USAI LIGHTING FACILITY

ORANGE COUNTY

NEW WINDSOR, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C336087

Prepared for:

BDL, LLC

1126 RIVER ROAD

NEW WINDSOR, NEW YORK 12553

Prepared by:

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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

NOVEMBER 2016

CERTIFICATION STATEMENT

SITE MANAGEMENT PLAN

USAI LIGHTING FACILITY

NEW WINDSOR, NEW YORK

I Jeffrey A. Marx, P.E. certify that I am currently a NYS registered professional engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Jeffrey A. Marx P.E.

DECEMBER 6, 2016 DATE

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AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization

SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

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Institutional Controls:	1. The property may be used for restricted commercial use.
	2. All ECs must be operated and maintained as specified in this SMP.
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.
	4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
	5. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP.
	6. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.
	7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
	8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.

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	9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP.	
	10. 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 identified by the Environmental Easement.	
	11. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure [x], and any potential impacts that are identified must be monitored or mitigated.	
	12. Vegetable gardens and farming on the site are prohibited.	
	13. All ECs must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Cover System	
	2. Vapor Intrusion Mitigation.	
Inspections:		Frequency
Cover Inspection		Annual
Monitoring:		
Groundwater Monitoring Wells (MW (no ID), MW-, MW-2, MW-3 and MW-4)		Annual
Maintenance:		
Stormwater Permanent Pool and Cover Systems Maintenance		As needed

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Reporting:	
Groundwater Data	Annual
Periodic Review Report	Annual

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the USAI Lighting Facility located in New Windsor, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C336087, which is administered by New York State Department of Environmental Conservation (NYSDEC).

BDL, LLC entered into a Brownfield Cleanup Agreement (BCA), on December 31, 2014 with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Orange County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC); and

- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the BCA, (Index #336087-12-14; Site #336087) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Tables 1.3-1 and 1.3-2 of this SMP.

This SMP was prepared by C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., on behalf of BDL. LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.

- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1.3.1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Table 1.3-2.

Table 1.3-1: Notifications*

Name	Contact Information
NYSDEC Project Manager: Matthew Hubicki	Telephone: 518.402. 9662 Email: matthew.hubicki@dec.ny.gov
NYSDEC Acting Regional Director: Kelly Turturro	Telephone: 845-256-3039 Email: kelly.tuturro@dec.ny.gov
NYSDEC Regional Engineer Samsudeen (Sam) Arakhan	Telephone: 845-256-3155 Email: samsudeen.arakhan@dec.ny.gov
NYSDEC Site Control	Telephone: 518.402.9706 Email: derweb@dec.ny.gov

Table 1.3-2: Contact Numbers

Name and Affiliation	Contact Information
Owners – BDL, LLC. David Littman Bonnie Littman Gatof	Telephone: (845) 565-8500 Email: blittman@usaiLighting.com Email: dslittman@aol.com
Professional Engineer (Environmental) C.T. Male Associates Jeffrey A. Marx, PE	Telephone: (518) 786-7400 Email: j.marx@ctmale.com
Qualified Environmental Professional C.T. Male Associates James McIver	Telephone: (845) 883-0964 Email: j.mciver@ctmale.com

* Note: Notifications are subject to change and will be updated as necessary.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in New Windsor, Orange County, New York and is identified as Section 9 Block 1 and Lots 96.1 (1126 River Road) and 97 (1126 River Road) on the Orange County Name Tax Map (see Figure 2). The site is an approximately 8.5-acres and 2.9-acre areas, respectively and is bounded by a bulk oil terminal to the north, a thermal desorption facility (Deep Green) to the south, railroad tracks and Hudson River to the east, and River Road to the west (see Figure 1 – Site Layout Map). The boundaries of the site are more fully described in Appendix A – Environmental Easement.

The owner(s) of the site parcel(s) at the time of issuance of this SMP is/are:

BDL, LLC

2.2 Physical Setting

2.2.1 Land Use

The Site consists of a light manufacturing building and surrounding paved parking. The Site is zoned commercial, and is currently utilized for commercial uses. Site occupants include an innovative light manufacture USAI Lighting, Inc.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial properties. The properties immediately south, north and west of the Site include commercial properties. Further west of the site is residential properties as well. The property immediately east of the Site includes railroad tracks and the Hudson River.

2.2.2 Geology

According to the USDA Web Soil Survey, the dominant soil component of the subject property is a non native fill. This fill is believed to be placed by previous site occupants to accommodate the West Shore Railroad line and commercial land uses. The fill material is composed of sandy materials, silty clay and mud, ash, and bricks. An additional subordinate soil component of the subject property is Scio silt loam. This soil type can be found in the western portion of the site, bordering River Road. This soil type consists of moderately well drained soils formed in glaciolacustrine or eolian deposits and is comprised primarily of silt and very fine sand.

The soil classification described above is consistent with the conditions observed by the advancement of exploratory test pits and subsurface soil borings during the Pre-Remedial Design Investigation. During the excavation of test pits in the southern portion of the site, the topsoil layer extended to a depth of 2 to 10 inches below ground surface (bgs). Underneath the topsoil was the historic fill material ranging from 2 inches to 7 feet bgs, consisting of gravel, sand, silt, brick, and wood. The fill material was then underlain by fine silts and sands encountered at depths between 5 and 8 feet bgs. Subsurface boring logs confirm this general subsurface soil stratification, with possible bedrock being encountered at depths of four (4) to 12 feet below ground surface.

According to the Surficial Geologic Map of New York State, Lower Hudson Sheet, the soils within the site are identified as lacustrine delta. Lacustrine delta is described as generally well sorted coarse to fine gravel and sand deposited at a lake shoreline. Thickness of this deposit varies between three (3) and 15 meters according to this mapping, but it was not encountered through site investigations.

Site specific subsurface exploration logs (boring and test pits) are provided in Appendix F.

2.2.3 Hydrogeology

According to the map entitled "Potential Yields of wells in unconsolidated Aquifers in Upstate New York, Lower Hudson Sheet" the subject site may lie within an unconfined aquifer whose potential yield range from 10 to 100 gallons per minute. Aquifers of this potential can consist of sand and gravel with a saturated thickness of less than ten feet, or less permeable silty sand and gravel with a larger saturated thickness.

Monitoring wells generally identified as MW-1 through MW-15 were located on the site prior to the Pre-Remedial Design Investigation (PDI). During the PDI, an additional four (4) wells were installed on site to include three (3) new well locations (monitoring wells MW-16, MW-17 and MW-18), and one new location as MW-10 could not be located and replaced with monitoring well MW-10R. Available wells located on the subject Site were utilized for groundwater characterization, except for an unnamed and unreferenced well in the extreme southeast corner of the site. During remedial construction activities, monitoring well MW-15 was abandoned in compliance with CP-43, Groundwater Monitoring Well Decommissioning Policy. Monitoring wells MW-11 and MW-12 were inadvertently destroyed during the removal of contaminated soil and, as a consequence, were fully excavated to ensure complete removal. These excavations were backfilled with existing and/or imported site soils.

