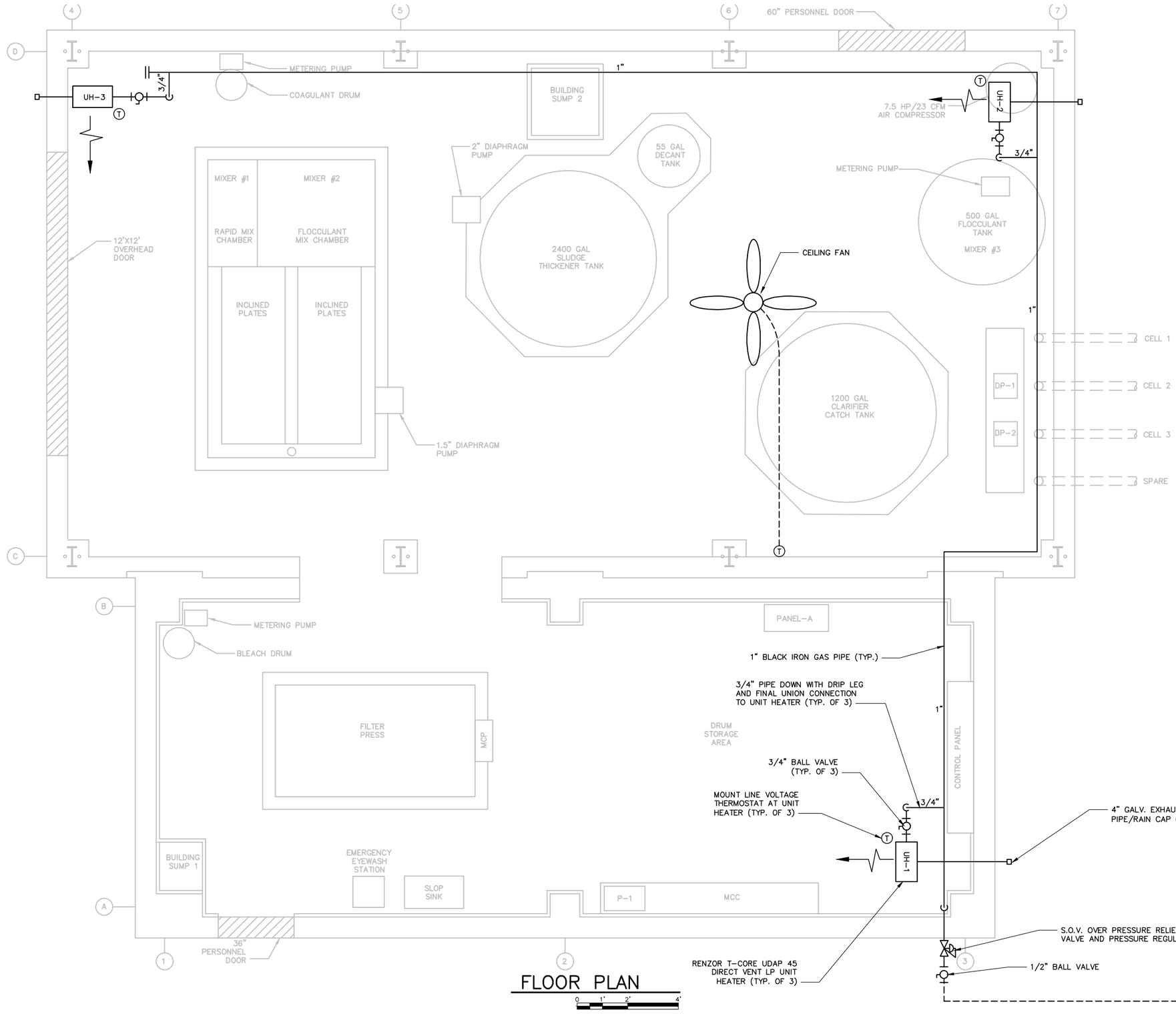
DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: M-01
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

EQUIPMENT LAYOUT

SCALE: 1/2" = 1'-0"

M-01
SHEET 5 OF 9



FLOOR PLAN

LEGEND

- BALL VALVE
- PRESSURE RELIEF VALVE
- THERMOSTAT
- FLANGE/CAP

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REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: M-02
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

HVAC LAYOUT AND DETAILS

SCALE: 1/2" = 1'-0"

M-02

SHEET 6 OF 9

User:HAUSMANN Spec:AUS-NCSMOD File:G:\ACAD\PROJ\00266434.0000\RSO\M-02.DWG Scale:1:1 Saved Date:1/29/2018 Time:08:21 Plot Date: Hausmann, Steve: 1/31/2018; 15:02 ; Layout:M-02

ELECTRICAL SYMBOL LEGEND

SINGLE LINE DIAGRAM

- SERVICE CONNECTION
- CIRCUIT BREAKER
- DISCONNECT SWITCH
- MOTOR
- COMBINATION MOTOR STARTER WITH MOTOR CIRCUIT PROTECTOR AND OVERLOADS
- METER
- GROUND ROD
- FUSE
- DRY TYPE TRANSFORMER
- PANEL
- VARIABLE FREQUENCY DRIVE (VFD)
- SURGE PROTECTION DEVICE (SPD)
- RECEPTACLES
- LIGHTS

MOTOR CONTROL CENTER (MCC)

DEVICE	MCC LOCATION	VOLTAGE	PHASE	HP	DUTY FACTOR	BREAKER SIZE (AMPS)	CONNECT LOAD (AMPS)**	DEMAND LOAD (AMPS)**	kVA	
PANELBOARD P-A	1B	208	3	--	100.0%	100	36.78	36.78	13.25	
DISCHARGE PUMP SP-2	1C	208	3	1.50	100.0%	15	5.40	5.40	1.95	
DISCHARGE PUMP SP-1	1D	208	3	1.50	100.0%	15	5.40	5.40	1.95	
MIXER M-1	2B	208	3	0.50	100.0%	15	2.00	2.00	0.72	
MIXER M-2	2C	208	3	0.50	100.0%	15	2.00	2.00	0.72	
SPARE STARTER	3A1	208	3	5.00	0.0%	35	16.80	0.00	0.00	
SPARE STARTER	3A2	208	3	5.00	0.0%	35	16.80	0.00	0.00	
SPARE VFD	3B	208	3	0.50	0.0%	15	2.40	0.00	0.00	
MCC PANELBOARD P-1	4B	208	3	--	100.0%	100	38.64	38.64	13.92	
SPARE VFD	4C	208	3	0.50	0.0%	15	2.40	0.00	0.00	
						SUBTOTALS :	129	90	32.50	
							TOTAL ELECTRICAL LOAD:		90.22	CONNECTED AMPS
**VALUES TAKEN FROM 2011 NEC									90.22	DEMAND AMPS
MAIN BREAKER INFORMATION									113	MINIMUM BREAKER SIZE
									225	MAIN BREAKER

ID: P-1 LOCATION: MOTOR CONTROL CENTER (MCC) NOTES: CABINET MOUNTING: SURFACE
VOLTS: 208V PHASE: 3 WIRE: 4 ENCLOSURE: NEMA 3R 100 AMP MAIN BREAKER RATING: 25 KAIC
FEED TOP FROM MCC BUCKET 4A

LOAD SERVED	LOAD (KVA) A	B	C	BREAKER AMP	POLE	CKT	PH	CKT	BREAKER POLE	AMP	LOAD (KVA) A	B	C	LOAD SERVED
METERING PUMP P-103	0.20			15	1	1		2	1	15	0.60			LIGHTING
CEILING FAN CF-1		0.12		15	1	3		4	1	20		1.20		RECEPTACLES
BUILDING SUMP PUMP P-104			0.96	20	1	5		6	1	20			0.60	LIGHTING
MCP 120 VAC POWER	1.00			20	1	7		8	1	20	1.20			OUTDOOR RECEPTACLE
MCP 24 VDC POWER		0.25		20	1	9		10	1	20				SPARE
SPARE				20	1	11		12	1	20				SPARE
SPARE				20	1	13		14	1	20				SPARE
SPARE				20	1	15		16	1	20				SPARE
SPARE				20	1	17		18	1	20			1.20	FILTER PRESS CONTROL PANEL
COLLECTION TRENCH SUMP PUMP EW-4	0.42			15	3	19		20			0.30			EXTRACTION PUMP EW-1
		0.42				21		22	3	15		0.30		
			0.42			23		24					0.30	
EXTRACTION PUMP EW-2	0.30			15	3	25		26	3	15	0.30			EXTRACTION PUMP EW-3
		0.30				27		28				0.30		
			0.30			29		30					0.30	
EFFLUENT COLLECTION SUMP PUMP EW-5	0.91			15	3	31		32	3	20				UNIT HEATER UH-2 (NO LONGER IN USE)
		0.91				33		34						
			0.91			35		36						
AIR HANDLER HEATER (NO LONGER IN USE)				15	3	37		38						
						39		40						
						41		42						
SUB TOTAL CONNECTED KVA	2.83										2.40			5.23
		2.00										1.80		3.80
			2.45										2.40	4.89
TOTAL CONNECTED KVA														**13.92**

ID: P-A LOCATION: TREATMENT SYSTEM BUILDING NOTES: CABINET MOUNTING: SURFACE
VOLTS: 208V PHASE: 3 WIRE: 4 ENCLOSURE: NEMA 3R 100 AMP MAIN BREAKER RATING: 25 KAIC
FEED TOP FROM MCC

LOAD SERVED	LOAD (KVA) A	B	C	BREAKER AMP	POLE	CKT	PH	CKT	BREAKER POLE	AMP	LOAD (KVA) A	B	C	LOAD SERVED
AIR COMPRESSOR AC-1	2.92			30	3	1		2	3	30	0.29			FLOC TANK MIXER (M-3)
		2.92				3		4				0.29		
			2.92			5		6					0.29	
RECEPTACLES	1.20			20	1	7		8	1	20	0.12			CEILING FAN CF-2
RECEPTACLES		1.20		20	1	9		10	1	20		0.50		UP UNIT HEATERS
OVERHEAD LIGHTS			0.60	20	1	11		12						
						13		14						
						15		16						
						17		18						
						19		20						
						21		22						
						23		24						
						25		26						
						27		28						
						29		30						
SUB TOTAL CONNECTED KVA	4.12										0.41			4.53
		4.12										0.79		4.91
			3.52										0.29	3.81
TOTAL CONNECTED KVA														**13.25**

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FORT EDWARD LANDFILL
LEAVY HOLLOW ROAD
FORT EDWARD, NEW YORK

NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: E-01
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

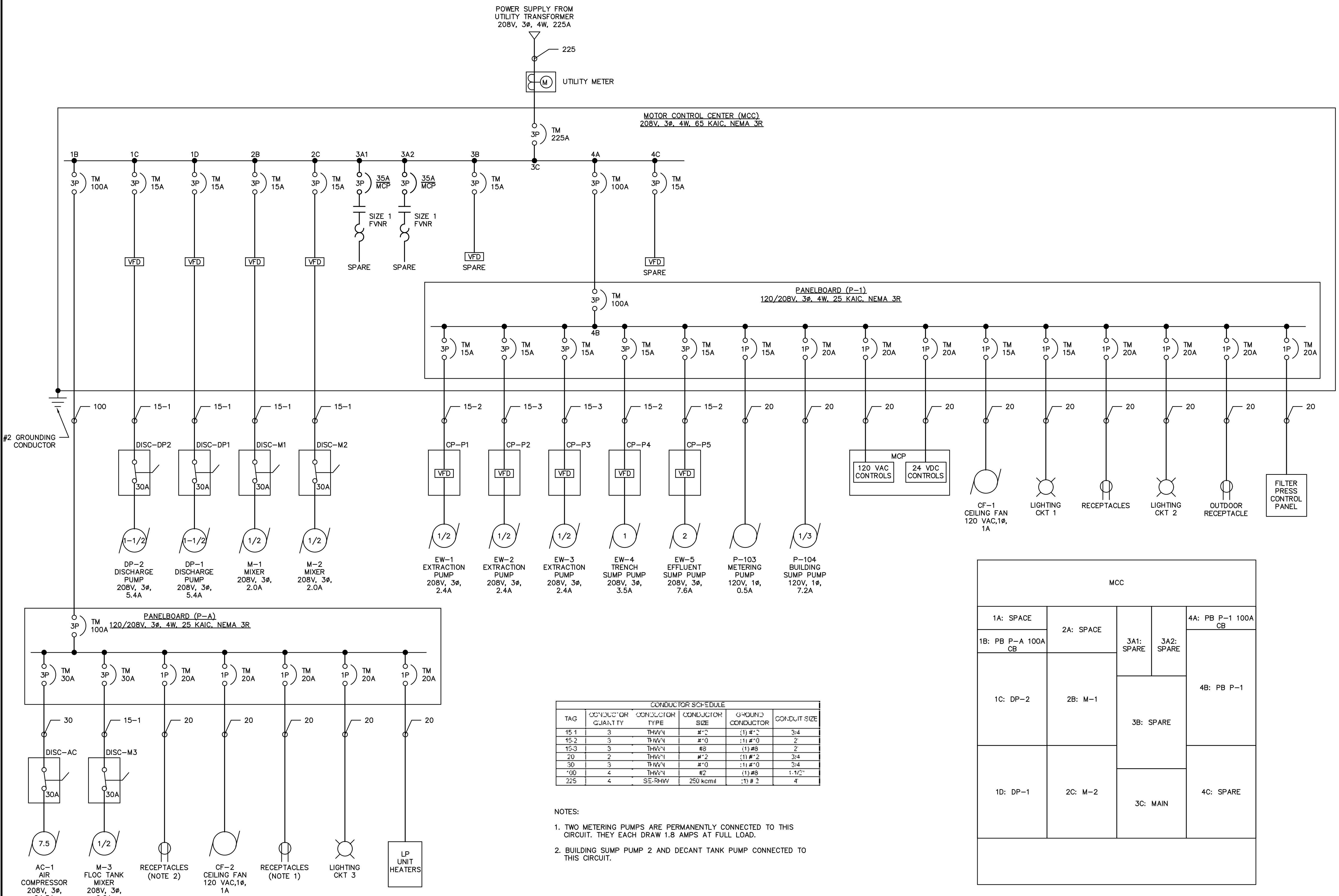
ELECTRICAL LEGEND AND LOAD CALCULATIONS

SCALE: NOT TO SCALE

E-01

SHEET 7 OF 9

User:HAUSMANN Spec:AUS-NCSM0D File:G:\AGAD\PROJ\00266434.0000\RSO\E-01.DWG Scale:1:1 SavedDate:1/30/2018 Time:14:09 Plot Date: Hausmann, Steve; 1/31/2018; 15:01 ; Layout:E-1



CONDUCTOR SCHEDULE					
TAG	CONDUCTOR QUANTITY	CONDUCTOR TYPE	CONDUCTOR SIZE	GROUND CONDUCTOR	CONDUIT SIZE
15-1	3	THWN	#12	(1) #12	3/4
15-2	3	THWN	#10	(1) #10	2"
15-3	3	THWN	#8	(1) #8	2"
20	2	THWN	#12	(1) #12	3/4
30	3	THWN	#10	(1) #10	3/4
100	4	THWN	#2	(1) #8	1-1/2"
225	4	SE-RHW	250 kcmil	(1) # 2	4"

NOTES:

1. TWO METERING PUMPS ARE PERMANENTLY CONNECTED TO THIS CIRCUIT. THEY EACH DRAW 1.8 AMPS AT FULL LOAD.
2. BUILDING SUMP PUMP 2 AND DECANT TANK PUMP CONNECTED TO THIS CIRCUIT.

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FORT EDWARD, NEW YORK

NYSDEC SITE 558001

REMEDIAL SYSTEM OPTIMIZATION

NO.	DATE	ISSUED FOR	BY

DATE: JANUARY 2018
PROJECT NO.: 00266434.0000
FILE NAME: E-02
DESIGNED BY: T. CARIGNAN
DRAWN BY: S. HAUSMANN
CHECKED BY: .

SHEET TITLE

ELECTRICAL SINGLE LINE DIAGRAM

SCALE: NOT TO SCALE

E-02

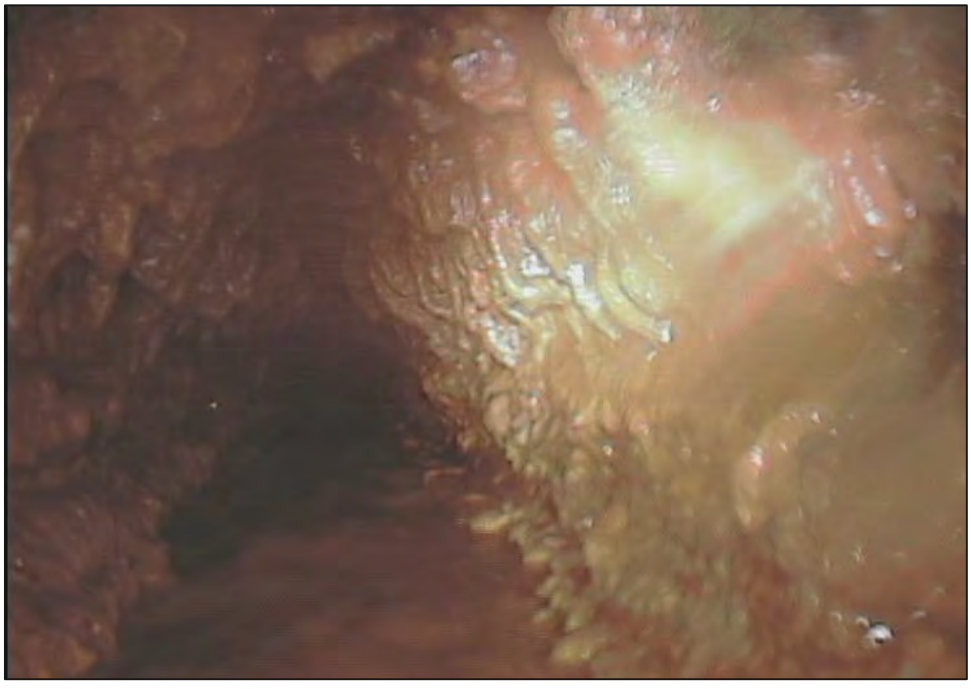
SHEET 8 OF 9

User:HAUSMANN Spec:AUS-NCSMOD File:G:\ACAD\PROJ\00266434.0000\RSO\E-02.DWG Scale:1:1 SavedDate:1/30/2018 Time:13:58 Plot Date: Hausmann, Steve; 1/31/2018; 15:01 ; Layout:E-2

APPENDIX B

Leachate Collection Pipe Photographs

Project Photographs



Date:
January 2017

Description:
Camera inspection

Location:
Cleanout CO FD-7

Date:
December 2017

Description:
Camera inspection after jetting

Location:
Cleanout CO FD-7

APPENDIX C

2017 Groundwater Sampling Report Tables and Figures

Table 1
Summary of Water Level Data
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Well ID	Measuring Point Elevation (ft. amsl)	August 2017	
		Depth to Water (ft.)	Groundwater Elevation (ft. amsl)
MW-1	256.94	37.06	219.88
MW-1A	253.55	39.73	213.82
MW-1D	258.66	46.70	211.96
MW-2	193.86	7.34	186.52
MW-2A	193.93	8.80	185.13
MW-5	183.43	7.49	175.94
MW-6	192.98	8.05	184.93
MW-6A	192.80	9.56	183.24
MW-6B	192.55	14.95	177.60
MW-7	210.47	16.77	193.70
MW-8	240.09	7.58	232.51
MW-9	174.49	7.94	166.55
MW-11	182.36	16.22	166.14

Notes:
All measurments in feet.

Definitions:
amsl - above mean sea level
ft - feet

Table 2
Volatile Organic Compound Analytical Results for 2017 Groundwater
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	MW-1	MW-1A	DUP-MW-1A	MW-1D	MW-2	MW-2A	MW-5	MW-6	MW-6A	MW-6B	MW-7	MW-8	MW-9	MW-10	MW-11	EW-1	EW-2	EW-3	EW-4
Sample Date		8/2/2017	8/3/2017	8/3/2017	8/1/2017	8/3/2017	8/2/2017	8/7/2017	8/3/2017	8/3/2017	8/3/2017	8/1/2017	8/1/2017	8/1/2017	8/1/2017	8/2/2017	7/31/2017	7/31/2017	7/31/2017	7/31/2017
Units	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Acetone	50	50 U	50 U	50 U	50 U	50 U	50 U	20 J	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	1,200 U	12 J	10 J	50 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.1**	**3.2**	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10 J**	**4.7**	**4.6**	1.0 U
Bromochloromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	5.0 U	5.0 U
2-Butanone (MEK)	50	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	500 U	20 U	20 U	20 U
Carbon Disulfide	60	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	100 U	4.0 U	4.0 U	4.0 U
Carbon Tetrachloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.0**	**23**	**3.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**7.8 J**	**1.4**	**32**	1.0 U
Chlorodibromomethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 J	1.8 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	0.8 J	5.0 U
Cyclohexane	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.4 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	1.1 J	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (EDB)	0.0006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	0.41 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	0.57 J	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.34 J	**4.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	0.34 J	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.79 J	**1.5**	**3.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	0.49 J	**6.5**	1.0 U
Dichlorodifluoromethane (Freon 12)	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	**1.4**	1.0 U	1.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**7.5 J**	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**50**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1,600**	0.5 J	1.0 U	1.0 U
trans-1,2-Dichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**16 J**	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	--	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.28 J	**110**	**3.2**	**9.6**	0.4 U	0.4 U	0.4 U	**5.2**	0.4 U	0.4 U	**140**	**48**	**74**	**3.9**
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.54 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
2-Hexanone (MBK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U	10 U
Isopropylbenzene (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 J	0.38 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	0.4 J	**1.2**	1.0 U
Methyl Acetate	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	0.96 J	0.69 J	0.09 J
Methyl Cyclohexane	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.71 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	0.65 J	1.0 U
Methylene Chloride	5	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	120 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U	10 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.1**	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12 J	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J	25 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**710**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**3,000**	2.0 U	2.0 U	2.0 U
m+p Xylene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**3.8**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**24 J**	1.2 J	2.0 U	2.0 U
o-Xylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	0.2 J	0.2 J	1.0 U
Xylenes (total)	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	75 U	1.2 J	3.0 U	3.0 U
Total VOCs	--	ND	ND	ND	ND	ND	0.28 J	908.4	32.9	29.5	ND	ND	ND	5.2	ND	0.44	4,817.3	72.37	132.52	3.99

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ug/L - micrograms per Liter
ND - Not Detected
"--" - No regulatory criteria exists for respective analyte.

Table 3
PCB Analytical Results for 2017 Groundwater
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	MW-1	MW-1A	DUP-MW-1A	MW-1D	MW-2	MW-2A	MW-5	MW-6	MW-6A	MW-6B	MW-7	MW-8	MW-9	MW-10	MW-11	EW-1	EW-2	EW-3	EW-4
Sample Date		8/2/2017	8/3/2017	8/3/2017	8/1/2017	8/3/2017	8/2/2017	8/7/2017	8/3/2017	8/3/2017	8/3/2017	8/1/2017	8/1/2017	8/1/2017	8/1/2017	8/2/2017	7/31/2017	7/31/2017	7/31/2017	7/31/2017
Units	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
PCB-1016	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	**250**	0.20 U	0.20 U	**0.63**
PCB-1221	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1232	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1242	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1248	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1254	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1260	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1262	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
PCB-1268	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	100 U	0.20 U	0.20 U	0.20 U
Total PCB	0.09	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	**250**	0.20 U	0.20 U	**0.63**

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.
The NYSDEC Class GA GW Standard for Total PCBs is 0.09 ug/L.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ug/L - micrograms per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 4
Metals Analytical Results for 2017 Groundwater
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	MW-1	MW-1A	DUP-MW-1A	MW-1D	MW-2	MW-2A	MW-5	MW-6	MW-6A	MW-6B	MW-7	MW-8	MW-9	MW-10	MW-11	EW-1	EW-2	EW-3	EW-4
Sample Date		8/2/2017	8/3/2017	8/3/2017	8/1/2017	8/2/2017	8/2/2017	8/7/2017	8/3/2017	8/3/2017	8/3/2017	8/1/2017	8/1/2017	8/1/2017	8/1/2017	8/2/2017	7/31/2017	7/31/2017	7/31/2017	7/31/2017
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum	--	0.05 U	**0.15**	**0.14**	**0.21**	0.05 U	0.05 U	**1.8**	0.05 U	0.05 U	**0.062**	0.05 U	0.05 U	**0.14**	0.05 U	**0.61**	0.05 U	0.05 U	0.05 U	0.05 U
Antimony	0.003	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Arsenic	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.029**	0.01 U	**0.016**	**0.012**	0.01 U	0.01 U	**0.013**	0.01 U	0.01 U	0.0034	**0.025**	0.0098	0.0083
Barium	1	0.05 U	0.05 U	0.05 U	**0.41**	0.05 U	**0.076**	**0.4**	**0.055**	**0.13**	0.05 U	**0.053**	0.05 U	**0.061**	0.05 U	**0.058**	**0.52**	**0.12**	**0.3**	**0.086**
Beryllium	0.003	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Calcium	--	**37**	**12**	**12**	**20**	**82**	**38**	**120**	**73**	**100**	**8.4**	**50**	**57**	**71**	**84**	**56**	**170**	**130**	**80**	**100**
Chromium	0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0075	0.008	0.009	0.05 U
Copper	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	0.3	0.05 U	**0.093**	**0.088**	**0.37**	**5.2**	**14**	**54**	**120**	**21**	**0.24**	**160**	**0.057**	**2.5**	**8.6**	**0.51**	**55**	**22**	**33**	**60**
Lead	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Magnesium	35	**7.8**	**1.4**	**1.4**	**4.8**	**12**	**14**	**45**	**16**	**41**	**1.4**	**9.7**	**12**	**150**	**15**	**16**	**58**	**45**	**39**	**24**
Manganese	0.3	0.01 U	**0.01**	0.01 U	**0.019**	**0.33**	**0.31**	**1.3**	**1.8**	**1.6**	**0.015**	**3.4**	**0.011**	**0.037**	**0.97**	**0.078**	**1.4**	**1.1**	**0.21**	**2.0**
Mercury	0.0007	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.00001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Nickel	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.024**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Potassium	--	2.0 U	2.0 U	2.0 U	**2.9**	**2.5**	2.0 U	**17**	**6.0**	**7.8**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**35.0**	**2.6**	**49.0**	**3.7**
Selenium	0.01	0.005 U	0.5 U	0.500 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	0.05	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sodium	20	**41**	**23**	**23**	**42**	**51**	**45**	**230**	**6.7**	**39**	**42**	**2.6**	**15**	**160**	**4.5**	**41**	**210**	**110**	**120**	**52**
Thallium	0.0005	0.05 U	0.05 U	0.05 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Vanadium	--	0.01 U	0.01 U	0.010 U	0.02 U	0.01 U	0.01 U	**0.013**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.05**	0.02 U	0.02 U	**0.031**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
mg/L - milligrams per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 5
General Chemistry Analytical Results for 2017 Groundwater
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	MW-1	MW-1A	DUP-MW-1A	MW-1D	MW-2	MW-2A	MW-5	MW-6	MW-6A	MW-6B	MW-7	MW-8	MW-9	MW-10	MW-11	EW-1	EW-2	EW-3	EW-4
Sample Date		8/2/2017	8/3/2017	8/3/2017	8/1/2017	8/3/2017	8/2/2017	8/7/2017	8/3/2017	8/3/2017	8/3/2017	8/1/2017	8/1/2017	8/1/2017	8/1/2017	8/2/2017	7/31/2017	7/31/2017	7/31/2017	7/31/2017
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Total Dissolved Solids	--	**220**	**110**	**40**	**120**	**360**	**270**	**1,100**	**290**	**550**	**80**	**280**	**170**	**970**	**100**	**280**	**1,200**	**750**	**730**	**410**
Total Suspended Solids	--	5 U	5 U	5 U	5 U	5 U	**13**	**220**	**140**	**45**	5 U	**63**	5 U	5 U	**16**	5 U	**30**	**35**	**40**	**110**

Notes:
Concentrations detected above the reporting limit are in **bold.**

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
mg/L - milligrams per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 6
Perfluorinated Alkyl Substances Analytical Results for 2017 Groundwater
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Standard	MW-1	MW-1A	DUP-MW-1A	MW-1D	MW-2	MW-2A	MW-5	MW-6	MW-6A	MW-6B	MW-7	MW-8	MW-9	MW-10	MW-11	EW-1	EW-2	EW-3	EW-4
Sample Date		8/2/2017	8/3/2017	8/3/2017	8/1/2017	8/2/2017	8/2/2017	8/4/2017	8/3/2017	8/3/2017	8/3/2017	8/1/2017	8/1/2017	8/1/2017	8/1/2017	8/2/2017	7/31/2017	7/31/2017	7/31/2017	7/31/2017
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Perfluorobutanesulfonic acid (PFBS)	70	1.2 J	2.0 U	NS	2.0 U	1.1 J	**2.9**	**5.0**	2.0 U	2.0 U	2.0 U	2.0 U	1.3 J	**5.8**	2.0 U	2.0 U	**7.5**	**2.7**	**3.0**	2.0 U
Perfluorohexanesulfonic acid (PFHxS)	70	**2.3**	2.0 U	NS	2.0 U	1.9 J	2.0 U	**40**	2.0 U	**3.0**	2.0 U	2.0 U	2.0 U	**5.6**	2.0 U	2.0 U	**47**	**15**	**12**	1.7 J
Perfluoroheptanoic acids (PFHpA)	70	**11**	2.0 U	NS	2.0 U	**3.2**	1.7 J	**65**	**2.9**	**6.4**	0.84 J	0.93 J	2.0 U	**53**	**2.2**	2.0 U	**160**	**28**	**29**	**8.3**
Perfluorooctanoic acid (PFOA)	70	**6.7**	2.0 U	NS	2.0 U	**25**	**2.3**	**190**	**14**	**19**	2.0 U	**2.9**	2.0 U	**110**	**7.7**	2.0 U	**1,300**	**68**	**64**	**20**
Perfluorooctanesulfonic acid (PFOS)	70	**2.4**	2.0 U	NS	2.0 U	**58**	2.0 U	**90**	**9.8**	**8.4**	2.0 U	2.0 U	2.0 U	**10**	**23**	2.0 U	**73** B	**23**	**21**	**7.6**
Perfluorononanoic acid (PFNA)	70	2.0 U	2.0 U	NS	2.0 U	0.93 J	2.0 U	1.4 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.8**	2.0 U	2.0 U	2.0 U
Total PFAS	70	23.6	2.0 U	NS	2.0 U	90.13	6.9	391.4	26.7	36.8	0.84 J	3.83	1.3 J	184.4	32.9	2.0 U	1,590.3	136.7	129	35.9

Notes:
Concentrations detected above the reporting limit are in **bold.**
The NYSDEC has currently set a standard of 70 nanograms per liter for individual and total PFAS. Concentrations detected above this standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ng/L - nanograms per Liter

Table 7
Volatile Organic Compounds Analytical Results for 2017 Surface Water
Fort Edward Landfill, Fort Edward, NY
NYSDEC # 558001

Location	NYSDEC Class GA GW Standard	Unnamed Pond	Polishing Pond Influent	Polishing Pond Effluent	GFFC1	GFFC2	GFFC3
Sample Date		8/4/2017	8/9/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	50	9.9 J	50 U	9.2 J	50 U	50 U	50 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (MEK)	50	20 U	20 U	20 U	20 U	20 U	20 U
Carbon Disulfide	60	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Carbon Tetrachloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorodibromomethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (EDB)	0.0006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (Freon 12)	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethylene	5	1.0 U	**2.6**	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	--	**14**	**6.5**	**2.4**	0.4 U	0.4 U	0.4 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone (MBK)	50	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Cyclohexane	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	--	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m+p Xylene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Total VOCs	--	23.9	9.1	11.6	ND	ND	ND

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ug/L - Micrograms per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 8
PCB Analytical Results for 2017 Surface Water
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	Unnamed Pond	Polishing Pond Influent	Polishing Pond Effluent	GFFC1	GFFC2	GFFC3
Sample Date		8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PCB-1016	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1221	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1232	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1242	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1248	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1254	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1260	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1262	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
PCB-1268	--	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	0.09	0.20 U	0.18 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.
The NYSDEC Class GA GW Standard for Total PCBs is 0.09 ug/L.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
ug/L - micrograms per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 9
Metals Analytical Results for 2017 Surface Water
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	Unnamed Pond	Polishing Pond Influent	Polishing Pond Effluent	GFFC1	GFFC2	GFFC3
Sample Date		8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum	--	0.05 U	**0.06**	**0.077**	**0.051**	**0.096**	**0.073**
Antimony	0.003	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Arsenic	0.025	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U
Barium	1	**0.062**	**0.056**	**0.055**	0.05 U	0.05 U	0.05 U
Beryllium	0.003	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Calcium	--	**51**	**100**	**85**	**8.1**	**10**	**8.3**
Chromium	0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Copper	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	0.3	**3.1**	**5.5**	**2.3**	**0.24**	**0.31**	**0.25**
Lead	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Magnesium	35	**24**	**22**	**20**	**1.5**	**2.0**	**1.5**
Manganese	0.3	**0.12**	**1.0**	**0.9**	**20**	**0.07**	**0.019**
Mercury	0.0007	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Nickel	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Potassium	--	**2.7**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Selenium	0.01	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	0.05	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sodium	20	**60**	**58**	**48**	**10**	**9.5**	**9.0**
Thallium	0.0005	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Vanadium	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	0.02 U	0.02 U	**0.17**	0.02 U	0.02 U	0.02 U

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC Class GA GW Standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
mg/L - milligrams per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 10
General Chemistry Analytical Results for 2017 Surface Water
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Class GA GW Standard	Unnamed Pond	Polishing Pond Influent	Polishing Pond Effluent	GFFC1	GFFC2	GFFC3
Sample Date		8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Total Dissolved Solids	--	**400**	**420**	**420**	**46**	**270**	**110**
Total Suspended Solids	--	5 U	**20**	**110**	5 U	**7**	5 U

Notes:
Concentrations detected above the reporting limit are in **bold.**

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
mg/L - milligrams per Liter
"--" - No regulatory criteria exists for respective analyte.

Table 11
Perfluorinated Alkyl Substances Analytical Results for 2017 Surface Water
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC Standard	Unnamed Pond	Polishing Pond Influent	Polishing Pond Effluent	GFFC1	GFFC2	GFFC3
Sample Date		8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Perfluorobutanesulfonic acid (PFBS)	70	**2.1**	1.4 J	1.3 J	2.0 U	2.0 U	2.0 U
Perfluorohexanesulfonic acid (PFHxS)	70	**9.4**	**3.1**	**2.1**	2.0 U	2.0 U	2.0 U
Perfluoroheptanoic acids (PFHpA)	70	**29**	**15**	**12**	2.0 U	0.9 J	2.0 U
Perfluorooctanoic acid (PFOA)	70	**130**	**51**	**31**	2.0 U	2.0 U	2.0 U
Perfluorooctanesulfonic acid (PFOS)	70	**39**	**9.7**	**3.9**	2.0 U	2.0 U	2.0 U
Perfluorononanoic acid (PFNA)	70	0.97 J	0.99 J	2.0 U	2.0 U	2.0 U	2.0 U
Total PFAS	70	210.47	81.19	50.3	2.0 U	0.9 J	2.0 U

Notes:
Concentrations detected above the reporting limit are in **bold.**

The NYSDEC has currently set a standard of 70 nanograms per liter for individual and total PFAS. Concentrations detected above this standard are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ng/L - nanograms per Liter

Table 12
Volatile Organic Compound Analytical Results for 2017 Sediment
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC 6 NYCRR Part 375 Unrestricted Use	Unnamed Pond	Cell 1	Cell 2	Cell 3	Polishing Pond Influent	Polishing Pond Effluent	DUP-Polishing Pond Effluent	GFCC1	GFCC2	GFCC3
Sample Date		8/4/2017	8/3/2017	8/3/2017	8/3/2017	8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Acetone	0.05	5.4 U	0.027 U	**0.35**	0.38 U	0.093 J	0.16 U	0.16 U	0.12 U	0.19 U	0.14 U
Acrylonitrile	--	0.54 U	0.016 U	0.02 U	0.023 U	0.012 U	0.0097 U	0.0097 U	0.0073 U	0.012 U	0.0085 U
tert-Amyl Methyl Ether (TAME)	--	0.054 U	0.0027 U	0.0034 U	0.0038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0019 U	0.0014 U
Benzene	0.06	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Bromobenzene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Bromochloromethane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Bromodichloromethane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Bromoform	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Bromomethane	--	0.54 U	0.027 U	0.034 U	0.038 U	0.02 U	0.016 U	0.016 U	0.012 U	0.019 U	0.014 U
2-Butanone (MEK)	0.12	2.2 U	0.11 U	**0.18**	0.15 U	0.08 U	0.065 U	0.065 U	0.049 U	0.077 U	0.057 U
tert-Butyl Alcohol (TBA)	--	2.2 U	0.11 U	0.13 U	0.15 U	0.08 U	0.065 U	0.065 U	0.049 U	0.077 U	0.057 U
n-Butylbenzene	12	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
sec-Butylbenzene	11	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
tert-Butylbenzene	5.9	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
tert-Butyl Ethyl Ether (TBEE)	--	0.054 U	0.0027 U	0.0034 U	0.0037 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0019 U	0.0014 U
Carbon Disufide	--	0.32 U	0.016 U	0.02 U	0.023 U	0.012 U	0.0098 U	0.0098 U	0.0073 U	0.012 U	0.0085 U
Carbon Tetrachloride	0.76	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Chlorobenzene	1.1	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Chlorodibromomethane	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Chloroethane	--	0.54 U	0.054 U	0.067 U	0.075 U	0.040 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
Chloroform	0.37	0.22 U	0.011 U	0.013 U	0.015 U	0.008 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
Chloromethane	--	0.54 U	0.027 U	0.034 U	0.038 U	0.02 U	0.016 U	0.016 U	0.012 U	0.019 U	0.014 U
2-Chlorotoluene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
4-Chlorotoluene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.032 U	0.032 U	0.0024 U	0.0039 U	0.0028 U
1,2-Dibromo-3-chloropropane (DBCP)	--	0.54 U	0.011 U	0.013 U	0.015 U	0.008 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.057 U
1,2-Dibromoethane (EDB)	--	0.054 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Dibromomethane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.32 U	0.32 U	0.0024 U	0.0039 U	0.0028 U
1,2-Dichlorobenzene	1.1	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,3-Dichlorobenzene	2.4	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0000 U
1,4-Dichlorobenzene	1.8	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
trans-1,4-Dichloro-2-butene	--	0.22 U	0.011 U	0.013 U	0.015 U	0.008 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
Dichlorodifluoromethane (Freon 12)	--	0.22 U	0.054 U	0.067 U	0.075 U	0.04 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
1,1-Dichloroethane	0.27	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,2-Dichloroethane	0.02	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1-Dichloroethylene	0.33	0.11 U	0.011 U	0.013 U	**0.0071**	0.008 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
cis-1,2-Dichloroethylene	0.25	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
trans-1,2-Dichloroethylene	0.19	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.04 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,2-Dichloropropane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,3-Dichloropropane	--	0.054 U	0.0027 U	0.0034 U	0.0038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0017 U	0.0014 U
2,2-Dichloropropane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1-Dichloropropene	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
cis-1,3-Dichloropropene	--	0.054 U	0.0027 U	0.0034 U	0.038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0017 U	0.0014 U
trans-1,3-Dichloropropene	--	0.054 U	0.0027 U	0.0034 U	0.038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0017 U	0.0014 U
Diethyl Ether	--	0.22 U	0.054 U	0.067 U	0.075 U	0.04 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
Diisopropyl Ether (DIPE)	--	0.054 U	0.0027 U	0.0034 U	0.0038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0019 U	0.0014 U
1,4-Dioxane	--	5.4 U	0.27 U	0.34 U	0.38 U	0.2 U	0.2 U	0.2 U	0.12 U	0.19 U	0.14 U
Ethylbenzene	1.0	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Hexachlorobutadiene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
2-Hexanone (MBK)	--	1.1 U	0.054 U	0.067 U	0.075 U	0.04 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
Isopropylbenzene (Cumene)	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
p-Isopropyltoluene (p-Cymene)	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Methyl Acetate	--	1.1 U	0.0054 U	**0.066**	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Methyl tert-Butyl Ether (MTBE)	0.93	0.11 U	0.011 U	0.013 U	0.015 U	0.01 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
Methyl Cyclohexane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Methylene Chloride	0.05	0.54 U	0.054 U	0.067 U	0.075 U	0.04 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
4-Methyl-2-pentanone (MIBK)	--	1.1 U	0.054 U	0.067 U	0.075 U	0.04 U	0.032 U	0.032 U	0.024 U	0.039 U	0.028 U
Naphthalene	--	0.22 U	0.011 U	0.013 U	0.015 U	0.01 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
n-Propylbenzene	3.9	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Styrene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1,1,2-Tetrachloroethane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1,2,2-Tetrachloroethane	--	0.054 U	0.0027 U	0.0034 U	0.0038 U	0.002 U	0.0016 U	0.0016 U	0.0012 U	0.0019 U	0.0014 U
Tetrachloroethylene	1.3	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Tetrahydrofuran	--	1.1 U	0.027 U	0.034 U	0.038 U	0.020 U	0.016 U	0.016 U	0.012 U	0.019 U	0.014 U
Toluene	0.7	0.11 U	0.0054 U	**0.036**	0.0075 U	0.0038 J	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,2,3-Trichlorobenzene	--	0.54 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,2,4-Trichlorobenzene	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,3,5-Trichlorobenzene	--	0.11 U	0.011 U	0.013 U	0.015 U	0.008 U	0.002 U	0.002 U	0.002 U	0.077 U	0.006 U
1,1,1-Trichloroethane	0.68	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1,2-Trichloroethane	--	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Trichloroethylene	0.47	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Trichlorofluoromethane (Freon 11)	--	0.22 U	0.027 U	0.034 U	0.038 U	0.02 U	0.016 U	0.016 U	0.120 U	0.019 U	0.014 U
1,2,3-Trichloropropane	--	0.22 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	0.11 U	0.027 U	0.034 U	0.038 U	0.02 U	0.016 U	0.016 U	0.120 U	0.019 U	0.014 U
1,2,4-Trimethylbenzene	3.6	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
1,3,5-Trimethylbenzene	8.4	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Vinyl Chloride	0.02	0.22 U	0.027 U	0.034 U	0.038 U	0.02 U	0.016 U	0.016 U	0.012 U	0.019 U	0.014 U
m+p Xylene	100	0.22 U	0.011 U	0.013 U	0.02 U	0.008 U	0.0065 U	0.0065 U	0.0049 U	0.0077 U	0.0057 U
o-Xylene	100	0.11 U	0.0054 U	0.0067 U	0.0075 U	0.004 U	0.0032 U	0.0032 U	0.0024 U	0.0039 U	0.0028 U
Total VOCs	--	ND	ND	0.632	0.0071	0.097	ND	ND	ND	ND	ND

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC 6 NYCRR Part 375 Unrestricted Use cleanup objective are highlighted in yellow.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
mg/Kg - milligrams per Kilogram
"--" - No regulatory criteria exists for respective analyte.