Based on water levels obtained from monitoring wells installed on the subject site, the depth to groundwater within the site is approximately four (4) to eight (8) feet below grade.

The regional groundwater flow direction is easterly toward the Hudson River and may be locally tidally influenced. Installation of pressure transducers in select wells closest to the river showed a hydraulic connection to the tidal influence, but the influence was estimated to be on the order of one inch or less. Based on findings of water level monitoring, the groundwater flow direction at this site is consistent with the regional flow

with some easterly and southeasterly flow contours. There may also have been some groundwater mounding occurring in the center of the southern portion of the site in the area of monitoring wells MW-12 and MW-15. There was some subsurface drainage features in this area that were identified and removed during remedial construction which would have allowed for elevated groundwater conditions in this area.

There are no known water supply wells in the vicinity of the site; the town of New Windsor provides municipal water for the community. The municipal water supply is taken from the Catskill Aqueduct, fed by Ashokan Reservoir and St. Anne's well.

2.3 Investigation History

2.3.1 Work by Others

The following narrative provides a historical environmental related timeline and a brief summary of the available project records to document key investigative milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

- December 30, 2009, "Circumstances Pertaining to Spill #9903745 [Former Affron MOSF Property] on property owned by Littman Industries, Inc., 1116 -1126 River Road, New Windsor, NY".

This report presented historical information, summarized two UST closures and the removal of 132.8 tons of petroleum contaminated soil. This report references a letter from Peter Doshna to John Scandura of IDC, Inc. presenting a Stipulation Agreement and a Corrective Action Plan. The southern portion of the Littman Industries property operated as part of the Affron MOSF site from the early 1940's until the mid-1990's.

- September 30, 2010, "Groundwater Investigation Pursuant To Spill # 0913553 on Property Owned By Littman Industries, Inc., 1116 – 1126 River Road, New Windsor, New York

This report summarized the results of the soil and groundwater sampling that has occurred on the property prior to C.T. Male involvement. The report presents data that indicates the presence of free phase product in monitoring well (MW-11) on the south site of the Site.

2.3.2. Former Structures and Petroleum Spills

There is one main warehouse building centrally located on the Site. Two separate out buildings were formerly located on the southern portion of the site. The warehouse is actively used and is subject to renovations and upgrades including vapor intrusion mitigation measures. The two out buildings have been demolished to allow for parking lot upgrades. The Site's buildings and structures are primarily constructed of aluminum, concrete and masonry. There was a potential for asbestos containing building materials to be present as components of the buildings. Therefore, a pre-demolition asbestos building survey was conducted prior to building demolition in accordance with NYS Department of Labor (DOL) 12 NYCRR Part 56 (Industrial Code Rule 56). The survey identified the presence of asbestos, and asbestos abatement was performed as an element of building demolition. Asbestos project monitoring was completed by C.T. Male, as required by Industrial Code Rule 56.

The site is identified with two spill numbers. Spill No. 9903745, which was created on April 30, 1999 in relation to removal and remediation of two (2) 1,000 gallon underground storage tanks formerly situated on the southern portion of the Littman Industries property and subsequently closed on December 10, 2009, as a result of the Site Investigation performed by the owner. Spill No. 0913553 was opened on March 23, 2010 for the purpose of investigating groundwater conditions across the entire Littman

Industries property. This spill number was closed on September 1, 2016 based on the level of remedial action implemented under the BCP.

2.3.3 Suspected Contamination Prior to Remediation

Known contaminants had been detected at the Site through completion of previous investigations. The investigations identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media that required action are summarized below:

Benzo(a)anthracene	Benzene, Toluene, Ethylbenzene and Xylenes
Benzo(a)pyrene	Naphthalene
Benzo(b)fluoranthene	PCB Aroclor 1260
1,3,5-Trimethylbenzene	n-Propylbenzene
1,2,4-Trimethylbenzene	Butylbenzene
2-Methlynaphthalene	1,1,1-Trichloroethane (1,1,1-TCA)
Trichloroethene (TCE)	Carbon Tetrachloride
Tetrachloroethene (PCE)	

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil
- soil vapor intrusion

Suspect contamination was known or inferred based on the historic operation of the 1116 River Road property as an MOSF, and MOSF operations alone the northern border of the site. This use would lead to petroleum contamination being the likely contaminants of concern. But due to the limitations of investigations performed prior to

entering the BCP, a more comprehensive NYSDEC approved pre-design investigation was performed by C.T. Male prior to implementing remedial action under the BCP.

2.3.4 Pre-Design Investigation (PDI)

In accordance with the NYSDEC approved March 24, 2015 PDI, the following media sampling tasks were completed to refine the remedial action planned for the site:

- Collect and analyze approximately 21 surface soil samples;
- Purge, sample and analyze groundwater samples from existing monitoring wells;
- Installed four (4) additional groundwater monitoring wells (one was a replacement of MW-10) to purge, sample and analyze additional groundwater samples;
- Complete soil vapor sampling beneath the existing building;
- Collect and analyze surface water and sediment in the wetland area; and
- Perform asbestos containing material surveys of the two buildings planned for demolition and any area of existing building subject to renovation.

Analytical results of various media are discussed in the ensuing sections. The laboratory analytical reports for the PDI are included in Appendix C on a CD due to the voluminous nature of the information. Summary tables of the laboratory analytical results were prepared for each media and are provided in the tables section of this SMP.

2.3.5 PDI Analytical Results – Surface Soil

No volatile organic compounds (VOCs) were detected above the limit of laboratory detection except for two (2) VOCs (acetone and 2-Butanone). These VOCs

were detected at concentration below their applicable commercial use soil cleanup objective (SCO) values.

Numerous semi-volatile organic compounds (SVOCs) were detected above the limit of laboratory detection. The concentrations of SVOCs were below their applicable commercial use SCOs except for two (2) SVOCs as described below:

- At SS-16: Benzo(a)pyrene was detected at 4.1 mg/kg above its SCO of 1 mg/kg) and dibenzo(a,h)anthracene was detected at 0.67 mg/kg above its SCO of 0.56 mg/kg).
- At SS-18: Benzo(a)pyrene was detected at 2.3mg/kg above its SCO if 1 mg/kg).
- At SS-21: Benzo(a)pyrene was detected at 2.3 mg/kg above its SCO of 1 mg/kg).

These locations are located along the western side of the site upgradient of all site operations. For this reason and consideration of the terrain, it would not be reasonable to assume that these detections are the result of past site operations. It would be suspected that these detections may be the result of River Road stormwater runoff given the relatively low level concentrations of the compounds.

Seven (7) pesticides were detected above the limit of laboratory detection. These included heptachlor, dieldrin, 4,4'-DDE, 4,4'-DDT, cis-chlordane, trans-chlordane and chlordane. The concentrations of the pesticides were below their applicable commercial use SCOs.