Table 13
PCB Analytical Results for 2017 Sediment
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Location	NYSDEC 6 NYCRR Part 375 Unrestricted Use	Unnamed Pond	Cell 1	Cell 2	Cell 3	Polishing Pond Influent	Polishing Pond Effluent	DUP-Polishing Pond Effluent	GFCC1	GFCC2	GFCC3
Sample Date		8/4/2017	8/3/2017	8/3/2017	8/3/2017	8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
PCB-1016	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1221	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1232	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1242	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1248	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	**0.32**	0.20 U	0.13 U
PCB-1254	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	**0.23**	0.20 U	0.13 U
PCB-1260	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1262	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
PCB-1268	--	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	0.13 U	0.20 U	0.13 U
Total PCBs	0.1	0.16 U	0.24 U	0.20 U	0.35 U	0.18 U	0.15 U	0.13 U	**0.55**	0.20 U	0.13 U

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC 6 NYCRR Part 375 Unrestricted Use cleanup objective are highlighted in yellow.
The NYSDEC6 NYCRR Part 375 Unrestricted Use cleanup objective for PCBs is 0.1 parts per million.

Definitions:
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ppm - parts per million
"--" - No regulatory criteria exists for respective analyte.

Table 14
Metals Analytical Results for 2017 Sediment
Fort Edward Landfill, Fort Edward, NY
NYSDEC # 558001

Location	NYSDEC 6 NYCRR Part 375 Unrestricted Use	Unnamed Pond	Cell 1	Cell 2	Cell 3	Polishing Pond Influent	Polishing Pond Effluent	DUP-Polishing Pond Effluent	GFCC1	GFCC2	GFCC3
Sample Date		8/4/2017	8/3/2017	8/3/2017	8/3/2017	8/4/2017	8/4/2017	8/4/2017	7/31/2017	8/4/2017	8/4/2017
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Aluminum	--	**4,500**	**4,500**	**31,000**	**13,000**	**23,000**	**17,000**	**13,000**	**4,600**	**13,000**	**4,700**
Antimony	--	3.7 U	6.0 U	5.0 U	8.7 U	4.5 U	3.5 U	3.1 U	3.0 U	5.0 U	3.1 U
Arsenic	13	3.7 U	6.0 U	5.0 U	8.7 U	4.5 U	3.5 U	3.1 U	3.0 U	5.0 U	3.1 U
Barium	350	**47**	**34**	**200**	**100**	**160**	**100**	**82**	**27**	**120**	**35**
Beryllium	7.2	0.37 U	0.6 U	**0.61**	0.87 U	0.45 U	0.35 U	0.31 U	0.3 U	0.5 U	0.31 U
Cadmium	2.5	0.37 U	0.6 U	0.5 U	0.87 U	0.45 U	0.35 U	0.31 U	0.3 U	0.5 U	0.31 U
Calcium	--	**13,000**	**150,000**	**8,900**	**17,000**	**3,300**	**5,200**	**2,800**	**1,800**	**6,700**	**2,100**
Chromium	30	**5.1**	**12**	**36**	**19**	**33**	**22**	**17**	**8.7**	**19**	**9.7**
Cobalt	--	3.7 U	6.0 U	**7.8**	8.7 U	**15**	**10**	**7.7**	**5.4**	**9.4**	**4.0**
Copper	50	**3.0**	**11**	**31**	**23**	**13**	**17**	**11**	**12**	**13**	**5.8**
Iron	--	**20,000 B**	**21,000 B**	**25,000 B**	**18,000 B**	**39,000 B**	**34,000 B**	**24,000 B**	**13,000**	**31,000**	**15,000**
Lead	63	**6.7**	**7.1**	**12**	**9.9**	**20**	**9.1**	**5.3**	**49**	**17**	**19**
Magnesium	--	**1,400**	**44,000**	**6,600**	**6,100**	**7,000**	**6,100**	**3,900**	**2,500**	**6,200**	**3,100**
Manganese	1600	**380**	**290**	**220**	**280**	**260**	**330**	**270**	**79**	**790**	**140**
Mercury	0.18	0.04 U	0.06 U	**0.052**	0.084 U	0.045 U	0.038 U	0.031 U	**0.088**	0.048 U	**0.048**
Nickel	30	**3.9**	**11**	**27**	**21**	**23**	**19**	**14**	**8.3**	**19**	**7.1**
Potassium	--	**350**	**900**	**2,600**	**1,500**	**2,200**	**2,000**	**1,600**	**430**	**2,100**	**580**
Selenium	3.9	7.4 U	12 U	10 U	17 U	9.0 U	6.9 U	6.1 U	6.0 U	9.9 U	6.2 U
Silver	2	0.74 U	1.2 U	1.0 U	1.7 U	0.9 U	6.9 U	0.61 U	0.6 U	0.99 U	0.62 U
Sodium	--	150 U	240 U	**300**	**480**	180 U	**190**	**160**	120 U	**210**	120 U
Thallium	--	3.7 U	6.0 U	5.0 U	8.7 U	4.5 U	3.5 U	3.1 U	3.0 U	5.0 U	3.1 U
Vanadium	--	**11**	**16**	**38**	**29**	**50**	**35**	**25**	**16**	**23**	**12**
Zinc	109	**23**	**32**	**73**	**40**	**79**	**64**	**47**	**70**	**76**	**63**

Notes:
Concentrations detected above the reporting limit are in **bold.**
Concentrations detected above the NYSDEC 6 NYCRR Part 375 Unrestricted Use cleanup objective are highlighted in yellow.

Definitions:
B - The compound was found in the associated blank as well as in the sample.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
ppm - parts per million
"--" - No regulatory criteria exists for respective analyte.

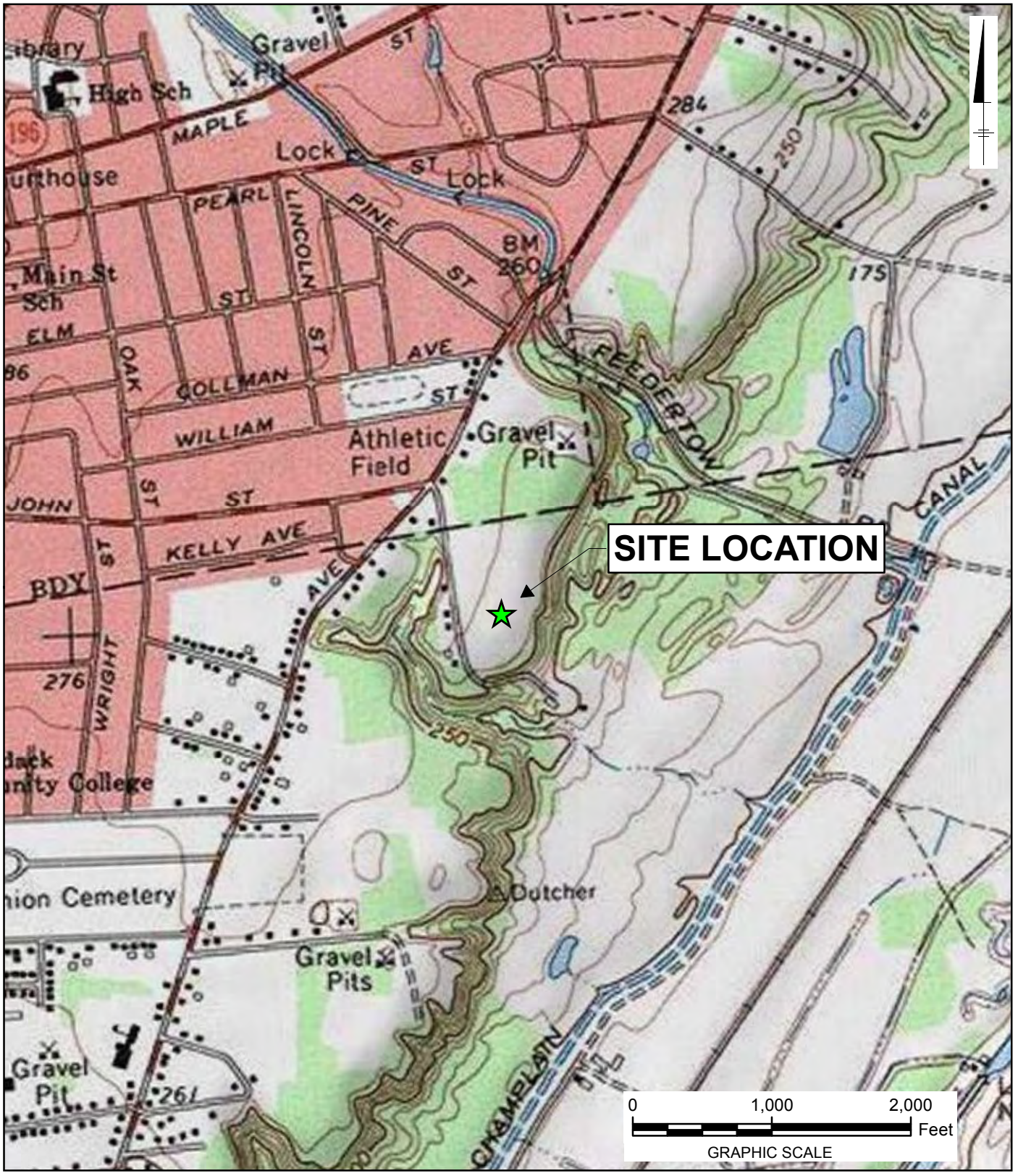
Table 15
Analytical Data May 1995 - August 2017
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

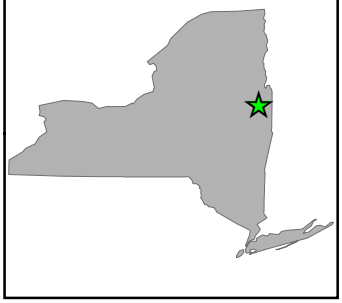
ARCADIS Design & Consultancy for natural and built assets

Well ID	Parameter	NYSDEC Class GA Standard	Units	Sample Date																
				May-95	Aug-95	May-99	Oct-99	May-00	Oct-01	May-02	Apr-03	Aug-04	Jul-07	Oct-08	Mar-10	Oct-11	Sep-12	Oct-13	Jan-15	May-16	Aug-17
MW-1	Total VOCs		µg/L	5.0	ND	ND	ND	ND	19	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Iron	0.30	mg/L	**45.4**	**13**	**0.498**	**1.1**	**2.2**	**1.1**	**1.6**	**1.1**	NA	**20.1**	**1.17**	ND	ND	0.29	0.21	0.053	0.079	ND
	Total PCBs	0.09	µg/L	NA	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	**0.82**	ND	ND	ND	ND
MW-1A	Total VOCs		µg/L	7.0	11	1.0	ND	3.0	ND	ND	ND	5.0	ND	ND	ND	ND	ND	ND	0.99	451	ND
	Iron	0.30	mg/L	**0.827**	**0.331**	**0.75**	**2.1**	**2.6**	**2.8**	**0.41**	**1.1**	NA	**11.5**	**1.63**	0.185	**0.352**	**0.55**	**0.25**	0.19	**0.48**	0.093
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	**7.4**	ND	**28**	**0.45**	ND
MW-1D	Total VOCs		µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	26.1	ND	ND	ND	1.1	ND	ND
	Iron	0.30	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.185	**1.14**	0.19	0.074	0.18	0.2	**0.37**
	Total PCBs	0.09	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	**0.81**	ND	ND	ND	ND
MW-2	Total VOCs		µg/L	9.0	8.0	10	ND	ND	ND	ND	ND	5.0	ND	ND	ND	6.7	ND	ND	ND	ND	ND
	Iron	0.30	mg/L	**1.27**	**8.03**	**7.62**	**2.9**	**15**	**1.1**	**5.8**	**5.2**	NA	**9.86**	**5.32**	**2.17**	**4.74**	**2.8**	**2.2**	**1.7**	**5.3**	**5.2**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-2A	Total VOCs		µg/L	ND	ND	6.0	ND	ND	ND	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	0.28
	Iron	0.30	mg/L	**4.62**	**4.89**	**4.83**	**8.6**	**13**	**7.5**	**9.3**	**6.8**	NA	**15.2**	**11.2**	**8.19**	**11.2**	**9.1**	**9.8**	**10.7**	**10.8**	**14**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	**0.28**	ND	ND	ND	ND
MW-5	Total VOCs		µg/L	8,641	11,438	NS	NS	27,034	50,271	NS	11,352	4,209	NA	NA	365	NS	NS	NS	1,858	1,259	908.4
	Iron	0.30	mg/L	**82.5**	**66.2**	NS	NS	**130**	**95**	NS	**95**	ND	NA	NA	**142**	NS	NS	NS	**56.5**	**100**	**54**
	Total PCBs	0.09	µg/L	ND	ND	NS	NS	NA	NA	NS	NS	ND	NA	NA	ND	NS	NS	NS	**1.1**	**0.54**	ND
MW-6	Total VOCs		µg/L	112	83	26	38	38	62	60	37	63	17	23	25	23	22.4	22.14	40.75	31.7	32.9
	Iron	0.30	mg/L	**37.4**	**63.7**	**49.3**	**80**	**84**	**97**	**100**	**130**	NA	**135**	**120**	**123**	**139**	**103**	**102**	**106**	**106**	**120**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	ND	NA	NA	NA	**3.3**	ND	**0.43**	**0.72**	**0.18**	**0.37**	ND	**11**	**15**	ND
MW-6A	Total VOCs		µg/L	30	4.0	ND	3.0	13	16	9.0	16	17	8.0	19	44	67.7	35.41	37.04	35.25	28.18	29.5
	Iron	0.30	mg/L	**0.404**	**0.428**	**0.388**	**2.6**	**35**	**35**	**49**	**54**	NA	**33.1**	**27.4**	**23.4**	**24.4**	**23.8**	**21.2**	**21.2**	**19.7**	**21**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	**3.8**	**14**	ND
MW-6B	Total VOCs		µg/L	30	ND	8.0	ND	ND	NA	ND	ND	4.0	ND	ND	ND	ND	ND	ND	0.94	ND	ND
	Iron	0.30	mg/L	**8.13**	**19.9**	**49**	**1.2**	**17**	NA	**9.1**	**38**	NA	**157**	**3.16**	**2.38**	**0.521**	**0.78**	**0.35**	**5**	**0.34**	0.24
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	**0.91**	ND	**1.5**	**29**	ND
MW-7	Total VOCs		µg/L	3.0	ND	5.0	ND	ND	ND	ND	NA	11	ND	ND	ND	ND	ND	2.78	1.91	0.6	ND
	Iron	0.30	mg/L	**23.6**	**30.8**	**8.06**	**2.2**	**17**	**23**	**27**	NA	**240**	**217**	**143**	**119**	**188**	**146**	**195**	**154**	**157**	**160**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	**0.27**	ND	ND
MW-8	Total VOCs		µg/L	ND	ND	ND	ND	ND	ND	ND	ND	6.0	ND	ND	ND	NS	ND	4.4	ND	ND	ND
	Iron	0.30	mg/L	0.195	**0.362**	**0.873**	**0.46**	**1.4**	0.29	**2.3**	NA	NA	**19.9**	0.25	**8.49**	NS	**4.0**	**1.5**	**9.8**	0.073	0.057
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NS	**1.0**	ND	ND	ND	ND
MW-9	Total VOCs		µg/L	NA	NA	7.0	ND	ND	ND	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	5.2
	Iron	0.30	mg/L	NA	NA	**0.946**	**0.56**	**2.0**	**0.26**	**0.39**	**5.3**	NA	**1.59**	0.213	0.14	**23.9**	**8.2**	0.2	**3.0**	**1.4**	**2.5**
	Total PCBs	0.09	µg/L	ND	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	**1.8**	**0.34**	ND	**4.9**	ND
EW-1	Total VOCs		µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	630	429	NS	525	1,347	1,170	4,817.3
	Iron	0.30	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**53.7**	**48.5**	NS	**66.2**	**70.2**	**1,530**	**55**
	Total PCBs	0.09	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**49**	**1,824**	NS	**650**	**1,100**	**970**	**250**
EW-2	Total VOCs		µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	140.8	7.2	NS	5.2	9.29	12.1	72.37
	Iron	0.30	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**40.1**	**24.5**	NS	**27.8**	**29.4**	**30.3**	**22**
	Total PCBs	0.09	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.27**	**0.16**	NS	ND	ND	**400**	ND
EW-3	Total VOCs		µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	53.2	51.2	NS	75.22	68.9	45.1	132.52
	Iron	0.30	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**40.6**	**123**	NS	**33.8**	**31.7**	**33.9**	**33**
	Total PCBs	0.09	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2.7**	**1.6**	NS	**2.9**	**2.2**	**23**	ND
EW-4	Total VOCs		µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	NS	1.2	NA	NS	3.99
	Iron	0.30	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**20.1**	**377**	NS	**32.5**	NA	NS	**60**
	Total PCBs	0.09	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1.6**	**3.3**	NS	**2.06**	**2.3**	NS	**0.63**

Notes:
All Concentrations are in micrograms per liter (µg/L).
Concentrations detected above the NYSDEC Class GA GW Standard are in bold and highlighted in yellow.
95-'00 Data Source: Final Evaluation and Assessment Report. Fort Edward Landfill. NYSDEC. July 2001. URS Consultants
VOC totals from 1995 through 2000 include only concentrations of VOCs that were detected above NYSDEC Class GA Standards, while the 2007, 2008, 2011, 2012, 2015, and 2016 VOC totals include all detections, whether above or below NYSDEC Class GA Standards.