Three (3) individual PCB aroclors were detected above the limit of laboratory detection. These included aroclors 1242, 1254 and 1260. At one location (SS-15), the total PCBs of 1.16 mg/kg was slightly above its commercial use SCO of 1 mg/kg. This location is located within the area of proposed parking. The surface soils at and around

SS-15 were excavated prior to the construction of the parking lot as described later in this SMP.

Several metals were detected above the limit of laboratory detection. Some metals are naturally occurring and are commonly detected in surface soils. The concentrations of metals were below their respective commercial use SCOs except for barium at SS-12. At this location, barium was detected at 1,200 mg/kg, which is above its SCO of 400 mg/kg. With comparison to the other surface soil results, this detection is an outlier (and not a contaminant of concern) as barium concentrations within the rest of the surface soil samples were less than 100 mg/kg.

Table 2.3.5-1 provides a summary of all of the analytical results. Table 2.3.5-2 provides a reduced list of only those compounds/analytes that were detected above the limit of laboratory detection and compared to their applicable NYSDEC 6 NYCRR Part 375 soil SCOs. The laboratory analytical report number for the surface soil samples was L1513932 and L1514071.

The surface soil sample analytical results indicated the following in terms of remedial action:

- PCB impacted soil was detected at SS-15, which warranted removal or cover with a new surface cover system.
- The surface soil generally on the northern half of the Site was not impacted and may not need to be covered with a new surface cover system. Further testing of the 6 to 12” depth interval was required by the RAWP, as detailed in Section 2.3.6.1.

2.3.5.1 Supplemental 6 to 12" Depth Sampling

As required by the RAWP, additional surface soil samples from the 6 to 12" below grade depth was to be performed if the surface soil met restricted commercial SCOs and the existing surface soils were to be considered as an acceptable cover system. This generally occurred in the northern portion of the site whereby additional samples were collected from 6 to 12" below grade depth at previous surface soil sample locations SS-10, SS-12, SS-18 and SS-20.

Table 2.3.5.1-1 summarizes the results of the supplemental sampling (detections only). As shown in this table, the concentrations of detected compounds/analytes were below 6 NYCRR restricted commercial SCOs with one exception. Cadmium was detected at one of the locations (SS-12) at a concentration of 16 mg/kg, which is above its SCO value of 9.3 mg/kg. This detection is an outlier (and not a contaminant of concern).

2.3.6 PDI Analytical Results – Groundwater

Groundwater was sampled from existing wells (MW-1 through MW-9, MW-11, MW-13 and MW-15) and PDI installed wells (MW-10R, MW-16, MW-17 and MW-18). Monitoring well MW-12 was not able to be located at the time of the PDI, but was later found as part of site development. MW-12 was not sampled but was checked and suspected to have free-phase petroleum product. An unidentified monitoring well was also found during site development in the southeast corner of the site, but was not sampled.

No VOCs were detected above the limit of laboratory detection except for a few at MW-6, MW-11, MW-10R, MW-15 and MW-18. It should be noted that the method detection limits for BTEX compounds (benzene, toluene, ethylbenzene and xylenes) at MW-2 and MW-3 were elevated above their NYSDEC standard value suggesting that these compounds may still be present at these locations under the detection limits but

above regulatory values. Otherwise, the VOCs were detected at concentration below their applicable NYSDEC water quality standard values except for the following conditions:

- At MW-10R: 2-butanone was detected at a concentration of 56 ug/L, which is slightly above its NYSDEC standard value of 50 ug/L.
- At MW-15: Benzene, ethylbenzene and isopropylbenzene were detected above their NYSDEC standard values, however, petroleum impacted soils were excavated from this area relative to the underground storage tank closure, which is further described in the Final Engineering Report.

No SVOCs were detected above the limit of laboratory detection except. The concentrations of SVOCs were below their applicable NYSDEC water quality standard except for two (2) SVOCs as described below:

- At MW-4: Bis(2ethylexyl)phthalate was detected at 64 ug/L above its NYSDEC standard value of 5 ug/L.
- At MW-11: There were a variety of SVOCs detected above their NYSDEC standard values, however, petroleum impacted soils were excavated from this area as described in the Final Engineering Report.

Up to (6) pesticides were detected above the limit of laboratory detection. These included heptachlor, dieldrin, 4,4'-DDT, cis-chlordane, trans-chlordane and chlordane. The concentrations of the pesticides were below their NYSDEC water quality standard except for chlordane at MW-4, MW-6, MW-8 (not estimated, but "P" qualified), MW-9, MW-13 (not estimated, but "P" qualified) and MW-17 at estimated values. It should be noted that chlordane at the other well locations and dieldrin at many locations was not detect but the method detection limit was elevated above their NYSDEC water quality standards.

No PCBs were detected above the limit of laboratory detection with one excavation. Two (2) individual PCB aroclors (1254 and 1260) were detected at one location (MW-2), one of which was Aroclor 1254 at 4.28 ug/L which was above its NYSDEC water quality standard of 0.9 ug/L.

Several metals were detected above the limit of laboratory detection. Some metals are naturally occurring and are commonly detected in groundwater. The concentrations of metals were below their respective NYSDEC water quality standard values except for antimony, iron, magnesium, manganese and sodium. These metals are not considered contaminants of concern.

Table 2.3.6-1 provides a summary of all of the analytical results. Table 2.3.6-2 provides a reduced list of only those compounds/analytes that were detected above the limit of laboratory detection and compared to their applicable NYSDEC TOGS 1.1.1 Ambient Water Quality Standard or Guidance Values for groundwater ("GA" class). The laboratory analytical report numbers for the groundwater samples were L1514248 and L1514840.

The groundwater results indicate that there is some impairment to the groundwater quality at MW-11 (SVOCs above SCGs) and MW-15 (VOCs above SCGs) from petroleum products, which required further evaluation during implementation of the remedial action. This evaluation would be to determine if petroleum impacts existed around these monitoring wells and whether these impacted soils warranted removal. Groundwater monitoring requirements after implementation of the remedial action are described in Section 4.3.

2.3.7 PDI Analytical Results – Soil Vapor

An initial phase of subslab soil vapor, indoor air and outdoor air sampling was performed April 2015 to evaluate for the potential for soil vapor intrusion into the building. The areas investigated were the warehouse and office spaces in the building. The sub-slab soil vapor and ambient air samples were collected in accordance with the procedures outline in the NYSDOH's SVI Guidance. The samples were identified as follows and are shown on Figure 1 in Exhibit A:

- One (1) from each sub-slab vapor sampling point (S.S. #1 through S.S. #5).
- Three (3) indoor ambient air samples identified as I.A.#1 through I.A.#3, collected separately. I.A.#1 was collected while adjacent to S.S.#1. I.A.#3 was collected while adjacent to S.S.#5. Due to limited access, I.A#3 was collected in the northern portion of the building where a sub-slab sample could not be collected.
- One (1) from ambient air outside the building along the northeast side of the building identified as O.A.#1.
- One (1) from ambient air outside the building along the western side of the building identified as O.A.#2.