Definitions:
GV - Guidance Value
NA - Not Analyzed
ND - Not detected above the Method Detection Limit or the Reporting Limit.
NS - Not Sampled
VOCs - Volatile Organic Compounds
PCBs - Polychlorinated Biphenyls





NOTE:

1. USGS QUADRANGLE INFORMATION
   QUAD ID: 43073-C5
   NAME: HUDSON FALLS, NEW YORK
   DATE PUB: 1968

FORT EDWARD LANDFILL
45 LEAVY HOLLOW LANE
FORT EDWARD, NEW YORK

ANNUAL GROUNDWATER MONITORING REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Fort Edward (00266434.0000)
Q:\FortEdwardLandfill\basemapping\mxd\SiteLocationMap2017.mxd 8/15/2017 9:45:33 PM

N

MW-6A
MW-6B
MW-7
193.70
184.93
MW-6
EW-3
EW-2
166.14
MW-11
GV-2
LP-3
GV-6
232.51
MW-8
175.94
MW-5
LP-1
CELL 1
Polishing Pond Effluent
Unnamed Ponds
GV-4
GV-3
GV-5
GV-7
EW-5
CELL 2
EW-1
Culvert Pipe
GV-1
LP-2
Polishing Pond Influent
CELL 3
LP-4
Propane Tank
Treatment Building
Transformer Pad
EW-4
219.88
MW-1
MW-1D
MW-1A
MW-2A
MW-9
166.55
MW-2
186.52
UMW-1
UTP
Leavy Hollow Lane
Feeder Tow Road
Towpath Line

185 195 205 215 225 175

LEGEND

GV-#	GAS VENT
MW-#	MONITORING WELL
LP-#	PIEZOMETER
UTP	UTILITY POLE
225	POTENTIOMETRIC CONTOUR
186.25	GROUNDWATER ELEVATION (FEET A.M.S.L.)
	STREAM
	ROAD
	EDGE OF POND
	UNDERGROUND TREATMENT PIPING
UE	UNDERGROUND ELECTRIC
	FENCE
EW-#	EXTRACTION WELL
UMW-#	UNIDENTIFIED MONITORING WELL

0 100' 200' 400'
SCALE IN FEET

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017.
ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

FORT EDWARD LANDFILL, FORT EDWARD, NY
NYSDEC SITE 558001
ANNUAL GROUNDWATER MONITORING REPORT

POTENTIOMETRIC CONTOURS AUGUST 2017

ARCADIS

FIGURE 2

Figure 3
Total VOCs in Upgradient Groundwater
Fort Edward Landfill
Site No. 558001

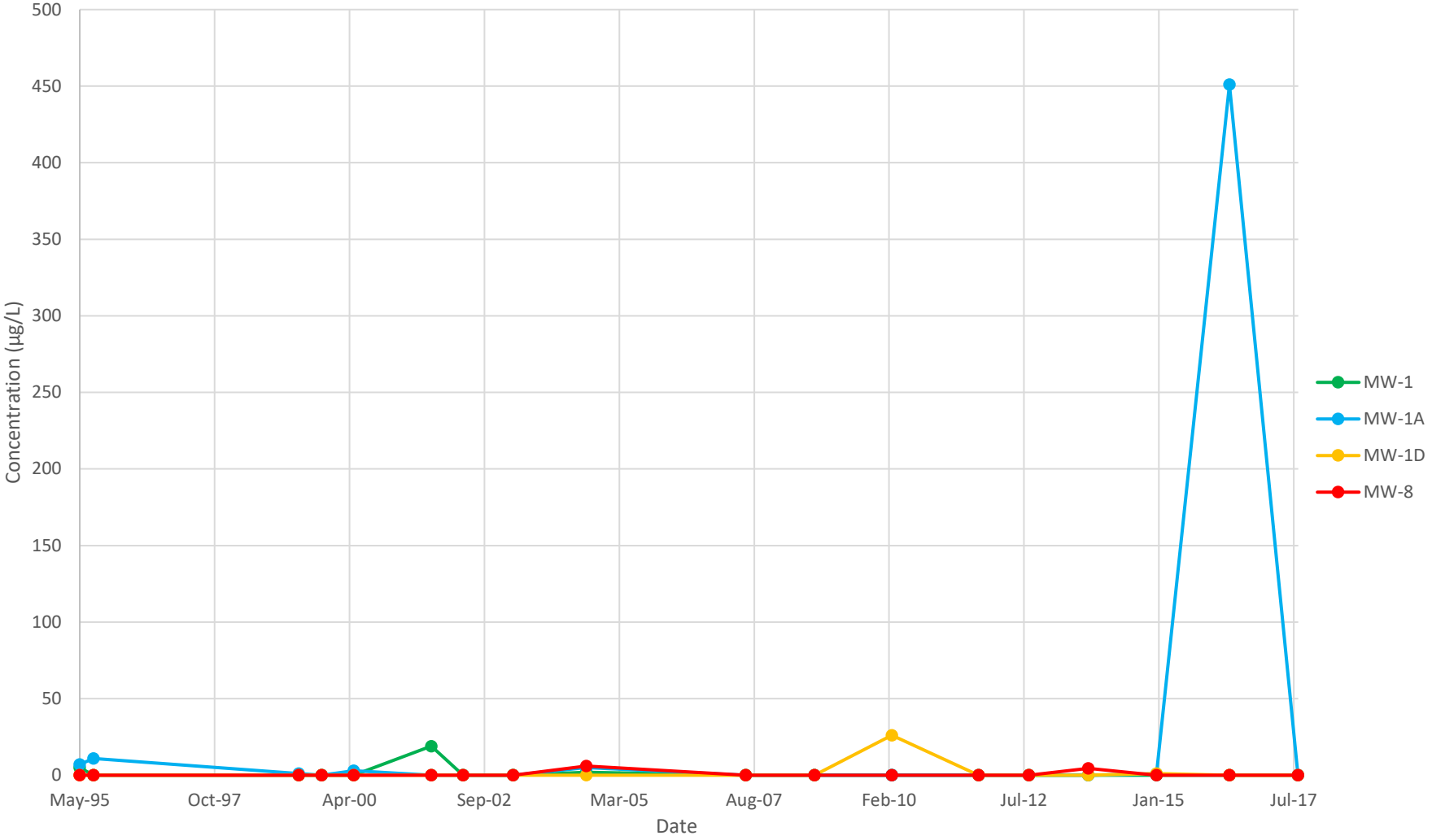


Figure 4
Total VOCs in Downgradient Groundwater
Fort Edward Landfill
Site No. 558001

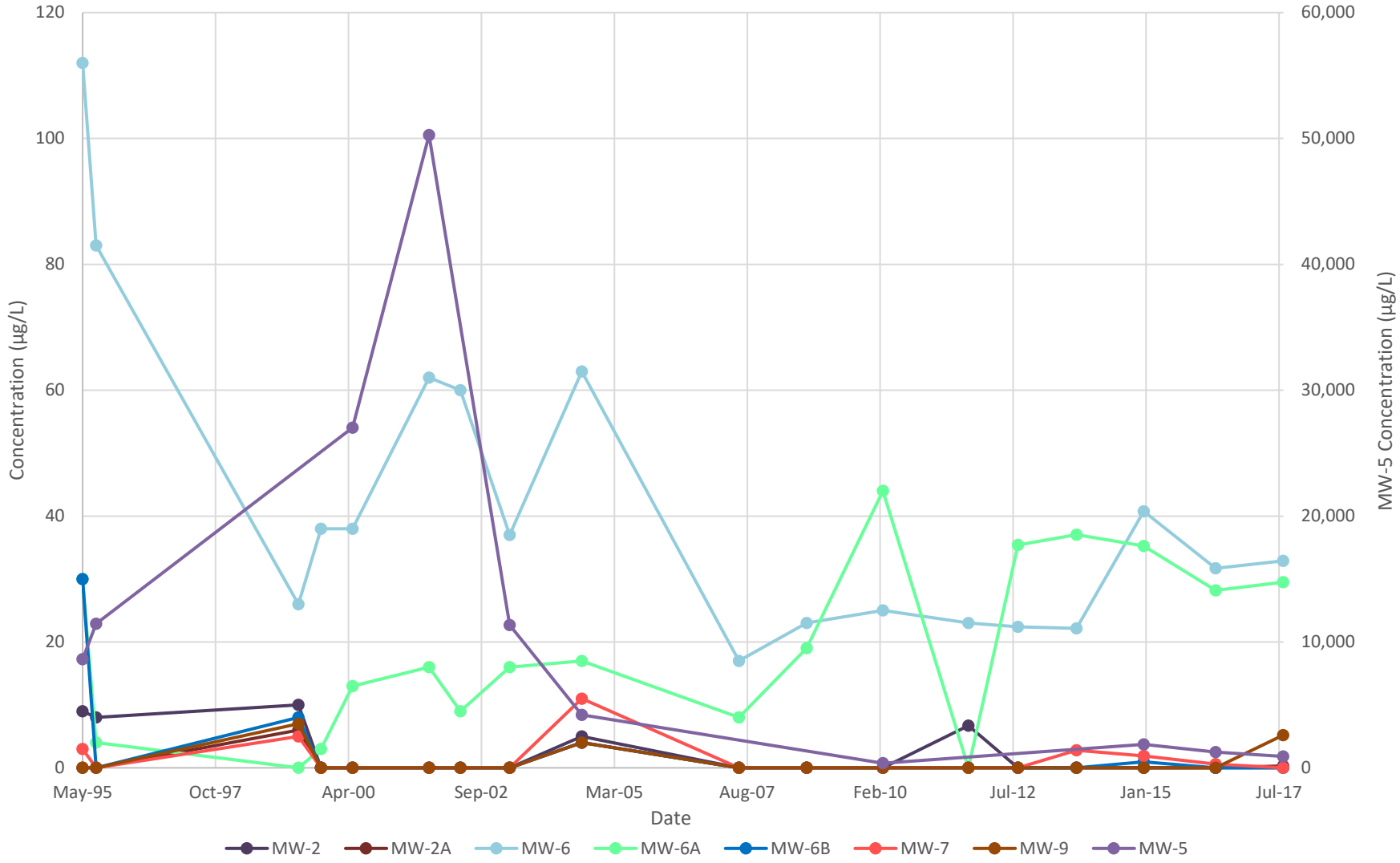


Figure 5
Total PCBs in Upgradient Groundwater
Fort Edward Landfill
Site No. 558001

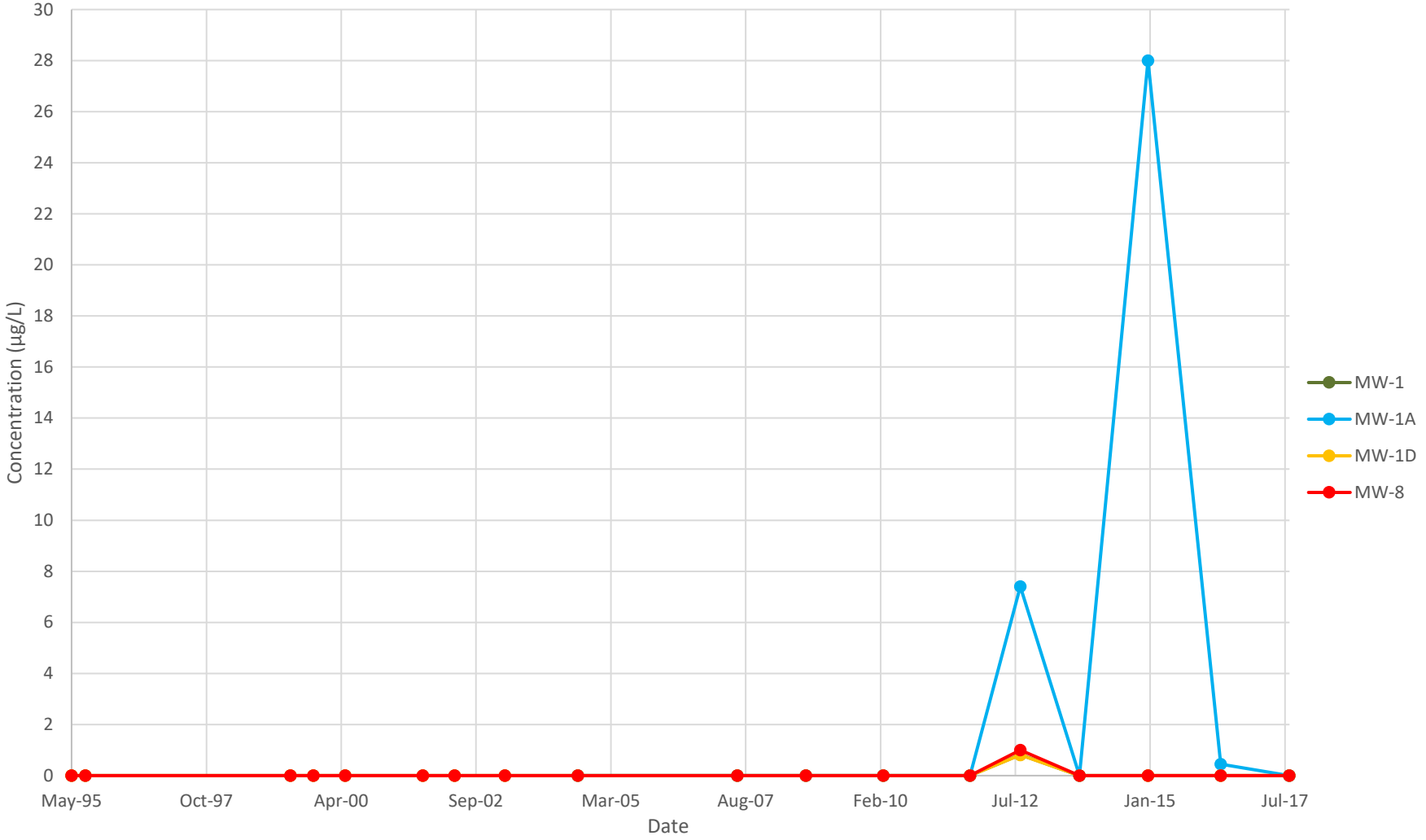


Figure 6
Total PCBs in Downgradient Groundwater
Fort Edward Landfill
Site No. 558001

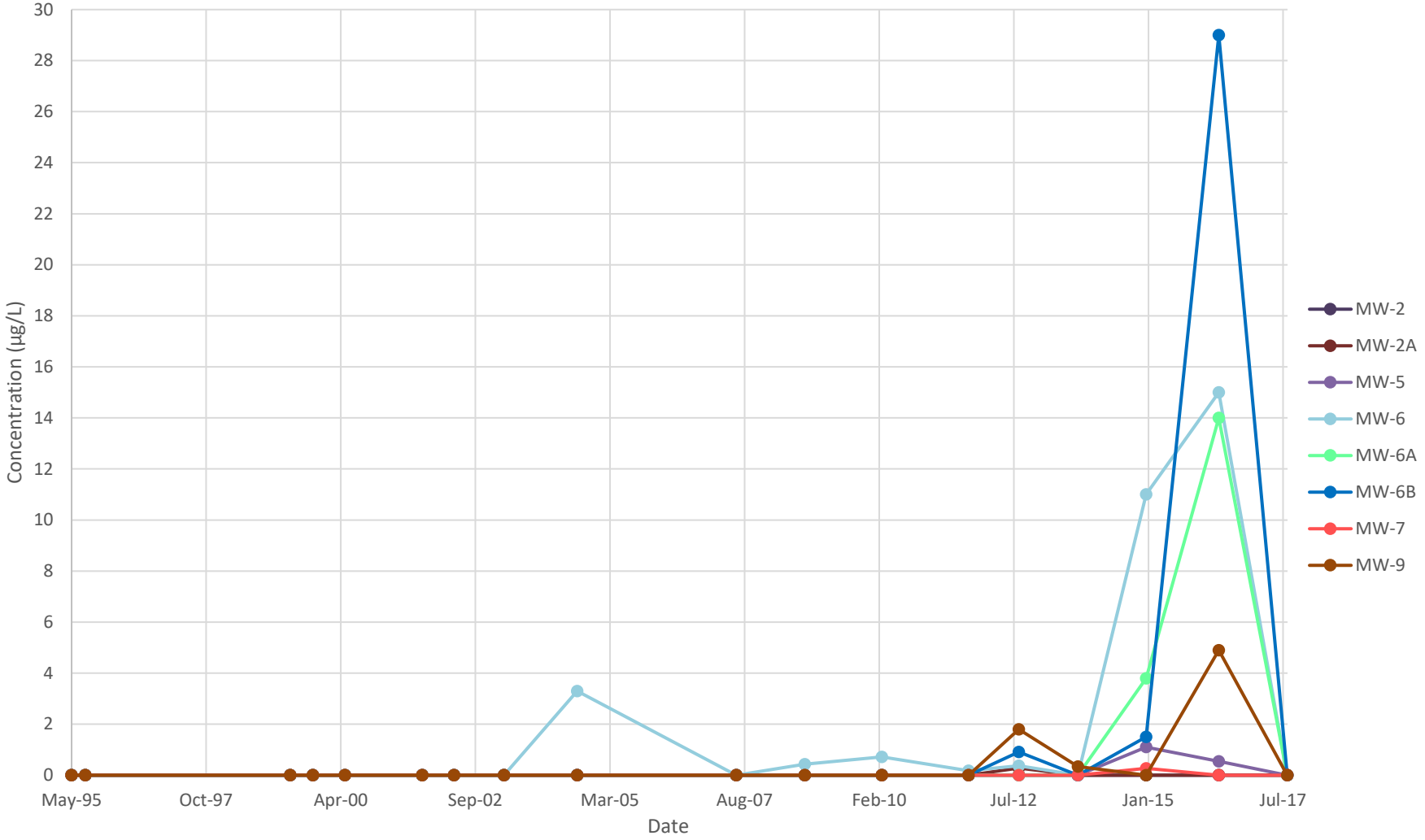


Figure 7
Iron in Upgradient Groundwater
Fort Edward Landfill
Site No. 558001

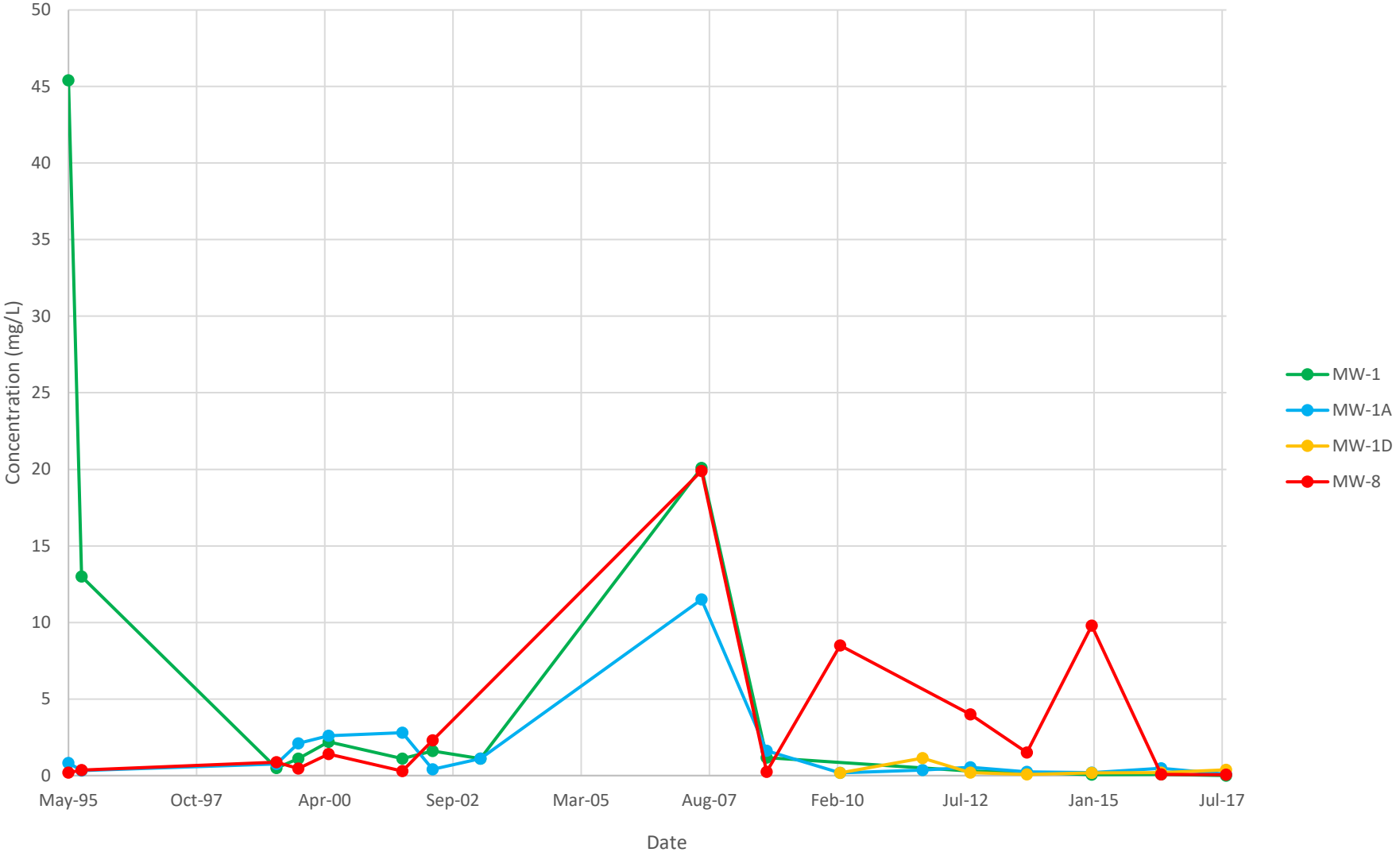
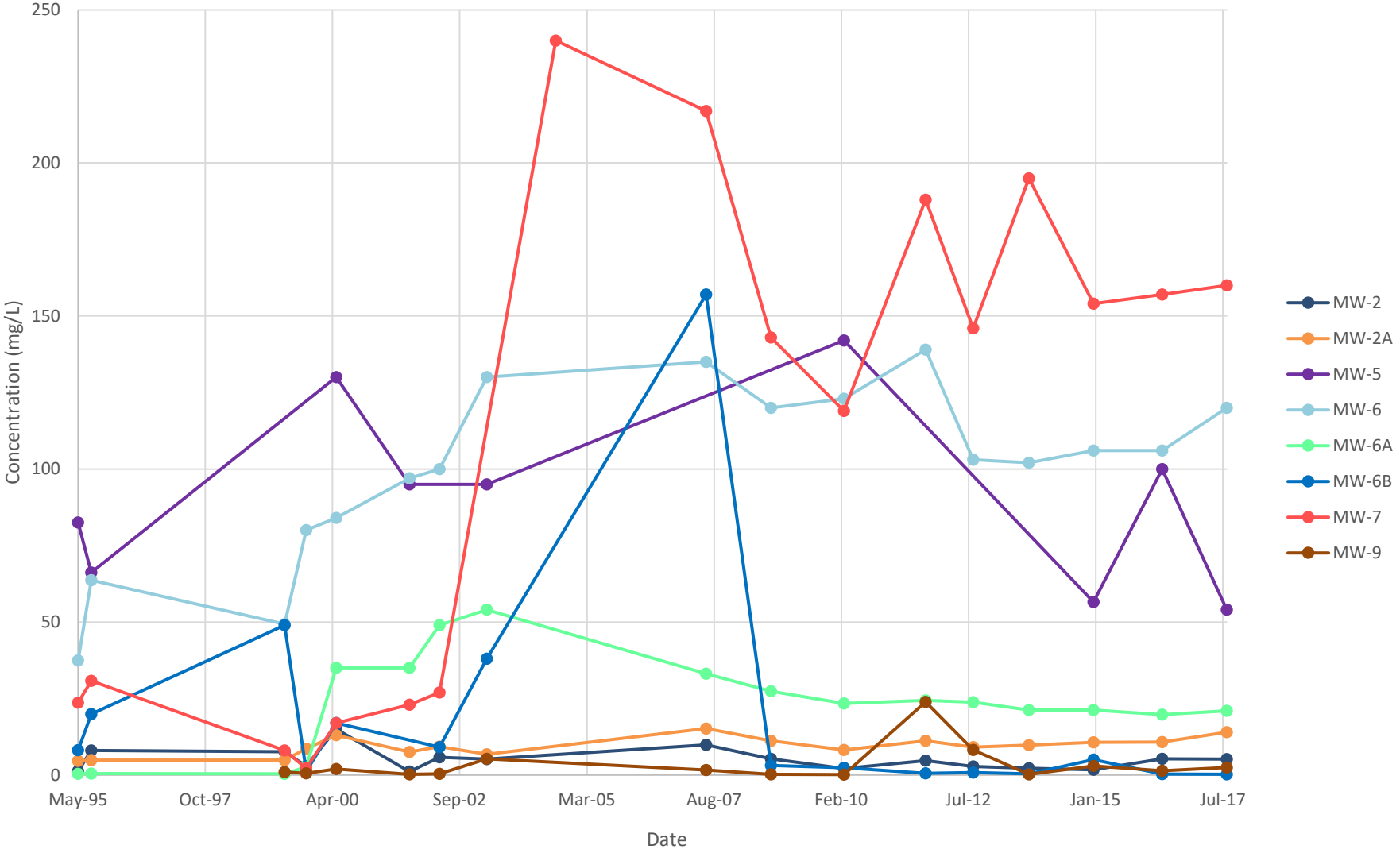
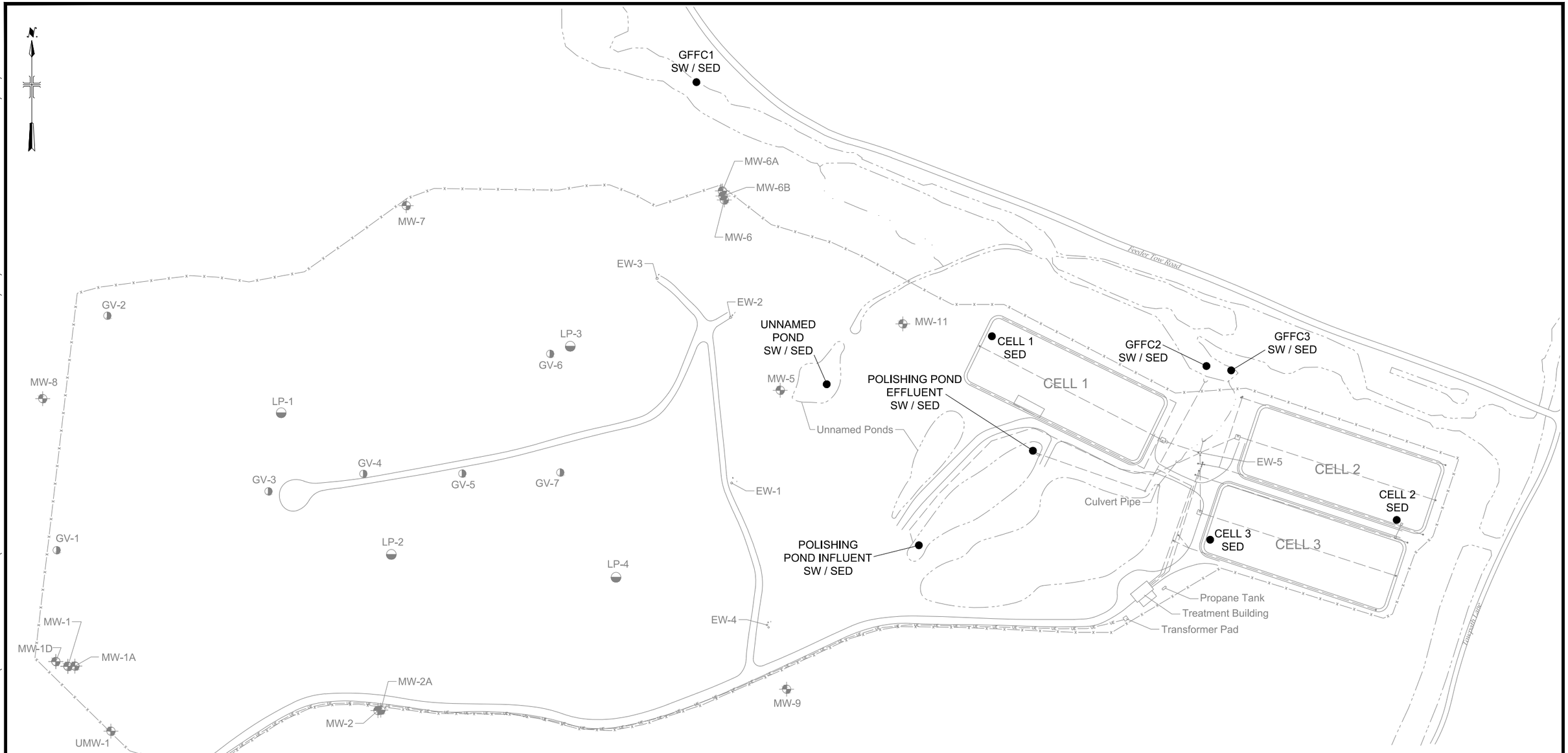


Figure 8
Iron in Downgradient Groundwater
Fort Edward Landfill
Site No. 558001





LEGEND

GV-#	GAS VENT
MW-#	MONITORING WELL
LP-#	PIEZOMETER
UTP	UTILITY POLE
SED	SEDIMENT SAMPLING LOCATIONS
SW / SED	SURFACE WATER / SEDIMENT SAMPLING LOCATIONS
	STREAM
	ROAD
	EDGE OF POND
	UNDERGROUND TREATMENT PIPING
ue ue ue ue ue	UNDERGROUND ELECTRIC
x x x x x	FENCE

0 100' 200' 400'

SCALE IN FEET

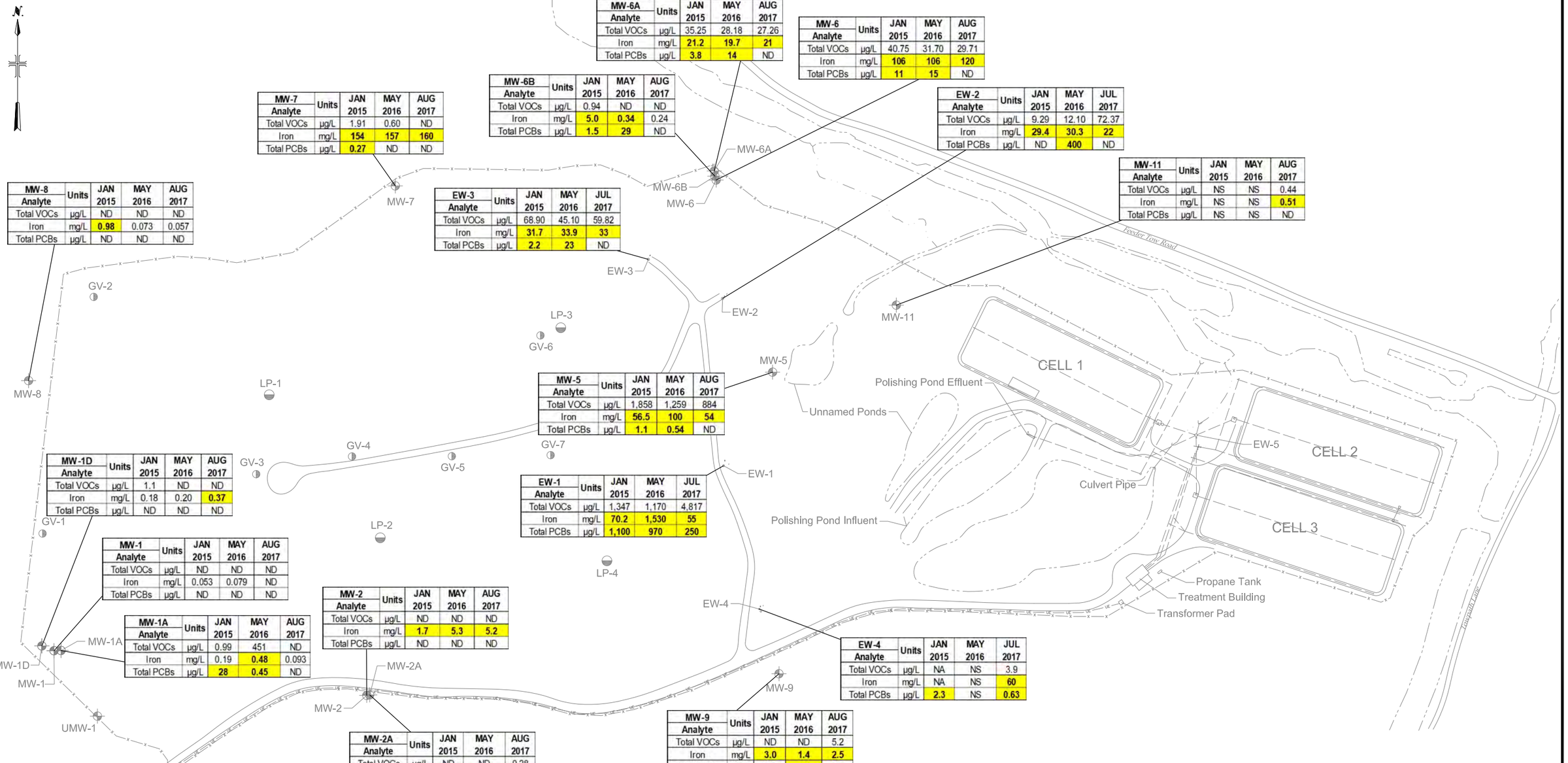
MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017.
ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

FORT EDWARD LANDFILL, FORT EDWARD, NY
NYSDEC SITE 558001
ANNUAL GROUNDWATER MONITORING REPORT

SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS

ARCADIS

FIGURE 9



MW-6A Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	35.25	28.18	27.26
Iron	mg/L	21.2	19.7	21
Total PCBs	µg/L	3.8	14	ND

MW-6 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	40.75	31.70	29.71
Iron	mg/L	106	106	120
Total PCBs	µg/L	11	15	ND

MW-6B Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	0.94	ND	ND
Iron	mg/L	5.0	0.34	0.24
Total PCBs	µg/L	1.5	29	ND

MW-7 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	1.91	0.60	ND
Iron	mg/L	154	157	160
Total PCBs	µg/L	0.27	ND	ND

EW-2 Analyte	Units	JAN 2015	MAY 2016	JUL 2017
Total VOCs	µg/L	9.29	12.10	72.37
Iron	mg/L	29.4	30.3	22
Total PCBs	µg/L	ND	400	ND

MW-11 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	NS	NS	0.44
Iron	mg/L	NS	NS	0.51
Total PCBs	µg/L	NS	NS	ND

MW-8 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	ND	ND	ND
Iron	mg/L	0.98	0.073	0.057
Total PCBs	µg/L	ND	ND	ND

EW-3 Analyte	Units	JAN 2015	MAY 2016	JUL 2017
Total VOCs	µg/L	68.90	45.10	59.82
Iron	mg/L	31.7	33.9	33
Total PCBs	µg/L	2.2	23	ND

MW-5 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	1,858	1,259	884
Iron	mg/L	56.5	100	54
Total PCBs	µg/L	1.1	0.54	ND

MW-1D Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	1.1	ND	ND
Iron	mg/L	0.18	0.20	0.37
Total PCBs	µg/L	ND	ND	ND

EW-1 Analyte	Units	JAN 2015	MAY 2016	JUL 2017
Total VOCs	µg/L	1,347	1,170	4,817
Iron	mg/L	70.2	1,530	55
Total PCBs	µg/L	1,100	970	250

MW-1 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	ND	ND	ND
Iron	mg/L	0.053	0.079	ND
Total PCBs	µg/L	ND	ND	ND

MW-2 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	ND	ND	ND
Iron	mg/L	1.7	5.3	5.2
Total PCBs	µg/L	ND	ND	ND

MW-1A Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	0.99	451	ND
Iron	mg/L	0.19	0.48	0.093
Total PCBs	µg/L	28	0.45	ND

EW-4 Analyte	Units	JAN 2015	MAY 2016	JUL 2017
Total VOCs	µg/L	NA	NS	3.9
Iron	mg/L	NA	NS	60
Total PCBs	µg/L	2.3	NS	0.63

MW-9 Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	ND	ND	5.2
Iron	mg/L	3.0	1.4	2.5
Total PCBs	µg/L	ND	4.9	ND

MW-2A Analyte	Units	JAN 2015	MAY 2016	AUG 2017
Total VOCs	µg/L	ND	ND	0.28
Iron	mg/L	10.7	10.8	14
Total PCBs	µg/L	ND	ND	ND

Analyte	Units	NYSDEC Class GA Standard
Total VOCs	µg/L	--
Iron	mg/L	0.30
Total PCBs	µg/L	0.09

NOTES

1. HIGHLIGHTED VALUES EXCEED NYSDEC CLASS GA STANDARDS.

DEFINITIONS

NA - NOT ANALYZED
NS - NOT SAMPLED
ND - NOT DETECTED
PCBs - POLYCHLORINATED BIPHENYLS
VOCs - VOLATILE ORGANIC COMPOUNDS

LEGEND

GV-# GAS VENT
MW-# MONITORING WELL
LP-# PIEZOMETER
UTP UTILITY POLE
EW-# EXTRACTION WELL
UMW-# UNIDENTIFIED MONITORING WELL
STREAM
ROAD
EDGE OF POND
UNDERGROUND TREATMENT PIPING
UNDERGROUND ELECTRIC
FENCE

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017.
ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

FORT EDWARD LANDFILL, FORT EDWARD, NY
NYSDEC SITE 558001
ANNUAL GROUNDWATER MONITORING REPORT

GROUNDWATER ANALYTICAL RESULTS

ARCADIS

FIGURE 10

APPENDIX D

2017 Periodic Review Report Tables and Figures

Table 1
Leachate Collection System Recovery Volumes
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Month	EW-1	EW-2	EW-3	EW-4	Gallons Per Month
January 2017	-	-	-	377,622	**377,622**
February 2017	-	-	-	365,085	**365,085**
March 2017	-	790	-	378,187	**378,977**
April 2017	-	12,893	284	321,751	**334,928**
May 2017	13,225	11,833	21,556	358,482	**405,096**
June 2017	15,799	13,986	46,800	366,488	**443,073**
July 2017	15,039	17,556	48,360	445,614	**526,569**
August 2017	13,341	14,956	48,360	412,728	**489,385**
September 2017	12,929	12,353	46,800	385,943	**458,025**
October 2017	7,324	254	48,360	289,752	**345,690**
November 2017	11,457	6,211	46,800	406,382	**470,850**
Jan-Nov 2017 Total	**89,114**	**90,832**	**307,320**	**4,108,034**	**4,595,300**

Table 2
Extraction Well Flow Rate
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Month	EW-1	EW-2	EW-3	EW-4	Gallons Per Minute Per Month
January 2017	-	-	-	8.5	**8.5**
February 2017	-	-	-	9.1	**9.1**
March 2017	-	0.0	-	8.5	**8.5**
April 2017	-	0.3	0.0	7.4	**7.8**
May 2017	0.3	0.3	0.5	8.0	**9.1**
June 2017	0.4	0.3	1.1	8.5	**10.3**
July 2017	0.3	0.4	1.1	10.0	**11.8**
August 2017	0.3	0.3	1.1	9.2	**11.0**
September 2017	0.3	0.3	1.1	8.9	**10.6**
October 2017	0.2	0.0	1.1	6.5	**7.7**
November 2017	0.3	0.1	1.1	9.4	**10.9**
Jan-Nov 2017 Total	**0.3**	**0.2**	**1.0**	**8.5**	**9.6**

Table 3
Treatment System Analytical Data - EW-1
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	5/24/2017		7/31/2017		10/30/2017	
Volatile Organic Compounds (ug/L)								
ACETONE	50	50	17	J	50	U	11	J
BENZENE	1	1	**8.8**		**10**	**J**	**9.9**	
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	47		20	U	18	J
CARBON DISULFIDE	60	60	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	**7.4**		**7.8**	**J**	**8.9**	
CHLORODIBROMOMETHANE	50	--	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	2.0	U	2.0	U	0.33	J
CYCLOHEXANE	--	--	0.64		5.0	U	1.1	J
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	0.21	J
1,3-DICHLOROBENZENE	3	3	0.39	J	1.0	U	0.44	J
1,4-DICHLOROBENZENE	3	3	0.67	J	1.0	U	0.97	J
DICHLORODIFLUOROMETHANE	5	5	1.1	J	2.0	U	0.29	J
1,1-DICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	**320**		**1,600**		**840**	
TRANS-1,2-DICHLOROETHYLENE	5	5	**5.8**		**16**	**J**	**12**	
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	2.6		**7.5**	**J**	4.7	
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	140		140		120	
ETHYLBENZENE	5	5	**7.2**		1.0	U	**6.2**	
2-HEXANONE	50	50	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	3.1		1.0	U	2.5	
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	0.72	
METHYLCYCLOHEXANE	--	--	1.4		1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	35		10	U	65	
STYRENE	5	930	1.0	U	1.0	U	1.0	U
1,1,1,2- TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE(PCE)	5	5	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	**28**		**12**	**J**	**13**	
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	**390**		**3,000**		**1,100**	
M,P-XYLENES	5	5	**36**		**24**	**J**	**32**	
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	3.8		1.0	U	4.0	
XYLENES, TOTAL	5	5	**40**		3.0	U	**36**	

Table 3
Treatment System Analytical Data - EW-1
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)								
PCB-1016 (AROCLOR 1016)	*	*	**910**		**250**		**3,300**	
PCB-1221 (AROCLOR 1221)	*	*	100	U	100	U	480	U
PCB-1232 (AROCLOR 1232)	*	*	100	U	100	U	480	U
PCB-1242 (AROCLOR 1242)	*	*	100	U	100	U	480	U
PCB-1248 (AROCLOR 1248)	*	*	100	U	100	U	480	U
PCB-1254 (AROCLOR 1254)	*	*	100	U	100	U	480	U
PCB-1260 (AROCLOR 1260)	*	*	100	U	100	U	480	U
PCB-1262 (AROCLOR 1262)	*	*	100	U	100	U	480	U
PCB-1268 (AROCLOR 1268)	*	*	100	U	100	U	480	U
PCB Total	0.09	0.09	**910**		**250**		**3,300**	
Metals (mg/L)								
ALUMINUM	--	2	0.18		0.05	U	0.05	U
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U
ARSENIC	0.025	0.05	0.010	U	0.0034		0.01	U
BARIUM	1	2	0.42		0.52		0.55	
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	180		170		160	
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.05	U	0.0075		0.05	U
COPPER	0.2	1	0.01	U	0.01	U	0.01	U
IRON	0.3	0.6	**72**		**55**		**82**	
LEAD	0.025	0.05	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	**57**		**58**		**56**	
MANGANESE	0.3	0.6	**1.6**		**1.4**		**1.1**	
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U
NICKEL	0.1	0.2	0.019		0.01	U	0.021	
POTASSIUM	--	--	35		35		37	
SELENIUM	0.01	0.02	0.05	U	0.05	U	0.05	U
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U
SODIUM	20	--	**190**		**210**		**200**	
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U
VANADIUM	--	--	0.01	U	0.01	U	0.01	U
ZINC	2	5	0.075		0.02	U	0.036	
Conventional Chemistry (mg/L)								
TOTAL DISSOLVED SOLIDS	--	--	1,300		1,200		1,300	
TOTAL SUSPENDED SOLIDS	--	--	70		30		64	
Perfluorinated Alkyl Substance (ng/L)								
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		7.5		NA	
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		47		NA	
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		160		NA	
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		1,300		NA	
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		73	B	NA	
PERFLUORONONANOIC ACID (PFNA)	70		NA		2.8		NA	
TOTAL PFAS	70		NA		1,590.3		NA	

Notes:

Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.

Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.

* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.

The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orang

Definitions:

NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.

NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.

U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J - The concentration is an approximate value.

B - Compound was found in the blank and sample.