The findings and conclusions of this sampling event were summarized in a June 15, 2015 letter. A copy of this letter is provided as Exhibit A. The conclusions are restated below:

"The findings indicate the presence of a variety of volatile organic compounds in sub-slab vapor, indoor air and outdoor air. Based on NYSDOH guidance, methylene chloride, trichloroethene and tetrachloroethene are below applicable guidance values for indoor air with the current construction of the existing building.

Using the NYSDOH matrices for an evaluation on detections, carbon tetrachloride, trichloroethene and tetrachloroethene are present but recommendations from NYSDOH guidance include "take reasonable and practical actions to identify

source(s) and reduce exposures", "no further action" or "monitor". These recommendations were similar for 1,1,1-trichloroethane including "no further action" and "monitor" which the exception of one outlier orders of magnitude higher than the rest that triggers a "mitigate" recommendation. Before taking any further action is taken, additional characterization may be warranted to determine the accuracy of the information obtained during this initial assessment. This characterization should be coupled with review of the findings of the pending pre-design remedial investigation and ultimate discussion with NYSDEC and NYSDOH.

There are petroleum related compounds detected in sub-slab vapor which consisted of ethylbenzene, xylenes and toluene. These compounds were also detected in indoor air, but in the absence of applicable guidance, the level of action, if any needs to be discussed further. Using historical background concentrations available from EPA, some of the concentrations may be slightly higher than reported background concentrations in indoor air. The significance of any detection should be compared with additional soil and groundwater sample analysis scheduled to be part of pending pre-design remedial investigation.

We plan on obtaining additional data from the northern part of the building where storage prevented the collection of sub-slab vapor samples. USAI needs to move the storage materials before taking these samples but we want NYSDEC's opinion on collecting samples outside the typical heating system to determine if that is acceptable."

Due to some issues with access and suspected data outliers (as explained in the italicized conclusions of the initial phase of soil vapor intrusion sampling above), additional vapor intrusion sampling was warranted. There were some sample locations that were inaccessible due to business activities and there were questionable detections that needed to be re-tested. Those locations that were re-tested were given a "RE" designation in the lab sample ID. The supplemental sampling event was performed in January 2016. The findings of this sampling event were summarized in a September 14, 2016 letter. A copy of this letter is provided as Exhibit B.

Table 2.3.7-1 provides a summary of the vapor intrusion data from April 2016 and January 2016. The laboratory analytical report numbers for the sub-slab vapor and ambient air were L1506599 L1600977, and L1602117.

Based on a comparative analysis of the results, there are a few compounds that appear to be elevated in sub-slab soil vapor that warranted consideration for vapor mitigation measures to be implemented. Installation of vapor mitigation measures are described in Section 3.3.2.

2.3.8 PDI Analytical Results – Surface Water

Surface water samples (SW-1 and SW-2) were collected from the ponded water located off of the northeast corner of the building and adjacent to the west side of the railroad tracks. There were no VOCs, SVOCs, pesticides or PCBs detected above the limit of laboratory detection. There were metals detected, which are commonly detected in the environment. Iron and manganese were the only two metals detected above their applicable NYSDEC TOGS 1.1.1 Ambient Water Quality Standard or Guidance Values for surface water ("A, A-S, AA, AA-S" classes). The presence of these metals in surface water does not warrant remedial action of the surface water.

2.3.9 PDI Analytical Results – Sediment

Sediment samples (SED-1 and SED-2) were collected from the bottom of the ponded water located off of the northeast corner of the building and adjacent to the west side of the railroad tracks. There were four (4) VOCs, two (2) SVOCs, two (2) pesticides, one PCB Aroclor and several metals detected above the limit of laboratory detection. For gauging the potential impacts to aquatic life, the results were compared to the NYSDEC Sediment and Assessment of Contaminated Sediment, June 24, 2014, Table 5 Freshwater Sediment Guidance Values. This document categorizes the contaminants based on their toxicity and the three (3) categories abbreviated definitions are as follows:

- Class A sediments are considered to be of low risk to aquatic life;
- Class B sediments are slightly to moderately contaminated and additional testing is required to evaluate the potential risks to aquatic life; or
- Class C sediments are considered to be highly contaminated and likely to pose a risk to aquatic life.

Using these categories, the following comparison is drawn:

- Only one of the four detected VOCs had a comparative class distinction, and that was within a Class A category.
- Only one of the two detected SVOCs has values for a comparative class distinction, and that was within a Class A category.
- Two pesticides (DDE and DDT) were detected in a Class A category.
- One PCB Aroclor 1260 was detected in a Class B category, but noting the concentration was close to the low end of that category range (0.112 mg/kg detected compared to 0.1 to 1 mg/kg range).
- Of the many metals detected (commonly naturally occurring in the environment), only six of them have values for a comparative class distinction. Of those, the applicable category was a mix of Class A and B. Where the Class B category was applicable, this occurred in only one of the two samples, where the other sample was in the Class A category.

Given the majority of the detections being within Class A and the general lack of connection to the Site's known contaminants of concern, it is concluded that the sediment is considered low risk to the aquatic life.

Table 2.3.9-1 provides a summary of all of the analytical results. Table 2.3.9-2 provides a reduced list of only those compounds/analytes that were detected above the

limit of laboratory detection and compared to the categories described above. The laboratory analytical report number for the sediment samples was L1514840.

2.3.10 PDI – Asbestos

An Asbestos Containing Material Survey was performed and reported in July 2015. The survey was performed on the main building (identified as "Office and Warehouse Facility" in the survey report), and the two separate buildings south of the main building (identified as "Out Building #1" and "Out Building #2"). Asbestos containing materials were identified within the out buildings and properly abated prior to and in conjunction with building demolition. C.T. Male completed the project monitoring during abatement and prepared a close-out report dated October 7, 2015.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated September 2015 are as follows:

Groundwater

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 ground water 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 for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

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.

2.5 Remaining Contamination

2.5.1 Soil

Remaining contamination in subsurface soil at the Site is based on endpoint soil sampling performed throughout the course of development where a series of smaller excavations were completed. When grossly petroleum impacted soils were encountered, soil samples were collected from the varying sidewalls and floors of the open excavation. Listed below are the types of compounds/analytes remaining in soil above 6 NYCRR Part 375 unrestricted SCOs.

VOCs

- Acetone (16 locations) ranging from 0.054 to 4.1 mg/kg.
- Benzene (3 locations) ranging from 0.072 to 5.3 mg/kg.
- Toluene (1 location) at 2.4 mg/kg.
- Ethylbenzene (2 locations) ranging from 11 to 61 mg/kg.
- 2-Butanone (4 locations) ranging from 0.16 to 4.4 mg/kg.
- Methylene Chloride (3 locations) ranging from 0.15 to 2.2 mg/kg.SVOCs
- Benzo(a)anthracene (10 locations) ranging from 1.1 to 22 mg/kg.
- Benzo(a)pyrene (8 locations) ranging from 1.1 to 22 mg/kg.
- Benzo(b)fluoranthene (10 locations) ranging from 1.1 to 26 mg/kg.
- Benzo(k)fluoranthene (5 locations) ranging from 0.92 to 8.7 mg/kg.
- Chrysene (9 locations) ranging from 1.2 to 21 mg.kg.
- Dibenzo(a,h)anthracene (4 locations) ranging from 0.37 to 3.1 mg/kg)
- Indeno(1,2,3-cd)pyrene (7 locations) ranging from 0.64 to 16 mg/kg.

Pesticides

- 4,4'-DDE (1 location) at 0.111 mg/kg.
- 4,4'-DDT (1 location) at 0.0645 mg/kg.

PCBs

Aroclor 1242 (1 location) at 0.148

Aroclor 1254 (12 locations) ranging from 0.236 to 6.1 mg/kg.

Aroclor 1260 (15 locations) ranging from 0.113 to 1.09 mg/kg.

Metals

- Arsenic (7 locations) ranging from 14 to 29 mg/kg.
- Copper (7 locations) ranging from 51 to 1,400 mg/kg.
- Lead (10 locations) ranging from 64 to 310 mg/kg.
- Manganese (2 locations) ranging from 1,700 to 1,800 mg/kg.
- Mercury (2 locations) ranging from 0.25 to 0.38 mg/kg.
- Nickel (3 locations) ranging from 31 to 98 mg/kg.
- Zinc (9 locations) ranging from 39 to 110 mg/kg.

In addition to the comparison above, the end point soil sample analytical results were summarized (detections above the laboratory limit) and 6 NYCRR Part 375 restricted commercial SCOs, which was the target cleanup level for the site. This comparison was shown on Tables 2.5.1-1 through 2.5.1-21. Where applicable, the tables were identified with a suffix "a", "b", etc. if the samples were collected from the similar excavation area from a later time period (i.e., from a separate lab sample delivery group) or after additional impacted soils were removed.

2.5.2 Groundwater

Remaining contamination in groundwater at the Site would be as described in Section 2.3.6, which was completed prior to implementing the remedy. However, impacted soil (and the wells) was removed from the area of monitoring well MW-11, MW-12 and MW-15. Assuming that this soil removal reduced groundwater impacts to below standards at these locations, the following summarizes the remaining contamination in groundwater that exceeded the SCGs after completion of the remedial action.

- VOCs: 2-butanone was detected above its SCG at monitoring well MW-10R. It should be noted that the laboratory detection limits for certain VOCs at MW-2 and MW-3 were elevated so there is the potential for these VOCs to be present in groundwater above SCGs. These include 1,1-dichloroethane, 1,1,1-trichloroethane, benzene, toluene, ethylbenzene, p/m-xylene and isopropylbenzene.
- SVOCs: Bis(2-ethylhexyl) phthalate was detected above its SCG at monitoring well MW-4.
- PCBs: Aroclors 1254 and 1260 were detected above SCGs at monitoring well MW-2.

- Pesticides: Chlordane was detected above SCGs at monitoring wells six monitoring wells (MW-4, MW-6, MW-8, MW-9, MW-13 and -17. Dieldrin was detected above its SCG at monitoring well MW-2.
- Metals: Iron, manganese, magnesium and sodium were detected above SCGs at all monitoring wells sampled.

2.5.3 Soil Vapor

The findings of the January 2016 soil vapor sampling event were summarized in a September 14, 2016 letter. Refer to Exhibit B for a description of the remaining contamination.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix B) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining

contamination; and, (3) limit the use and development of the site to restricted commercial uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 2. These ICs are:

- The property may be used for : restricted commercial use;
- All ECs must be operated and maintained as specified in this SMP;
- 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 NYSDOH or the Orange County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this 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 identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated; and

- Vegetable gardens and farming on the site are prohibited.

3.3 Engineering Controls

3.3.1 Cover (or Cap)

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. This cover system is comprised of a minimum of 12 inches of clean soil (south side of Site), existing soil (north side of the Site), asphalt pavement, concrete-covered sidewalks, and/or concrete building slabs. Figure 5 presents the location of the cover system and applicable demarcation layers. The Excavation Work Plan (EWP) provided in Appendix B outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared for the site.

Prior to commencement of any intrusive work that breaches the demarcation layer, the contractor shall prepare for NYSDEC approval, a HASP and Site Specific CAMP that is in current compliance with NYSDEC DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Any intrusive work that impacts the soil cover layer but does not impact the demarcation layer, will not trigger this SMP as long as the cover is restored in-kind following construction.

3.3.2 Vapor Intrusion Mitigation Systems

Vapor intrusion (VI) mitigation systems were designed and implemented in conjunction with the interior building renovations. The type of VI mitigation system

designed/installed was based on sub-slab vapor testing, continuous or part time use of the interior space (i.e., office, warehouse, storage, etc.), limitations imposed by existing building layout, and planned building upgrades. The VI mitigation systems consisted of one or more of the following:

- Patching the cracks and edges in the existing concrete floor slab;
- Application of a ¼" Epoxy coating atop of the existing concrete floor;
- Patching the cracks and edges in the existing concrete floor slab, installation of a 10 mil plastic vapor barrier, pouring a new 6-inch concrete floor slab;
- Installation of 4-inch diameter perforated pipe and placement of ¾" imported stone atop of the existing concrete floor slab, installation of a 10 mil plastic vapor barrier, pouring a new 6-inch concrete slab, and venting the perforated pipe with solid pipe out through the roof or exterior of the building; or
- Installation of 4-inch diameter perforated pipe and placement of ¾" imported stone after removal of the existing concrete floor slab or where a concrete floor slab wasn't previously present, installation of a 10 mil plastic vapor barrier, pouring a new 6-inch concrete floor slab, and venting the perforated pipe with solid pipe out through the roof or exterior of the building.

Procedures for operating and maintaining the VI mitigation systems are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). Figure 6 shows the VI mitigation measures installed at the site, as signed and sealed by a professional engineern, to show the location of these ECs for the site.

3.3.3 Criteria for Completion of Remediation

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the

decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.3.1 - Cover (or Cap)

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP in perpetuity.

3.3.3.2 - Vapor Intrusion Mitigation Systems

The vapor intrusion mitigation systems shall include a passive sub-slab depressurization system (SSD), epoxy coating the existing and/or new concrete flooring, and new concrete slabs atop of a vapor barrier and in some cases atop of an existing concrete floor slab. If the passive SSD system is converted to an active system on the basis of air testing, the active SSD system will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH.