T - LCS or LCSD is outside acceptable limits.

mg/L - milligrams per liter

ng/L - nanograms per liter

ug/L - micrograms per liter

NA - Not Analyzed

Table 4
Treatment System Analytical Data - EW-2
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	4/28/2017		5/24/2017		7/31/2017		10/30/2017	
Volatile Organic Compounds (ug/L)										
ACETONE	50	50	17	J	50	U	12	J	16	J
BENZENE	1	1	0.63	J	**2.3**		**4.7**		**5.4**	
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	20	U	20	U	20	U	20	U
CARBON DISULFIDE	60	60	4.0	U	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	0.26	J	0.93	J	1.4		1.8	
CHLORODIBROMOMETHANE	50	--	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	2.0	U	2.0	U	2.0	U	0.28	J
CYCLOHEXANE	--	--	5.0	U	5.0	U	5.0	U	0.92	J
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	0.29	J	0.49	J	0.44	J
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	0.37	J
1,1-DICHLOROETHANE	5	5	0.44	J	1.1		1.4		1.1	
CIS-1,2-DICHLOROETHYLENE	5	5	1.0	U	0.37	J	0.45	J	0.7	J
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	50	U	50	U	48		49	J
ETHYLBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	0.12	J	0.34	J	0.4	J	0.35	J
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	0.5	J	0.92	J	0.96	J	0.9	J
METHYL CYCLOHEXANE	--	--	1.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	10	U	10	U	10	U	10	U
STYRENE	5	930	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	2.0	U	0.44	J	2.0	U	0.34	J
M,P-XYLENES	5	5	0.27	J	2.0		1.2	J	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0	U	0.21	J	0.17	J	0.2	J
XYLENES, TOTAL	5	5	3.0	U	2.0	J	1.2	J	3.0	U

Table 4
Treatment System Analytical Data - EW-2
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

ARCADIS Design & Consultancy for natural and built assets

Polychlorinated Biphenyls (ug/L)												
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.19	U		
PCB Total	0.09	0.09	0.2	U	0.2	U	0.2	U	0.19	U		
Metals (mg/L)												
ALUMINUM	--	2	0.05	U	0.05	U	0.05	U	0.05	U		
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U	0.05	U		
ARSENIC	0.025	0.05	**0.041**		**0.049**		**0.025**		0.014			
BARIUM	1	2	0.15		0.22		0.12		0.14			
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U	0.004	U		
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U	0.004	U		
CALCIUM	--	--	120		130		130		120			
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U	0.01	U		
COBALT	--	--	0.05	U	0.05	U	0.008		0.05	U		
COPPER	0.2	1	0.011		0.034		0.01	U	0.01	U		
IRON	0.3	0.6	**29**		**68**		**22**		**40**			
LEAD	0.025	0.05	0.01	U	0.01	U	0.01	U	0.01	U		
MAGNESIUM	35	35	**42**		**43**		**45**		**41**			
MANGANESE	0.3	0.6	**0.85**		**1.1**		**1.1**		**0.93**			
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U		
NICKEL	0.1	0.2	0.017		0.01	U	0.01	U	0.011			
POTASSIUM	--	--	3.5		2.6		2.6		3.9			
SELENIUM	0.01	0.02	0.05	U	0.05	U	0.05	U	0.05	U		
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U	0.005	U		
SODIUM	20	--	**120**		**99**		**110**		**100**			
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U	0.05	U		
VANADIUM	--	--	0.01	U	0.01	U	0.01	U	0.01	U		
ZINC	2	5	0.02	U	0.02	U	0.02	U	0.02	U		
Conventional Chemistry (mg/L)												
TOTAL DISSOLVED SOLIDS	--	--	540		740		750		870			
TOTAL SUSPENDED SOLIDS	--	--	65		120		35		56			
Perfluorinated Alkyl Substance (ng/L)												
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		2.7		NA			
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		15		NA			
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		28		NA			
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		68		NA			
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		23		NA			
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		2.0	U	NA			
TOTAL PFAS	70		NA		NA		136.7		NA			

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 5
Treatment System Analytical Data - EW-3
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	5/24/2017		7/31/2017		10/30/2017	
Volatile Organic Compounds (ug/L)								
ACETONE	50	50	50	U	9.9	J	11	J
BENZENE	1	1	**4.2**		**4.6**		**3.9**	
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	20	U	20	U	20	U
CARBON DISULFIDE	60	60	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	**30**		**32**		**23**	
CHLORODIBROMOMETHANE	50	--	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	0.51	J	0.79	J	0.72	J
CYCLOHEXANE	--	--	0.92	J	1.1	J	1.3	J
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	0.52	J	0.57	J	0.5	J
1,3-DICHLOROBENZENE	3	3	0.31	J	0.34	J	0.39	J
1,4-DICHLOROBENZENE	3	3	**6.5**		**6.5**		**6.1**	
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	81		1.3		71	
ETHYLBENZENE	5	5	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	1.3		1.2		1.0	
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	0.68	J	0.69	J	0.63	J
METHYL CYCLOHEXANE	--	--	1.0	U	0.65	J	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	10	U	10	U	10	U
STYRENE	5	930	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	2.0	U	2.0	U	2.0	U
M,P-XYLENES	5	5	2.0	U	2.0	U	0.29	J
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	0.16	J	0.18	J	0.2	J
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U

Table 5
Treatment System Analytical Data - EW-3
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)								
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	0.2	U	0.18	U
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.18	U
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.18	U
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.18	U
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.18	U
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.18	U
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.18	U
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.18	U
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.18	U
PCB Total	0.09	0.09	0.2	U	0.2	U	0.18	U
Metals (mg/L)								
ALUMINUM	--	2	0.05	U	0.05	U	0.11	
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U
ARSENIC	0.025	0.05	0.012		0.0098		0.01	U
BARIUM	1	2	0.31		0.3		0.27	
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	83		80		73	
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.05	U	0.009		0.05	U
COPPER	0.2	1	0.01	U	0.01	U	0.01	U
IRON	0.3	0.6	**35**		**33**		**38**	
LEAD	0.025	0.05	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	**39**		**39**		**36**	
MANGANESE	0.3	0.6	0.17		0.21		0.2	
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U
NICKEL	0.1	0.2	0.01	U	0.01	U	0.01	U
POTASSIUM	--	--	51		49		42	
SELENIUM	0.01	0.02	0.05	U	0.05	U	0.05	U
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U
SODIUM	20	--	**120**		**120**		**93**	
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U
VANADIUM	--	--	0.011		0.01	U	0.01	U
ZINC	2	5	0.025		0.02	U	0.02	U
Conventional Chemistry (mg/L)								
TOTAL DISSOLVED SOLIDS	--	--	760		730		660	
TOTAL SUSPENDED SOLIDS	--	--	64		40		81	
Perfluorinated Alkyl Substance (ng/L)								
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		3.0		NA	
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		12		NA	
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		29		NA	
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		64		NA	
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		21		NA	
PERFLUORONONANOIC ACID (PFNA)	70		NA		2.0	U	NA	
TOTAL PFAS	70		NA		129		NA	

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 6
Treatment System Analytical Data - EW-4
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	4/27/2017		5/24/2017		7/31/2017		10/30/2017	
Volatile Organic Compounds (ug/L)										
ACETONE	50	50	50	U	50	U	50	U	50	U
BENZENE	1	1	1.0	U	0.16	J	1.0	U	0.22	J
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	20	U	20	U	20	U	20	U
CARBON DISULFIDE	60	60	4.0	U	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	0.28	J	0.26	J	1.0	U	0.24	J
CHLORODIBROMOMETHANE	50	--	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	2.0	U	2.0	U	2.0	U	0.39	J
CYCLOHEXANE	--	--	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	0.15	J
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	0.44	J	0.31	J	1.0	U	0.25	J
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	50	U	50	U	3.9		50	U
ETHYLBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	0.09	J	1.0	U
METHYL CYCLOHEXANE	--	--	1.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	10	U	10	U	10	U	10	U
STYRENE	5	930	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	2.0	U	2.0	U	2.0	U	2.0	U
M,P-XYLENES	5	5	2.0	U	2.0	U	2.0	U	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U	3.0	U

Table 7
Effluent Limitations for the Discharge to the Glens Falls Feeder Canal
Fort Edward Landfill, Fort Edward, New York
NYSDEC Site # 558001

Analyte	Concentration (Daily Maximum)*
Instantaneous pH (Range)	6.0 9.0 Standard Units
Total Dissolved Solids	500,000
Total Suspended Solids	50,000
Arsenic	150
Barium	3,500 (Daily Average)
Cadmium	1
Chromium (Total)	210
Cobalt	5
Copper	24
Iron	300
Lead	3
Mercury	0.8
Nickel	9.6
Vanadium	14.0
Zinc	170
Vinyl Chloride	50
Chloroethane	20
Methylene Chloride	50
1,1-Dichloroethane	30
1,2 Dichloroethene (Total)	30
Chloroform	150
Bromodichloromethane	30
Benzene	10
Toluene	10
Chlorobenzene	10
Ethylbenzene	10
Xylenes, Total	10
Phenols, Total Phenolics	8 (Daily Average)
Aroclor 1016 (PCB)	ND (0.065)
Aroclor 1221 (PCB)	ND (0.065)
Aroclor 1242 (PCB)	ND (0.065)

Notes:

* Unless otherwise indicated

NYSDEC, Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1), "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations", dated June 1998

Definitions:

ug/L - micrograms per liter or parts per billion

Table 6
Treatment System Analytical Data - EW-4
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)												
PCB-1016 (AROCLOR 1016)	*	*	**0.4**		**0.29**		**0.63**		**0.37**			
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.18	U		
PCB Total	0.09	0.09	**0.4**		**0.29**		**0.63**		**0.37**			
Metals (mg/L)												
ALUMINUM	--	2	0.05	U	0.05	U	0.05	U	0.05	U		
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U	0.05	U		
ARSENIC	0.025	0.05	0.01	U	0.01	U	0.0083		0.01	U		
BARIUM	1	2	0.063		0.055		0.086		0.05	U		
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U	0.004	U		
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U	0.004	U		
CALCIUM	--	--	82		92		100		86			
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U	0.01	U		
COBALT	--	--	0.05	U	0.05	U	0.05	U	0.05	U		
COPPER	0.2	1	0.01	U	0.01	U	0.01	U	0.01	U		
IRON	0.3	0.6	**32**		**20**		**60**		**21**			
LEAD	0.025	0.05	0.01	U	0.01	U	0.01	U	0.01	U		
MAGNESIUM	35	35	23		22		24		20			
MANGANESE	0.3	0.6	**1.7**		**1.7**		**2.0**		**1.8**			
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U		
NICKEL	0.1	0.2	0.01	U	0.01	U	0.01	U	0.01	U		
POTASSIUM	--	--	3.3		3.1		3.7		3.5			
SELENIUM	0.01	0.02	0.05	U	0.05	U	0.05	U	0.05	U		
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U	0.005	U		
SODIUM	20	--	**48**		**43**		**52**		**45**			
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U	0.05	U		
VANADIUM	--	--	0.01	U	0.01	U	0.01	U	0.01	U		
ZINC	2	5	0.02	U	0.02	U	0.02	U	0.02	U		
Conventional Chemistry (mg/L)												
TOTAL DISSOLVED SOLIDS	--	--	370		510		410		420			
TOTAL SUSPENDED SOLIDS	--	--	47		27		110		22			
Perfluorinated Alkyl Substance (ng/L)												
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		2.0	U	NA			
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		1.7	J	NA			
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		8.3		NA			
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		20		NA			
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		7.6		NA			
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		2.0	U	NA			
TOTAL PFAS	70		NA		NA		37.6		NA			

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlightec

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 8
Treatment System Analytical Data - Influent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	9/13/2016	10/19/2016	11/15/2016	12/28/2016	1/19/2017	2/28/2017	3/29/2017	4/27/2017	5/24/2017	6/28/2017	7/31/2017	8/29/2017	9/25/2017	10/30/2017	11/27/2017
Volatile Organic Compounds (ug/L)																	
ACETONE	50	50	9.2 J	50 U	7.0 J	6.9 J	33 J	12 J	19 J	50 U	50 U	50 U	50 U	16 J	50 U	50 U	50 U
BENZENE	1	1	0.21 J	0.27 J	0.13 J	0.34 J	0.29 J	0.2 J	1.0 U	0.27 J	0.38 J	0.19 J	0.47 J	0.34 J	0.7 J	0.24 J	0.48 J
BROMOCHLOROMETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	50	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6	1.0 U	0.5 U	0.5 U
BROMOFORM	50	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-BUTANONE (MEK)	50	50	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	6.6 J	1.0 U	1.0 U	20.0 U
CARBON DISULFIDE	60	60	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.5 J	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U
CARBON TETRACHLORIDE	5	5	5.0 U	5.0 U	0.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
CHLOROBENZENE	5	5	0.39 J	0.38 J	0.21 J	0.34 J	0.65 J	0.29 J	0.25 J	0.29 J	0.59 J	0.23 J	0.76 J	0.57 J	0.77 J	0.31 J	0.58 J
CHLORODIBROMOMETHANE	50	--	2.0 U	2.0 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.24 J	1.0 U	1.0 U	0.5 U
CHLOROETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.42 J	0.55 J	2.0 U
CYCLOHEXANE	--	--	0.3 U	0.3 U	0.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.2 U	0.2 U	0.2 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	3	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	3	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	3	3	0.18 J	0.19 J	1.0 U	0.18 J	0.17 J	0.15 J	0.16 J	1.0 U	0.2 J	1.0 U	0.21 J	0.15 J	0.18 J	0.18 J	0.16 J
DICHLORODIFLUOROMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-DICHLOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,2-DICHLOROETHYLENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	0.43 J	0.5 J	0.4 J	**7.0**	2.6	**8.9**	**11**	**21**	0.19 J	**13**
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J	0.16 J	0.34 J	1.0 U	0.25 J
1,2-DICHLOROETHANE	0.6	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHYLENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	--	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	8.2	50 U	50 U	50 U	50 U
ETHYLBENZENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U
2-HEXANONE	50	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U	0.12 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
METHYL ACETATE	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.09 J	1.0 U	1.0 U	1.0 U	1.0 U
METHYL CYCLOHEXANE	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	5	5	3.2 U	5.0 U	3.2 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
STYRENE	5	930	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TETRACHLOROETHYLENE (PCE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	5	5	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	0.55 J	1.0 U	0.2 J	0.18 J	0.43 J	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-TRICHLOROBENZENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-TRICHLOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHYLENE (TCE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.18 J	2.0 U	2.0 U	**11**	**3.0**	**14**	**5.2**	**19**	2.0 U	**14**
M,P-XYLENES	5	5	3.0 U	3.0 U	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.58 J	2.0 U	0.26 J	0.35 J	0.6 J	2.0 U	2.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	5	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Polychlorinated Biphenyls (ug/L)																	
PCB-1016 (AROCLOR 1016)	*	*	0.2 U	0.2 U	0.2 U	**0.6**	0.2 U	0.2 U	**0.81**	**0.34**	**4.1**	**80**	**25**	2.0 U	4.0 U	**2.2**	1.9 U
PCB-1221 (AROCLOR 1221)	*	*	**1.5**	0.2 U	0.2 U	0.2 U	**2.2**	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB-1232 (AROCLOR 1232)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	**30**	0.19 U	**17**
PCB-1242 (AROCLOR 1242)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.93**	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	**8.5**	4.0 U	0.19 U	1.9 U
PCB-1248 (AROCLOR 1248)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB-1254 (AROCLOR 1254)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB-1260 (AROCLOR 1260)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB-1262 (AROCLOR 1262)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB-1268 (AROCLOR 1268)	*	*	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	4.0 U	2.0 U	4.0 U	0.19 U	1.9 U
PCB Total	0.09	0.09	**1.5**	0.2 U	0.2 U	**0.6**	**2.2**	**0.93**	**0.81**	**0.34**	**4.1**	**80**	**25**	**8.5**	**30**	**2.2**	**17**
Metals (mg/L)																	
ALUMINUM	--	2	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.06	0.05 U	0.05 U	0.09	0.05 U	13	0.050 U	0.05 U	0.05 U
ANTIMONY	0.003	0.006	0.005 U	0.005 U	0.005 U	0.050 U	0.050 U	0.050 U	**0.052**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ARSENIC	0.025	0.05	0.019	0.0021	0.002 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0059	0.01 U	0.01 U	0.01 U	0.01 U
BARIUM	1	2	0.076	0.05 U	0.05 U	0.05 U	0.13	0.054	0.05 U	0.05	0.061	0.08	0.08	0.11	0.066	0.053	0.068
BERYLLIUM	0.003	0.003	0.002 U	0.002 U	0.002 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
CADMIUM	0.005	0.01	0.0025 U	0.0025 U	0.0025 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
CALCIUM	--	--	83	81	80	79	99	94	90	81	100	100	96	98	91	87	99
CHROMIUM, TOTAL	0.05	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
COBALT	--	--	0.01 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
COPPER	0.2	1	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
IRON	0.3	0.6	**55**	**25**	**24**	**16**	**71**	**11**	**10**	**15**	**16**	**39**	**40**	**12**	**17**	**25**	**28**
LEAD	0.025	0.05	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
MAGNESIUM	35	35	19	19	18	19	26	25	23	22	25	26	24	25	24	19	23
MANGANESE	0.3	0.6	**2.1**	2.0 U	**1.8**	**1.8**	**1.9**	**1.8**	**1.7**	**1.6**	**1.9**	**1.8**	**1.9**	**2.1**	**1.8**	**1.8**	**1.8**
MERCURY	0.0007	0.0014	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
NICKEL	0.1	0.2	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
POTASSIUM	--	--	2.8	3.1	3.1	3.8	5.5	3.8	3.4	3.1	4.5	3.5	4.3	5.6	4.7	3.1	4.1
SELENIUM	0.01	0.02	0.025 U	0.025 U	0.025 U	0.05 U	0.05 U	**0.052**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
SILVER	0.05	0.1	0.0025 U	0.0025 U	0.0025 U	0.005	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
SODIUM	20	--	**47**	**50**	**49**	**48**	**57**	**51**	**47**	**48**	**65**	**180**	**53**	**70**	**52**	**44**	**47**
THALLIUM	0.0005	0.0005	0.001 U	0.001 U	0.001 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VANADIUM	--	--	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
ZINC	2	5	0.071	0.05 U	0.05 U	0.02 U	0.02 U	0.025	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Conventional Chemistry (mg/L)																	
TOTAL DISSOLVED SOLIDS	--	--	390	220	400	340	510	290	470	270	540	620	430	550	380	530	470
TOTAL SUSPENDED SOLIDS	--	--	110	21	15	49	42	18	22	31	42	80	84	100	12	27	36
Perfluorinated Alkyl Substance (ng/L)																	
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U	NA	NA	NA	NA
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	NA	NA	NA	NA
PERFLUOROOCTANOIC ACID (PFOA)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37	NA	NA	NA	NA
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8	NA	NA	NA	NA
PERFLUORONONANOIC ACID (PFNA)	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U	NA	NA	NA	NA
TOTAL PFAS	70		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	59.7	NA	NA	NA	NA

Notes:

Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.

Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.

* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.