3.3.3.3 - Monitoring Wells associated with Monitored Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will be performed, as determined by the NYSDEC with consultation with NYSDOH, until residual groundwater concentrations are found to be consistently below ambient water quality standards, the site SCGs, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring for natural attenuation may no longer be required, a proposal to discontinue the system will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels

become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – wide Inspection

Site-wide inspections will be performed a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix D – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and

- If site records are complete and up to date; and

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the monitoring wells and permanent sub-slab points on a routine basis. Sampling locations, required analytical parameters and schedule are provided in Table 4.3-1 – Post Remediation Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Table 4.3-1 – Post Remediation Sampling Requirements and Schedule

Sampling Location	**Analytical Parameters**			**Schedule**
	TCL VOCs (EPA Method 8260)	TCL SVOCS (EPA Method 8270	VOCs (TO-15)	
Monitoring Well MW-1	X	X		Annual
Monitoring Well MW-2	X	X		Annual

Sampling Location	Analytical Parameters			Schedule
	TCL VOCs (EPA Method 8260)	TCL SVOCS (EPA Method 8270	VOCs (TO-15)	
Monitoring Well MW-3	X	X		Annual
Monitoring Well MW-4	X	X		Annual
Indoor Air			X	Post VI Mitigation Measures Installation (no sooner than 30 days after installation and prior to close of 2016/2017 heating season; subsequent testing frequency to be determined thereafter)
Outdoor Air			X	Post VI Mitigation Measures Installation (no sooner than 30 days after installation and prior to close of 2016/2017 heating season; subsequent testing frequency to be determined thereafter)
Subslab Vapor Via Perm. Sampling Points (4 of them)			X	Post VI Mitigation Measures Installation (no sooner than 30 days after installation and prior to close of 2016/2017 heating season; subsequent testing frequency to be determined thereafter)

Detailed sample collection and analytical procedures and protocols are provided below.

4.3.1 Groundwater Sampling

Groundwater monitoring will be performed on an annual basis to assess the performance of the remedy (i.e., to assess the effectiveness of the excavation of the

source material in reducing the contaminant levels). Modification to the frequency or sampling requirements will require approval from the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

A network of monitoring wells has been installed to investigate upgradient, on-site and downgradient groundwater conditions at the site. Based on the analytical results of groundwater samples collected during the pre-design investigation prior to remedial action, the groundwater quality was mostly impacted in the center of the site, south of the main site building. As such, only the monitoring wells downgradient of the south side of the site warrant continued monitoring.

Table 4.3.1-1 summarizes the wells identification number, the purpose, location, depths, diameter and screened intervals of the wells. The monitoring wells listed were installed prior to remedial action, so the monitoring well details are based on observations at the time of sampling during the pre-design investigation. The length of the screened interval is assumed based on an industry standard 10 foot length of screen. As part of the groundwater monitoring, four (4) downgradient wells are sampled to evaluate the effectiveness of the remedial action.

Table 4.3.1-1 – Monitoring Well Construction Details

Monitoring Well ID	Well Location	Coordinates (longitude/ latitude)	Well Diameter (inches)	Elevation (above mean sea level)			Total Depth from TPVC
				Casing	Screen Top	Screen Bottom	
MW-1	Down-gradient	-74.01216409 / 41.47614421	1	6.814’	-0.686’	-10.686’	17.5’
MW-2	Down-gradient	-74.01209133 / 41.47644419	1	7.198’	1.598’	-8.402’	15.6’
MW-3	Down-gradient	-74.01202337 / 41.47673703	1	6.847’	1.247’	-8.753’	15.6’

If bio-fouling or silt accumulation occurs in the Site monitoring wells, the wells will be physically agitated/surged to redevelop them. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable. Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

Sampling of monitoring wells will be recorded using an Environmental Services Field Logs and Groundwater Services Field Logs. These blank forms are provided in Appendix D – Site Management Forms. Laboratory Data Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.3.2 Soil Vapor Intrusion Sampling

Soil vapor intrusion sampling will be performed subsequent to the installation of vapor intrusion mitigation measures shown in Figure 6. The soil vapor intrusion sampling will be the collection of sub-slab vapor, indoor ambient air and outdoor ambient air to assess the performance of the remedy. Four (4) permanent sub-slab vapor intrusion sampling points have been installed for future sampling as shown on Figure 6. After the initial sampling, the laboratory data will be provided for review and presentation to NYSDEC whereby the frequency of future sampling will be set no more frequent than

annually. Modification to the frequency or sampling requirements will require approval from the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

The location of the indoor air samples will be biased toward office and/or production areas where continuous occupancy during working hours occurs. The location of the outdoor air samples will be in areas where least likely to be affected or tampered with by employees. The samples shall be collected over an eight hour time period matching the time period when the employees are working.

Sampling of indoor and outdoor ambient air will be recorded using an Environmental Services Field Logs. These blank forms are provided in Appendix D – Site Management Forms. Laboratory Data Deliverables for the soil vapor intrusion sampling program are specified in Section 7.0 – Reporting Requirements.

Monitoring for vapor intrusion shall also be required for new buildings developed on the Site in the event soil vapor intrusion testing warrants the installation of a SSDS. The details of this monitoring shall be scoped when this occurs and the SMP amended, as necessary.

4.3.3 Monitoring and Sampling Protocol

All sampling activities will be recorded in Environmental Services Field Logs and associated sampling logs as provided in Appendix D - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

The site remedy does not rely on any mechanical systems as of the date of the COC, such as groundwater treatment systems, active sub-slab depressurization systems or air sparging/soil vapor extraction systems to protect public health and the environment. However, it should be noted that there is sub-slab piping associated with a passive sub-slab depressurization system (SSDS), but there are no mechanical parts to operate or maintain. If supplemental indoor air testing identifies the need for converting the passive SSDS to an active system, The following Operation and Maintenance Plan should be followed:

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS systems are operated and maintained.

A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance (O&M) Plan is not to be used as a stand-alone document, but as a component document of this SMP.

The O&M Manual shall provide protocols for the operation and maintenance of a remedial system. The procedures detailed in the O&M Manual do not replace the manufacturer's documents for specific remedial components but rather supplement such documents and provide for a concise, organized reference document for the remedial system and associated remedial components for operation and maintenance.

The O&M Manual shall include as-built drawings and catalog-cuts on all fixed and mobile mechanical equipment necessary to operate and maintain the active SSDS. Catalog-cuts shall include maintenance procedures, spare parts lists, and any special tool requirement as well as vendor/service contact/local dealer information, including address and telephone numbers.

The O&M Manual is to be revised on a periodic basis and must be kept up to date by the remedial party.

5.1.1 SSDS Components

The SSDS is constructed of PVC piping (perforated and solid) installed within a ¾-inch stone bedding and covered by a vapor barrier and concrete floor slab. Therefore, passive SSDS system components are unable to be maintained or monitored. The passive SSDS will have an exhaust pipe penetrating the roof in more than one location. The exhaust piping shall be inspected annually as part of the surface cover inspection to document that the exhaust is not blocked or otherwise limited in airflow.

If the SSDS system is converted to an active system, it would include the installation of an in-line fan (and associated electrical connections), alarms and other in-line monitoring devices. Any additional equipment shall be monitoring by site personnel on a regular basis and also observed for damage by the environmental profession as part of the surface cover inspection. This additional equipment may be installed in the building, near the ceiling or possibly on the roof with the proper weather protection.

5.1.2 SSDS Performance Criteria

There are no performance criteria for the SSDS when operating in a passive mode. If the SSDS system is converted into an active system, where an in-line fan is

installed to provide a path for sub-slab vapors to be routed through the gravel bedding into the perforated pipe network and out through the roof via solid piping. The fan is designed to depressurize the space under the concrete slab by maintaining a pressure lower than the pressure in the building thereby allowing vapors to go out through the system piping and not through the building's floor slabs/cracks.

After installation of an in-line fan, testing shall be performed to confirm that an adequate pressure differential is created (i.e., lower pressure in the SSDS than the indoor air pressure in the building). This pressure differentiate may be monitored with a manometer installed on a visible portion of the vertical piping. If the manometer reading is zero inches of WC, the system requires maintenance and repairs.

5.1.3 System Start-Up and Testing

The system start up should follow the manufacturer's installation instructions of the fan and as applicable, monitoring equipment. The system's piping and seals shall be visually inspected for damage and pressure testing completed. The system testing described above will also be conducted if, in the course of the SSDS system lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.1.4 Routine System Operation and Maintenance

The routine system operation and maintenance of the active SSDS shall be completed on an annual basis. This should follow manufacture recommendations, when known, which may include verifying piping connections are secure and not leaking, the fan is properly mounted, and pressure readings are within acceptable ranges.

5.1.5 Non-Routine Operation and Maintenance

If the in-line fan is not operational, damaged or otherwise not producing the necessary vacuum per the readings of the manometer, the fan may need replacing. The fan shall be returned to the manufacturer for repair or replaced with the same or better model. The actions taken to fix the in-line fan shall be documented on SSDS record drawings and also summarized for reporting in the Periodic Review Report.

5.1.6 System Monitoring Devices and Alarms

The active SSDS system shall include a warning device(s) to indicate that the system is not operating properly. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the active SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

5.2 Soil Cover Performance Criteria

The remedy involves the maintenance and periodic inspection of an engineered cover system consisting a demarcation layer and clean soil in designated areas of the site as shown in Figure 5. The periodic inspections will be completed to document the EC's are being maintained and when necessary to ensure its effectiveness as a soil cover to potential exposure to remaining contamination. Maintenance, repair or other disturbances to the soil cover system will be performed in accordance with application sections of Appendix B - Excavation Work Plan.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the site during periodic assessments, and briefly summarizes the vulnerability of the site and/or engineering controls to severe storms/weather events and associated flooding.

- Flood Plain: Portions of the site are within the "special flood hazard areas subject to inundation by the 1% annual chance flood".
- Site Drainage and Storm Water Management: As part of the new redevelopment as a parking lot, new stormwater management measures (i.e., permanent pool) were installed for treatment and management of a 1-year storm event.
- Erosion: The majority of the Site is covered with a building and asphalt paved parking with storm water catch basins which will not be easily susceptible to erosion during periods of severe rain events.
- High Wind: With the location of the Site being adjacent to the open Hudson River, high winds may be present at the Site. However, high wind should have little to no effect on the surface soil cover system once it is in a vegetative state. Light pole bases would not likely be blown over in high wind as the actual light pole would break first**.**

- Electricity: There will be no effect on the engineering controls (surface cover system) due to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes, and the associated impact on site equipment and operations.
- Spill/Contaminant Release: The surface cover system will not be susceptible to a spill or other contaminant release due to storm-related damage caused by flooding, erosion, high winds, loss of power etc. as there is no storage of petroleum or chemical products.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

- Waste Generation: Operation and maintenance of the remedy should not generate waste. If new site development or repairs/maintenance of infrastructure occurs, there is the potential to generate excess soils that would require special handling and disposal if the soils exceed NYSDEC restricted commercial SCOs. If development or repairs are planned, they should consider techniques that minimize site disturbance and generation of excess soils. If excess soils are generated, measures should be developed to re-use excess soils on site in accordance with this SMP.
- Emissions: When implementing groundwater sampling with low flow sampling equipment, the power source should be portable batteries in lieu of a generator or running vehicle.

Methods proposed or implemented to reduce waste generation, emissions, etc. should be included in the PRR.

6.2.1 Timing of Green Remediation Evaluations

Green remediation evaluations and corresponding modifications will be undertaken at any time that the Project Manager feels appropriate (e.g. during significant maintenance events or in conjunction with storm recovery activities).

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Frequency of Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

Wherever possible, consideration shall be given to:

- Reduced sampling frequencies;
- Reduced site visits and system checks;
- Installation of remote sensing/operations and telemetry; and
- Coordination/consolidation of activities to maximize foreman/labor time.

6.2.3 Metrics and Reporting

As discussed in Section 7.0, a set of metrics has been developed relative to energy usage, solid waste generation, and transportation and shipping. When applicable, this information will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits.

7.0 REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix D. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 7.1-1 and summarized in the Periodic Review Report (PRR).

Table 7.1-1: Schedule of Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Surface Cover Inspection and Groundwater Monitoring Report	Annual
Periodic Review Report	Annually, or as otherwise determined by the Department
Vapor Intrusion Effectiveness Monitoring	Within 45 days of receipt of laboratory testing results with frequency to be determined after the first round of testing/monitoring

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;

- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or field sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., groundwater, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Laboratory data will be reported in digital format as determined by the NYSDEC. Currently, laboratory data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html to Environmental Data Submission.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the Department or at another frequency as may be required by the Department. In the event

that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A - Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of the ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections and if applicable, severe condition inspections.
- Applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html to Environmental Data Submission.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific Decision Document;
  - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;

- Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan; and
- Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document.
- The overall performance and effectiveness of the remedy.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"*For each institutional or engineering control identified for the site, I certify that all of the following statements are true:*

- *The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*
- *The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;*
- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*
- *Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*
- *Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*
- *Use of the site is compliant with the environmental easement;*
- *The engineering control systems are performing as designed and are effective;*

- *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and*
- *The information presented in this report is accurate and complete.*

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party] for the site."

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

8.0 REFERENCES

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation". May 3, 2010

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Pre-Design Investigation Work Plan, USAI Lighting Facility, prepared by C.T. Male Associates. March 24, 2015.

Remedial Action Work Plan, USAI Lighting Facility, prepared by C.T. Male Associates. May 27, 2015.