The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:

NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 9
Treatment System Analytical Data - Clarifier Catch Tank
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	12/28/2016	1/19/2017	2/28/2017	3/29/2017	4/27/2017	5/24/2017	6/28/2017	7/31/2017	8/29/2017	9/25/2017	10/30/2017	11/27/2017
Volatile Organic Compounds (ug/L)														
ACETONE	50	50	**50 J**	**130**	23 J	27 J	12 J	50 U	5.6 J	8.1 J	50 U	8.7 J	50 U	50 U
BENZENE	1	1	0.32 J	0.28 J	0.14 J	0.16 J	0.24 J	0.47 J	0.31 J	0.74 J	0.63 J	0.71 J	0.24 J	0.37 J
BROMOCHLOROMETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	50	50	0.5 U	0.5 U	0.5 U	1.2 U	0.61	0.5	0.38 J	1.1 J	0.5 U	0.54	0.5 U	0.5 U
BROMOFORM	50	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-BUTANONE (MEK)	50	50	30	20 U	20 U	4.0 J	7.7 J	20 U	3.5 J	20 U	20 U	8.0 J	20 U	20 U
CARBON DISULFIDE	60	60	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.5 J	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U
CARBON TETRACHLORIDE	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
CHLOROBENZENE	5	5	0.31 J	0.53 J	0.23 J	0.2 J	0.27 J	0.67 J	0.32 J	1.3	1.1	0.86 J	0.27 J	0.50 J
CHLORODIBROMOMETHANE	50	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.37 J	2.0 U	2.0 U
CYCLOHEXANE	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	3	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	3	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	3	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.23 J	1.0 U	0.31 J	0.27 J	0.25 J	0.16 J	0.19 J
DICHLORODIFLUOROMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-DICHLOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,2-DICHLOROETHYLENE	5	5	1.0 U	0.42 J	0.28 J	0.38 J	0.30 J	**10**	**8.8**	**25**	**17**	**20**	0.3 J	**8.9**
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	0.33 J	0.31 J	1.0 U	1.0 U
1,2-DICHLOROETHANE	0.6	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHYLENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	--	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U	11	50 U	50 U	50 U	50 U
ETHYLBENZENE	5	5	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	0.13 J	0.18 J	0.16 J	1.0 U	1.0 U
2-HEXANONE	50	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	0.16 J	1.0 U	1.0 U	2.0 U
METHYL ACETATE	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 J	1.0 U	1.0 U	1.0 U
METHYL CYCLOHEXANE	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANO	--	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
STYRENE	5	930	1.0 U	1.0 U	1.0 U	0.3 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-TETRACHLOROETHANE	5	5	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TETRACHLOROETHYLENE (PCE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.85 J	0.29 J	0.51 J	0.34 J	0.46 J	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-TRICHLOROBENZENE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-TRICHLOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHYLENE (TCE)	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	5	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**14**	**7.6**	**37**	**14**	**15**	0.2 J	**8.0**
M,P-XYLENES	5	5	0.64 J	2.0 U	2.0 U	2.0 U	2.0 U	0.89 J	0.50 J	0.37 J	0.71 J	0.62 J	2.0 U	2.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J	0.17 J	1.0 U	1.0 U
XYLENES, TOTAL	5	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Table 9
Treatment System Analytical Data - Clarifier Catch Tank
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)																																
PCB-1016 (AROCLOR 1016)	*	*	**0.34**		0.2	U	0.2	U	**0.72**		**0.34**		**4.1**		**7.9**		**21**		4.0	U	4.0	U	**3.3**		3.9	U
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	**2.0**		0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	**37**		0.77	U	**23**	
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	**0.84**		0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	**20**		4.0	U	0.77	U	3.9	U
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.0	U	1.0	U	1.0	U	4.0	U	4.0	U	0.77	U	3.9	U
PCB Total	0.09	0.09	**0.34**		**2.0**		**0.84**		**0.72**		**0.34**		**4.1**		**7.9**		**21**		**20**		**37**		**3.3**		**23**	
Metals (mg/L)																																
ALUMINUM	--	2	0.05	U	0.06		0.05	U	0.65		1.9		0.54		0.35		0.57		0.73		1.5		0.33		0.39	
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U	**0.051**		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
ARSENIC	0.025	0.05	0.01	U	0.023		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
BARIUM	1	2	0.07		0.068		0.05	U	0.05	U	0.05	U	0.053		0.056		0.061		0.063		0.06		0.05	U	0.07	
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	85		95		92		88		83		100		100		97		91		88		86		100	
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
COPPER	0.2	1	0.078		0.015		0.011		0.010	U	0.010	U	0.010	U	0.190		0.010	U	0.018		0.018		0.02		0.013	
IRON	0.3	0.6	**42**		**21**		**5.6**		**0.89**		**7.1**		**4.0**		**5.0**		**4.3**		**13**		**6.7**		**11**		**12**	
LEAD	0.025	0.05	0.086		0.038		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	20		25		24		22		23		25		26		26		25		24		20		23	
MANGANESE	0.3	0.6	**1.9**		**1.8**		**1.9**		**1.4**		**1.6**		**1.8**		**1.8**		**1.8**		**1.8**		**1.7**		**1.8**		**1.8**	
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
NICKEL	0.1	0.2	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.013		0.042		0.05		0.016	
POTASSIUM	--	--	4.1		5.7		3.7		3.6		3.2		5.1		4		6.3		5.4		5.3		3.3		5.1	
SELENIUM	0.01	0.02	0.05	U	0.05	U	**0.057**		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
SODIUM	20	--	**48**		**55**		**50**		**59**		**59**		**61**		**58**		**75**		**59**		**66**		**56**		**55**	
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
VANADIUM	--	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
ZINC	2	5	0.2		0.076		0.048		0.027		0.02	U	0.035		0.49		0.02	U	0.1		0.02	U	0.15		0.27	
Conventional Chemistry (mg/L)																																
TOTAL DISSOLVED SOLIDS	--	--	400		460		410		520		440		550		480		480		450		380		460		540	
TOTAL SUSPENDED SOLIDS	--	--	120		47		5.0	U	40		32		23		5.0		14		45		12		48		11	
Perfluorinated Alkyl Substance (ng/L)																																
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		NA		NA		NA		3.6		NA		NA		NA		NA	
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		NA		NA		NA		14		NA		NA		NA		NA	
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		NA		NA		NA		63		NA		NA		NA		NA	
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		NA		NA		NA		8.2		NA		NA		NA		NA	
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
TOTAL PFAS	70		NA		NA		NA		NA		NA		NA		NA		88.8		NA		NA		NA		NA	

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 10
Treatment System Analytical Data - Cell 3 Chamber
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	11/15/2016		12/18/2016		1/19/2017		2/28/2017		3/29/2017		4/27/2017		5/24/2017		7/31/2017	
Volatile Organic Compounds (ug/L)																		
ACETONE	50	50	9.7	J	11	J	19	J	29	J	23	J	6.9	J	9.5	J	50	U
BENZENE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	20	U	20	U	20	U	20	U	20	U	20	U	13	J	20	U
CARBON DISULFIDE	60	60	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CHLORODIBROMOMETHANE	50	--	2.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
CYCLOHEXANE	--	--	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.68	J	0.85	J
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	50	U	50	U	50	U	50	U	50	U	50	U	50	U	1.3	
ETHYLBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL CYCLOHEXANE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTAN	--	--	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
STYRENE	5	930	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	1.3	J	2.0	U
M,P-XYLENES	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

Table 10
Treatment System Analytical Data - Cell 3 Chamber
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)																				
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB Total	0.09	0.09	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Metals (mg/L)																				
ALUMINUM	--	2	0.12		0.05	U	0.05	U	0.05	U	0.065		0.05	U	0.05	U	0.086			
ANTIMONY	0.003	0.006	0.005	U	0.05	U	0.05	U	0.05	U	0.056		0.05	U	0.05	U	0.05	U		
ARSENIC	0.025	0.05	0.002	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.019		0.018	
BARIUM	1	2	0.059		0.057		0.059		0.050	U	0.050	U	0.071	U	0.060		0.082			
BERYLLIUM	0.003	0.003	0.002	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.0025	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	97		110		110		83		92		40		110		70			
CHROMIUM, TOTAL	0.05	0.1	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.005	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
COPPER	0.2	1	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
IRON	0.3	0.6	**0.75**		**5.0**		**3.0**		**0.81**		**1.7**		0.05	U	**19**		**16**			
LEAD	0.025	0.05	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	14		17		21		15		17		11		21		12			
MANGANESE	0.3	0.6	**0.33**		**1.1**		**0.83**		**0.43**		**0.66**		0.053		**2.3**		**0.99**			
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U		
NICKEL	0.1	0.2	0.025	U	0.014		0.013		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
POTASSIUM	--	--	3.1		7.7		9.1		4.7		4.0		2.0	U	6.5		3.2			
SELENIUM	0.01	0.02	0.025	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
SILVER	0.05	0.1	0.0025	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U		
SODIUM	20	--	**34**		**37**		**48**		**30**		**36**		13		**49**		15			
THALLIUM	0.0005	0.0005	0.0011		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
VANADIUM	--	--	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
ZINC	2	5	0.05	U	0.02	U	0.02		0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
Conventional Chemistry (mg/L)																				
TOTAL DISSOLVED SOLIDS	--	--	440		430		490		210		450		420		470		240			
TOTAL SUSPENDED SOLIDS	--	--	5.0	U	26		10		5.0	U	11		20		41		54			
Perfluorinated Alkyl Substance (ng/L)																				
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		NA		NA		NA		2.0	U		
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		NA		NA		NA		1.1	J		
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		NA		NA		NA		6.3			
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		NA		NA		NA		14			
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		NA		NA		NA		2.6			
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		NA		NA		NA		0.9	J		
TOTAL PFAS	70		NA		NA		NA		NA		NA		NA		NA		24.9			

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in oran

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 11
Treatment System Analytical Data - Cell 3 Bypass
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	6/28/2017		8/29/2017		9/25/2017		10/30/2017		11/27/2017	
Volatile Organic Compounds (ug/L)												
ACETONE	50	50	50	U	50	U	50	U	50	U	50	U
BENZENE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	0.14	J
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	0.5	U	0.5	U	0.5	U	0.5	U	1.0	
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	20	U	20	U	20	U	20	U	20	U
CARBON DISULFIDE	60	60	2.6	J	4.0	U	4.0	U	4.0	U	1.0	U
CARBON TETRACHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	1.0	U	0.16	J	1.0	U	1.0	U	1.0	U
CHLORODIBROMOMETHANE	50	--	0.5	U	0.50	U	0.5	U	0.5	U	0.16	J
CHLOROETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
CYCLOHEXANE	--	--	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.00	U	1.0	U	1.0	U
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	3.2		**7.0**		**9.2**		0.19	J	**5.0**	
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	1.0	U	1.0	U	1.0	U	1.0	U	**0.74**	**J**
1,1-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	50	U	50	U	50	U	50	U	50	U
ETHYLBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	2.0	U
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL CYCLOHEXANE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTAN	--	--	10	U	10	U	10	U	10	U	10	U
STYRENE	5	930	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	0.2	J	1.0	U	0.23	J	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	**1.1**	
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	2.0	U	**2.5**		1.4	J	2.0	U	**4.2**	
M,P-XYLENES	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

Table 11
Treatment System Analytical Data - Cell 3 Bypass
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)														
PCB-1016 (AROCLOR 1016)	*	*	**0.44**		0.2	U	1.0	U	**0.53**		0.19	U		
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	**3.9**		0.19	U	**0.97**			
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	**1.1**		1.0	U	0.19	U	0.19	U		
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	1.0	U	0.19	U	0.19	U		
PCB Total	0.09	0.09	**0.44**		**1.1**		**3.9**		**0.53**		**0.97**			
Metals (mg/L)														
ALUMINUM	--	2	3.0		0.091		0.087		0.05	U	0.05	U		
ANTIMONY	0.003	0.006	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
ARSENIC	0.025	0.05	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
BARIUM	1	2	0.11		0.083		0.071		0.05	U	0.066			
BERYLLIUM	0.003	0.003	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U		
CADMIUM	0.005	0.01	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U		
CALCIUM	--	--	120		110		100		89		110			
CHROMIUM, TOTAL	0.05	0.1	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
COBALT	--	--	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
COPPER	0.2	1	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
IRON	0.3	0.6	**16**		**6.4**		**5.5**		**0.55**		**1.7**			
LEAD	0.025	0.05	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
MAGNESIUM	35	35	26		25		24		20		24			
MANGANESE	0.3	0.6	**1.9**		**1.4**		**1.4**		**0.35**		**0.61**			
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U		
NICKEL	0.1	0.2	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
POTASSIUM	--	--	2.2		2.4		2.9		3.1		5.3			
SELENIUM	0.01	0.02	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
SILVER	0.05	0.1	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U		
SODIUM	20	--	**64**		**71**		**67**		**52**		**63**			
THALLIUM	0.0005	0.0005	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U		
VANADIUM	--	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
ZINC	2	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
Conventional Chemistry (mg/L)														
TOTAL DISSOLVED SOLIDS	--	--	450		440		450		480		590			
TOTAL SUSPENDED SOLIDS	--	--	10		16		34		5.0	U	8.0			
Perfluorinated Alkyl Substance (ng/L)														
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		NA			
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		NA			
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		NA			
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		NA			
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		NA			
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		NA			
TOTAL PFAS	70		NA		NA		NA		NA		NA			

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 12
Treatment System Analytical Data - Cell 2 Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	9/13/2016		11/15/2016		4/27/2017		5/24/2017		6/28/2017		7/31/2017		8/29/2017		9/25/2017		10/30/2017		11/27/2017	
Volatile Organic Compounds (ug/L)																						
ACETONE	50	50	1.0	U	1.0	U	1.0	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
BENZENE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	1.0	U	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	1.0	U	1.0	U	1.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	1.0	U	1.0	U	1.0	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
CARBON DISULFIDE	60	60	5.0	U	5.0	U	5.0	U	4.0	U	2.7	J	4.0	U	4.0	U	4.0	U	4.0	U	1.0	U
CARBON TETRACHLORIDE	5	5	0.5	U	0.5	U	0.5	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CHLORODIBROMOMETHANE	50	--	1.0	U	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
CYCLOHEXANE	--	--	1.0	U	1.0	U	1.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	8.2	J	15	J	50	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	1.0	U	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	0.5	U	0.5	U	0.5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	20	U	5.2	J	20	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	5.0	U	5.0	U	5.0	U	0.69	J	2.3		4.5		5.5		6.7		1.6		1.5	
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	2.0	U	2.0	U	0.5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	2.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROPROPANE	1	1	NA		NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	1.0	U	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	1.0	U	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	0.5	U	0.5	U	0.5	U	50	U	50	U	5.7		50	U	50	U	50	U	50	U
ETHYLBENZENE	5	5	5.0	U	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	NA		NA		NA		10	U	10	U	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	2.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	2.0	U
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL CYCLOHEXANE	--	--	2.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	1.0	U	1.0	U	1.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTA	--	--	1.0	U	1.0	U	1.0	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
STYRENE	5	930	10	U	10	U	10	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	5.0	U	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	NA		NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	NA		NA		NA	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	5.0	U	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	NA		NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	0.5	U	0.5	U	0.5	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	50	U	50	U	50	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	1.0	U	1.0	U	1.0	U	0.62	J	2.0	U	2.0	U	1.6	J	1.4	J	0.41	J	0.39	J
M,P-XYLENES	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	2.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

Table 12
Treatment System Analytical Data - Cell 2 Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (ug/L)																						
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	NA		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	**0.39**	
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U
PCB Total	0.09	0.09	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	**0.39**	
Metals (mg/L)																						
ALUMINUM	--	2	0.05	U	0.05	U	0.17		0.05	U	0.077		0.062		0.056		0.05	U	0.072		0.05	U
ANTIMONY	0.003	0.006	0.005	U	0.005	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
ARSENIC	0.025	0.05	0.0029		0.0029		0.01	U	0.012		0.01	U	0.0062		0.01	U	0.01	U	0.01	U	0.01	U
BARIUM	1	2	0.063		0.073		0.12		0.074		0.067		0.073		0.077		0.08		0.064		0.062	
BERYLLIUM	0.003	0.003	0.002	U	0.002	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.0025	U	0.0025	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	130		240		62		110		100		110		110		110		110		100	
CHROMIUM, TOTAL	0.05	0.1	0.005	U	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.013		0.048		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
COPPER	0.2	1	0.025	U	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
IRON	0.3	0.6	**2.0**		**22**		**0.39**		**9.2**		**9.4**		**11**		**10**		**10**		**10**		**6.6**	
LEAD	0.025	0.05	0.005	U	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	20		31		20		17		19		20		23		22		21		20	
MANGANESE	0.3	0.6	**0.72**		**0.86**		**2.6**		**1.8**		**1.5**		**1.5**		**1.5**		**1.4**		**1.2**		**0.92**	
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
NICKEL	0.1	0.2	0.077		0.026		0.01	U	0.014		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
POTASSIUM	--	--	2.8		4.6		2.0	U	3.5		2.0	U	2.0	U	2.1		2.0	U	2.0	U	2.9	
SELENIUM	0.01	0.02	0.0025	U	0.0025	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.034	U
SILVER	0.05	0.1	0.0025	U	0.0025	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
SODIUM	20	--	**36**		**43**		**47**		**41**		**51**		**60**		**66**		**65**		**61**		**54**	
THALLIUM	0.0005	0.0005	0.001	U	0.001	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
VANADIUM	--	--	0.025	U	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
ZINC	2	5	0.05	U	0.05	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Conventional Chemistry (mg/L)																						
TOTAL DISSOLVED SOLIDS	--	--	560		920		250		510		410		490		590		490		600		510	
TOTAL SUSPENDED SOLIDS	--	--	5.0	U	21		19		37		5.0	U	17		22		7.0		22		5.0	
Perfluorinated Alkyl Substance (ng/L)																						
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		NA		2.3		NA		NA		NA		NA	
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		NA		11.0		NA		NA		NA		NA	
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		NA		41		NA		NA		NA		NA	
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		NA		5.0		NA		NA		NA		NA	
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
TOTAL PFAS	70		NA		NA		NA		NA		NA		59.3		NA		NA		NA		NA	

Notes:

Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.

Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.

* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.

The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:

NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 13
Treatment System Analytical Data - Cell 1 Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	9/13/2016		4/27/2017		5/24/2017		6/28/2017		7/31/2017	
Volatile Organic Compounds (ug/L)												
ACETONE	50	50	9.2	J	6.6 J	U	50	U	50	U	50	U
BENZENE	1	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOCHLOROMETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMODICHLOROMETHANE	50	50	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U
BROMOFORM	50	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
BROMOMETHANE	5	5	1.0	U	1.0	U	2.0	U	2.0	U	2.0	U
2-BUTANONE (MEK)	50	50	1.0	U	1.0	U	20	U	20	U	20	U
CARBON DISULFIDE	60	60	5.0	U	5.0	U	4.0	U	4.0	U	4.0	U
CARBON TETRACHLORIDE	5	5	0.5	U	0.5	U	5.0	U	5.0	U	5.0	U
CHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CHLORODIBROMOMETHANE	50	--	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	5	5	1.0	U	1.0	U	2.0	U	2.0	U	2.0	U
CYCLOHEXANE	--	--	1.0	U	1.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-DICHLOROBENZENE	3	3	0.5	U	0.5	U	1.0	U	1.0	U	1.0	U
1,4-DICHLOROBENZENE	3	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
DICHLORODIFLUOROMETHANE	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-DICHLOROETHANE	5	5	20	U	20	U	1.0	U	1.0	U	1.0	U
CIS-1,2-DICHLOROETHYLENE	5	5	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-DICHLOROETHANE	0.6	0.6	2.0	U	0.5	U	1.0	U	1.0	U	1.0	U
1,1-DICHLOROETHYLENE	5	5	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	1.0	U	1.0	U	0.5	U	0.5	U	0.5	U
1,4-DIOXANE	--	--	0.5	U	0.5	U	50	U	50	U	5.5	
ETHYLBENZENE	5	5	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U
2-HEXANONE	50	50	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE (CUMENE)	5	5	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U
METHYL ACETATE	--	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
METHYL CYCLOHEXANE	--	--	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U
METHYLENE CHLORIDE	5	5	1.0	U	1.0	U	5.0	U	5.0	U	5.0	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	1.0	U	1.0	U	10	U	10	U	10	U
STYRENE	5	930	10	U	10	U	1.0	U	1.0	U	1.0	U
1,1,1,2-TETRACHLOROETHANE	5	5	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U
TETRACHLOROETHYLENE (PCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TOLUENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-TRICHLOROBENZENE	5	5	5.0	U	1.0	U	5.0	U	5.0	U	5.0	U
1,2,4-TRICHLOROBENZENE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,1-TRICHLOROETHANE	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-TRICHLOROETHANE	1	1	5.0	U	5.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROETHYLENE (TCE)	5	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
TRICHLOROFLUOROMETHANE	5	5	0.5	U	0.5	U	2.0	U	2.0	U	2.0	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	50	U	50	U	1.0	U	1.0	U	1.0	U
VINYL CHLORIDE	2	2	1.0	U	1.0	U	2.0	U	2.0	U	2.0	U
M,P-XYLENES	5	5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U
XYLENES, TOTAL	5	5	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

Table 13
Treatment System Analytical Data - Cell 1 Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Polychlorinated Biphenyls (mg/L)																
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB- 1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
PCB Total	0.09	0.09	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U				
Metals (mg/L)																
ALUMINUM	--	2	0.1		0.05	U	0.05	U	0.05	U	0.05	U				
ANTIMONY	0.003	0.006	0.005	U	0.05	U	0.05	U	0.05	U	0.05	U				
ARSENIC	0.025	0.05	0.012		0.01	U	0.01	U	0.01	U	0.0061					
BARIUM	1	2	0.12		0.1		0.061		0.061		0.05	U				
BERYLLIUM	0.003	0.003	0.002	U	0.004	U	0.004	U	0.004	U	0.004	U				
CADMIUM	0.005	0.01	0.0025	U	0.004	U	0.004	U	0.004	U	0.004	U				
CALCIUM	--	--	110		74		130		130		110					
CHROMIUM, TOTAL	0.05	0.1	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U				
COBALT	--	--	0.005	U	0.05	U	0.05	U	0.05	U	0.05	U				
COPPER	0.2	1	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U				
IRON	0.3	0.6	**45**		0.05	U	**10**		**10**		**8.2**					
LEAD	0.025	0.05	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U				
MAGNESIUM	35	35	18		30		25		25		16					
MANGANESE	0.3	0.6	**1.3**		0.054		**1.3**		**1.3**		**0.85**					
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U				
NICKEL	0.1	0.2	0.025	U	0.01	U	0.02		0.02		0.01	U				
POTASSIUM	--	--	2.2		3.3		2.2		2.2		2.0	U				
SELENIUM	0.01	0.02	0.025	U	0.05	U	0.05	U	0.05	U	0.05	U				
SILVER	0.05	0.1	0.0025	U	0.005	U	0.005	U	0.005	U	0.005	U				
SODIUM	20	--	**36**		18		**23**		**23**		**22**					
THALLIUM	0.0005	0.0005	0.001	U	0.05	U	0.05	U	0.05	U	0.05	U				
VANADIUM	--	--	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U				
ZINC	2	5	0.098		0.02	U	0.02	U	0.02	U	0.02	U				
Conventional Chemistry (mg/L)																
TOTAL DISSOLVED SOLIDS	--	--	410		200		510		510		380					
TOTAL SUSPENDED SOLIDS	--	--	130		91		49		49		5.0	U				
Perfluorinated Alkyl Substance (ng/L)																
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		2.0	U				
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		2.0					
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		8.0					
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		27					
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		4.4					
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		2.0	U				
TOTAL PFAS	70		NA		NA		NA		NA		41.4					

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed

Table 14
Treatment System Analytical Data - Polishing Pond Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

Chemical Name	NYSDEC Class GA GW Standard	NYSDEC Class GA GW Effluent Limitation	9/13/2016	10/19/2016	11/15/2016	12/28/2016	1/19/2017	2/28/2017	3/29/2017	4/27/2017	5/24/2017	6/28/2017	7/31/2017	8/29/2017	9/25/2017	10/30/2017	11/27/2017
Volatile Organic Compounds (ug/L)																	
ACETONE	50	50	11 J	100 U	7.3 J	20 J	24 J	22 J	16 J	5.4 J	50 U	50 U	50 U	50 U	50 U	5.6 J	50 U
BENZENE	1	1	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOCHLOROMETHANE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	50	50	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMOFORM	50	50	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	5	5	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-BUTANONE (MEK)	50	50	20 U	40 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
CARBON DISULFIDE	60	60	4.0 U	8.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.6 J	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U
CARBON TETRACHLORIDE	5	5	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
CHLOROBENZENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CHLORODIBROMOMETHANE	50	--	2.0 U	4.0 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROETHANE	5	5	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CYCLOHEXANE	--	--	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	0.04	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.0006	0.0006	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	3	3	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	3	3	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	3	3	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	5	5	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-DICHLOROETHANE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,2-DICHLOROETHYLENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J
TRANS-1,2-DICHLOROETHYLENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROETHANE	0.6	0.6	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHYLENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1	1	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	0.4	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	--	--	50 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	2.5	50 U	50 U	50 U	50 U
ETHYLBENZENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-HEXANONE	50	50	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ISOPROPYLBENZENE (CUMENE)	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
METHYL ACETATE	--	--	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYL TERT-BUTYL ETHER (MTBE)	10	10	1.0 U	2.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYL CYCLOHEXANE	--	--	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	5	5	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	--	--	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
STYRENE	5	930	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-TETRACHLOROETHANE	5	5	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TETRACHLOROETHYLENE (PCE)	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	5	5	0.56 J	2.0 U	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	5	5	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-TRICHLOROBENZENE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-TRICHLOROETHANE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1	1	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHYLENE (TCE)	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	5	5	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2	2	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
M,P-XYLENES	5	5	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	5	5	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	5	5	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

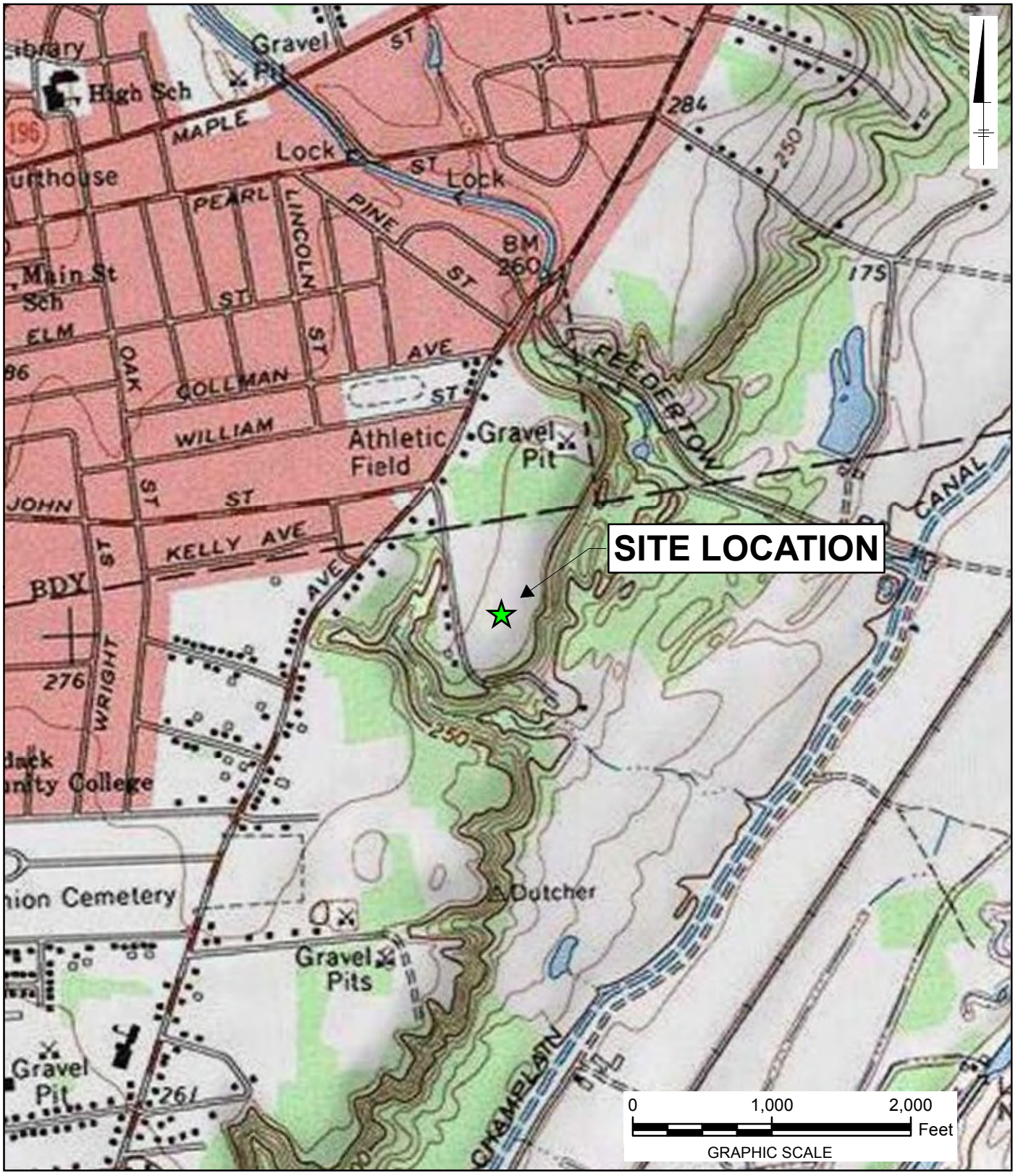
Table 14
Treatment System Analytical Data - Polishing Pond Effluent
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001

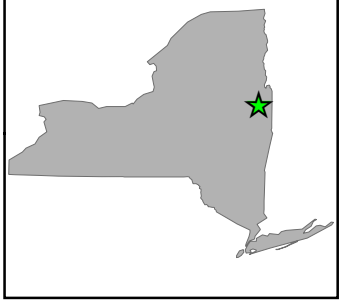
ARCADIS Design & Consultancy for natural and built assets

Polychlorinated Biphenyls (ug/L)																														
PCB-1016 (AROCLOR 1016)	*	*	0.2	U	0.2	U	NA		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1221 (AROCLOR 1221)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1232 (AROCLOR 1232)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1242 (AROCLOR 1242)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1248 (AROCLOR 1248)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1254 (AROCLOR 1254)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1260 (AROCLOR 1260)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1262 (AROCLOR 1262)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB-1268 (AROCLOR 1268)	*	*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
PCB Total	0.09	0.09	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.2	U
Metals (mg/L)																														
ALUMINUM	--	2	0.05	U	0.05	U	0.05	U	0.24		0.12		0.085		0.16		0.05	U	0.05	U	0.27		0.05	U	0.12		0.13		0.053		0.05	U
ANTIMONY	0.003	0.006	0.005	U	0.005	U	0.005	U	0.05	U	0.05	U	0.05	U	**0.055**		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
ARSENIC	0.025	0.05	0.0022		0.002	U	0.003		0.01	U	0.013		0.01	U	0.01	U	0.01	U	0.010	U	0.01	U	0.0034		0.01	U	0.01	U	0.01	U	0.01	U
BARIUM	1	2	0.07		0.05	U	0.05	U	0.05	U	0.05		0.05	U	0.05	U	0.05	U	0.05	U	0.056		0.052		0.05	U	0.052		0.05	U	0.05	U
BERYLLIUM	0.003	0.003	0.002	U	0.002	U	0.002	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CADMIUM	0.005	0.01	0.0025	U	0.0025	U	0.0025	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
CALCIUM	--	--	89		66		88		96		99		74		92		64		90		86		89		86		94		79		99	
CHROMIUM, TOTAL	0.05	0.1	0.005	U	0.005	U	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
COBALT	--	--	0.005	U	0.005	U	0.005	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
COPPER	0.2	1	0.025	U	0.025	U	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
IRON	0.3	0.6	**6.0**		0.05	U	**4.1**		**4.7**		**2.7**		**1.5**		**1.1**		**1.4**		**1.8**		**4.4**		**3.6**		**4.0**		**4.2**		**1.4**		**1.5**	
LEAD	0.025	0.05	0.005	U	0.005	U	0.005	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
MAGNESIUM	35	35	21		21		29		21		21		15		18		15		18		18		21		26		26		20		23	
MANGANESE	0.3	0.6	**1.4**		**0.29**		**3.7**		**1.3**		**0.88**		**0.66**		**0.34**		**0.84**		**0.96**		**1.7**		**1.9**		**2.7**		**2.4**		**0.53**		**0.85**	
MERCURY	0.0007	0.0014	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
NICKEL	0.1	0.2	0.025	U	0.025	U	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
POTASSIUM	--	--	2.0	U	2.8		2.0	U	4.6		8.5		3.7		3.4		2.2		2.1		2.0	U	2.0	U	2.0	U	2.0	U	6.6		3.1	
SELENIUM	0.01	0.02	0.025	U	0.025	U	0.025	U	0.05	U	0.05	U	**0.06**		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
SILVER	0.05	0.1	0.0025	U	0.0025	U	0.0025	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
SODIUM	20	--	**33**		**36**		**25**		**28**		**40**		**23**		**31**		**16**		**32**		**38**		**40**		**41**		**44**		**52**		**49**	
THALLIUM	0.0005	0.0005	0.001	U	0.001	U	0.001	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
VANADIUM	--	--	0.025	U	0.025	U	0.025	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
ZINC	2	5	0.05	U	0.05	U	0.05	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Conventional Chemistry (mg/L)																														
TOTAL DISSOLVED SOLIDS	--	--	380		280		400		330		440		190		430		280		390		320		410		420		420		500		520	
TOTAL SUSPENDED SOLIDS	--	--	28		5.0	U	5.0	U	22		15		5.0	U	9.0		14		5.0	U	42		14		22		8.0		17		5	U
Perfluorinated Alkyl Substance (ng/L)																														
PERFLUOROBUTANESULFONIC ACID (PFBS)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
PERFLUOROHEXANESULFONIC ACID (PFHxS)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		1.9	J	NA		NA		NA		NA	
PERFLUOROHEPTANOIC ACID (PFHpA)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		11		NA		NA		NA		NA	
PERFLUOROOCTANOIC ACID (PFOA)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		23		NA		NA		NA		NA	
PERFLUOROOCTANESULFONIC ACID (PFOS)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		2.3		NA		NA		NA		NA	
PERFLUORONONANOIC ACID (PFNA)	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		2.0	U	NA		NA		NA		NA	
TOTAL PFAS	70		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		38.2		NA		NA		NA		NA	

Notes:
Constitutents detected above the NYSDEC Class GA GW Standard are in **bold**.
Constitutents detected above the NYSDEC Class GA GW Effluent Limitation are highlighted in yellow.
* The NYSDEC Class GA GW Standard and Effluent Limitation for PCBs is 0.09 ug/L.
The current NYSDEC Health Advisory Limit for PFAS is 70 nanograms per liter for individual and total PFAS. Constituents detected above this standard are highlighted in orange.

Definitions:
NYSDEC Class GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard and Guidance Value.
NYSDEC Class GA GW Effluent Limitation - New York State Department of Environmental Conservation Effluent Limitation.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J - The concentration is an approximate value.
B - Compound was found in the blank and sample.
T - LCS or LCSD is outside acceptable limits.
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NA - Not Analyzed





NOTE:

1. USGS QUADRANGLE INFORMATION
   QUAD ID: 43073-C5
   NAME: HUDSON FALLS, NEW YORK
   DATE PUB: 1968

FORT EDWARD LANDFILL
45 LEAVY HOLLOW LANE
FORT EDWARD, NEW YORK

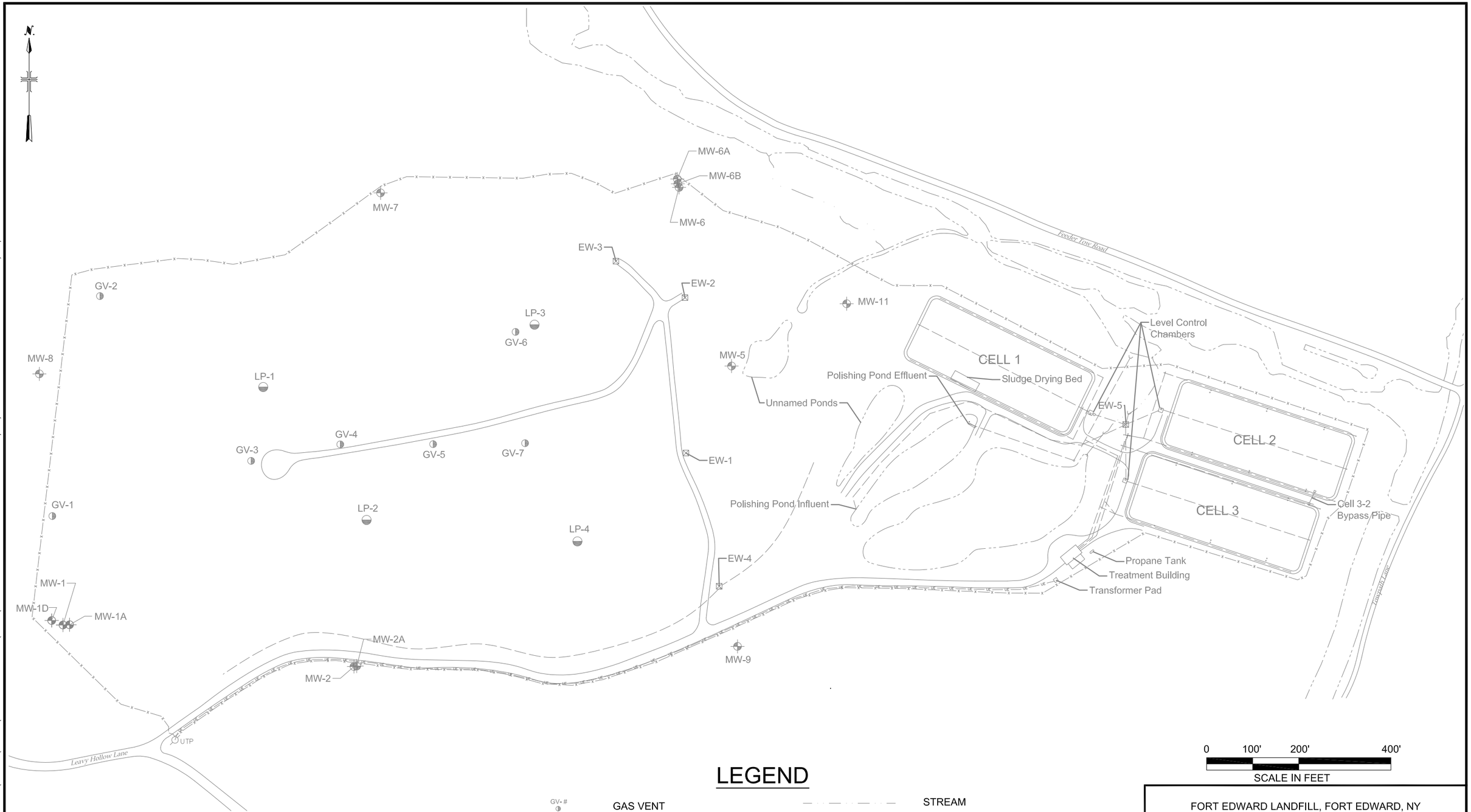
PERIODIC REVIEW REPORT 2017

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Fort Edward (00266434.0000)
Q:\FortEdwardLandfill\basemapping\mxd\SiteLocationMap2017.mxd 8/15/2017 9:45:33 PM



0 100' 200' 400'

SCALE IN FEET

LEGEND

GV-#	GAS VENT
MW-#	MONITORING WELL
LP-#	PIEZOMETER
UTP	UTILITY POLE
	EXTRACTION WELL
	STREAM
	ROAD
	EDGE OF POND
	UNDERGROUND TREATMENT PIPING
UE	UNDERGROUND ELECTRIC
X	FENCE

MAP BASED ON SURVEY PERFORMED BY DARRAH LAND SURVEYING, PLLC, APRIL 2017.
ORTHOIMAGERY FROM NYS ORTHOIMAGERY APPLICATION ONLINE DATED 2013.

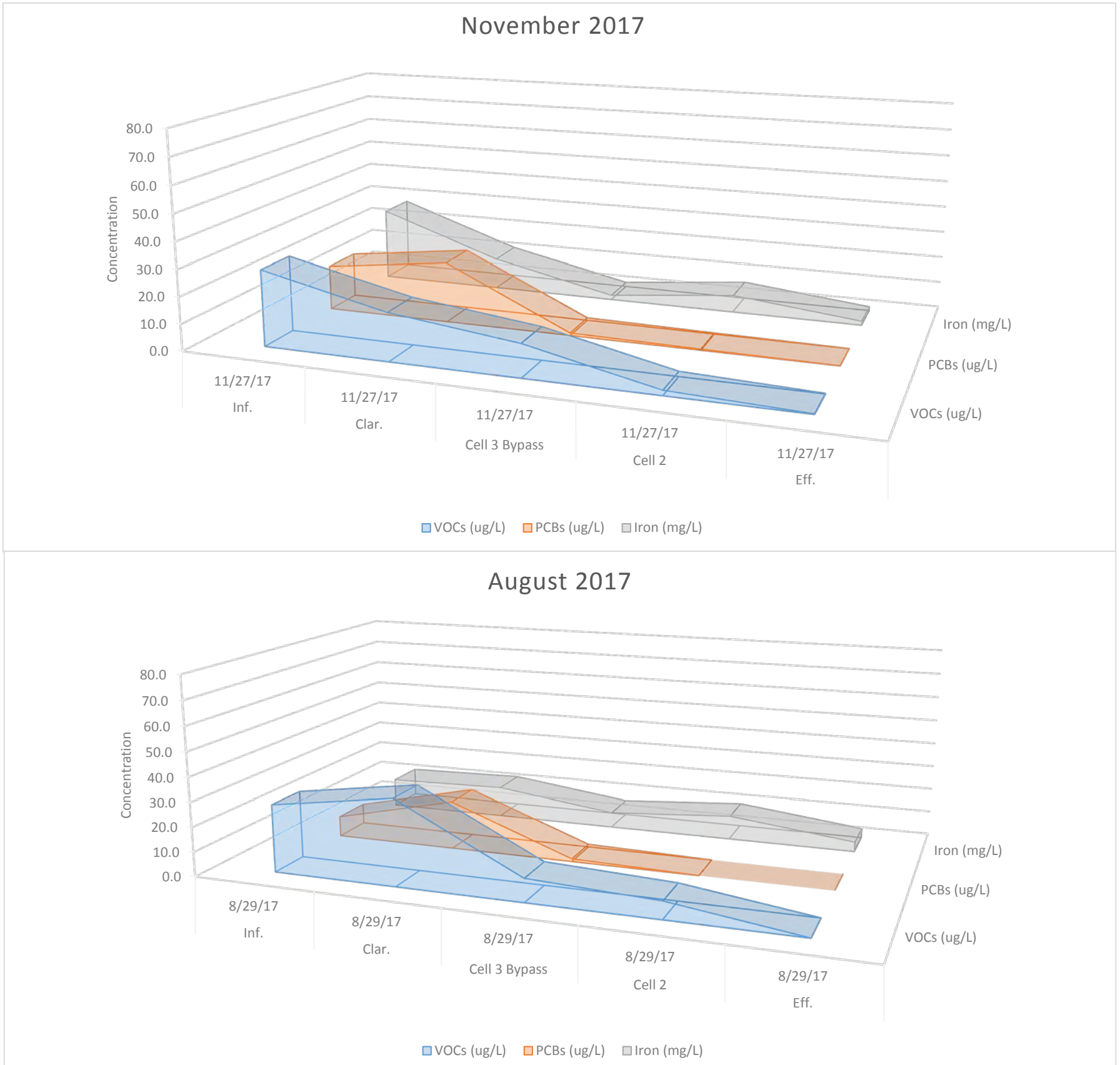
FORT EDWARD LANDFILL, FORT EDWARD, NY
NYSDEC SITE 558001

SITE MAP

ARCADIS | **FIGURE 2**

USER: JMULLINS FILENAME: G:\ACAD\PROJ\00266434.0000\PRR\FIG2-SITE MAP.DWG SAVE DATE: 1/11/2018 7:54 PM PLOT DATE: 1/11/2018 7:55 PM

Figure 3
Treatment System Analytical Results
Fort Edward Landfill, Fort Edward, NY
NYSDEC Site # 558001



G:\PROJECT\00266434.0000\Reports (old and new)\PRR\PRR 2017\Figures\Figure 3

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