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-1		SS-2		SS-3		SS-4		SS-5		FDSS1-06192015		SS-6		SS-7		SS-8		SS-9		SS-10		SS-11		SS-12	
	SAMPLING DATE			6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
	LAB SAMPLE ID			L1513932-01		L1513932-02		L1513932-03		L1513932-04		L1513932-05		L1513932-06		L1513932-07		L1513932-08		L1513932-09		L1513932-10		L1513932-11		L1513932-12		L1513932-13	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
General Chemistry - Westborough Lab																													
	Solids, Total	NONE	%	81.8		84.2		80.6		71.2		71.9		68.8		87.5		78.6		75.1		81.2		94.9		68.5		50.9	
	Cyanide, Total	57-12-5	mg/kg	1.2	U	0.53	J	0.58	J	0.54	J	1.3	U	1.4	U	1.1	U	1.3	U	1.3	U	1.2	U	1	U	1.4	U	1.8	U
	Chromium, Hexavalent	18540-29-9	mg/kg	-		-		-		-		-		-		-		-		-		-		0.84	U	-		1.6	U
Organochlorine Pesticides by GC - Westborough Lab																													
	Delta-BHC	319-86-8	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Lindane	58-89-9	mg/kg	0.000783	U	0.000754	U	0.000823	U	0.00093	U	0.00091	U	0.000958	U	0.000742	U	0.00083	U	0.000838	U	0.000805	U	0.00068	U	0.000945	U	0.00127	U
	Alpha-BHC	319-84-6	mg/kg	0.000783	U	0.000754	U	0.000823	U	0.00093	U	0.00091	U	0.000958	U	0.000742	U	0.00083	U	0.000838	U	0.000805	U	0.00068	U	0.000945	U	0.00127	U
	Beta-BHC	319-85-7	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Heptachlor	76-44-8	mg/kg	0.000939	U	0.000542	J	0.000987	U	0.00112	U	0.00109	U	0.00115	U	0.00089	U	0.000996	U	0.001	U	0.000966	U	0.000816	U	0.00113	U	0.00152	U
	Aldrin	309-00-2	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Heptachlor epoxide	1024-57-3	mg/kg	0.00352	U	0.0034	U	0.0037	U	0.00418	U	0.00409	U	0.00431	U	0.00334	U	0.00373	U	0.00377	U	0.00362	U	0.00306	U	0.00425	U	0.00572	U
	Endrin	72-20-8	mg/kg	0.000783	U	0.000754	U	0.000823	U	0.00093	U	0.00091	U	0.000958	U	0.000742	U	0.00083	U	0.000838	U	0.000805	U	0.00068	U	0.000945	U	0.00127	U
	Endrin ketone	53494-70-5	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Dieldrin	60-57-1	mg/kg	0.00117	U	0.00274		0.00122	J	0.00232	J	0.00245	U	0.00144	U	0.00111	U	0.00124	U	0.00126	U	0.00121	U	0.0088	J	0.00142	U	0.00191	U
	4,4'-DDE	72-55-9	mg/kg	0.00188	U	0.00181	U	0.00117	J	0.00223	U	0.000898	J	0.0023	U	0.000764	J	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00303	J
	4,4'-DDD	72-54-8	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	4,4'-DDT	50-29-3	mg/kg	0.00216	J	0.00389	J	0.00223	J	0.00494		0.0036	J	0.00431	U	0.00188	J	0.00287	J	0.00202	J	0.00347	J	0.00734	J	0.00425	U	0.00576	
	Endosulfan I	959-98-8	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Endosulfan II	33213-65-9	mg/kg	0.00188	U	0.00181	U	0.00197	U	0.00223	U	0.00218	U	0.0023	U	0.00178	U	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00305	U
	Endosulfan sulfate	1031-07-8	mg/kg	0.000783	U	0.000754	U	0.000823	U	0.00093	U	0.00091	U	0.000958	U	0.000742	U	0.00083	U	0.000838	U	0.000805	U	0.00068	U	0.000945	U	0.00127	U
	Methoxychlor	72-43-5	mg/kg	0.00352	U	0.0034	U	0.0037	U	0.00418	U	0.00409	U	0.00431	U	0.00334	U	0.00373	U	0.00377	U	0.00362	U	0.00306	U	0.00425	U	0.00572	U
	Toxaphene	8001-35-2	mg/kg	0.0352	U	0.034	U	0.037	U	0.0418	U	0.0409	U	0.0431	U	0.0334	U	0.0373	U	0.0377	U	0.0362	U	0.0306	U	0.0425	U	0.0572	U
	cis-Chlordane	5103-71-9	mg/kg	0.00235	U	0.00072	U	0.00247	U	0.00143	U	0.00273	U	0.00287	U	0.00223	U	0.00249	U	0.00251	U	0.00242	U	0.00204	U	0.00283	U	0.00381	U
	trans-Chlordane	5103-74-2	mg/kg	0.00235	U	0.0021	U	0.00247	U	0.00108	U	0.00273	U	0.00287	U	0.00223	U	0.00249	U	0.00251	U	0.00242	U	0.00204	U	0.00283	U	0.00381	U
	Chlordane	57-74-9	mg/kg	0.0153	U	0.0225	U	0.00885	U	0.0167	U	0.0177	U	0.0187	U	0.0145	U	0.0162	U	0.0163	U	0.0157	U	0.0132	U	0.0184	U	0.0248	U
Polychlorinated Biphenyls by GC - Westborough Lab																													
	Aroclor 1016	12674-11-2	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1221	11104-28-2	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1232	11141-16-5	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1242	53469-21-9	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.0128	J	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1248	12672-29-6	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1254	11097-69-1	mg/kg	0.0394	U	0.0489		0.03	J	0.0183	J	0.0446	U	0.0161	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0446		0.49		0.0473	J
	Aroclor 1260	11096-82-5	mg/kg	0.0394	U	0.0266	J	0.0393	U	0.0234	J	0.0212	J	0.028	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0672	
	Aroclor 1262	37324-23-5	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	Aroclor 1268	11100-14-4	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.044	U	0.0446	U	0.046	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0627	U
	PCBs, Total	1336-36-3	mg/kg	0.0394	U	0.0755	J	0.03	J	0.0545	J	0.0212	J	0.0441	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0446		0.49		0.115	J
Semivolatile Organics by GC/MS - Westborough Lab																													
	Acenaphthene	83-32-9	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	0.19	U	0.15	U	0.17	U	0.18	U	0.16	U	0.14	U	0.05	J	0.26	U
	Hexachlorobenzene	118-74-1	mg/kg	0.12	U	0.12	U	0.12	U	0.14	U	0.14	U	0.14	U	0.11	U	0.12	U	0.13	U	0.12	U	0.1	U	0.14	U	0.19	U
	Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.18	U	0.17	U	0.18	U	0.21	U	0.21	U	0.21	U	0.17	U	0.19	U	0.2	U	0.18	U	0.15	U	0.22	U	0.29	U
	2-Chloronaphthalene	91-58-7	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-1		SS-2		SS-3		SS-4		SS-5		FDSS1-06192015		SS-6		SS-7		SS-8		SS-9		SS-10		SS-11		SS-12	
	SAMPLING DATE			6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
	LAB SAMPLE ID			L1513932-01		L1513932-02		L1513932-03		L1513932-04		L1513932-05		L1513932-06		L1513932-07		L1513932-08		L1513932-09		L1513932-10		L1513932-11		L1513932-12		L1513932-13	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	UJ	0.19	U	0.21	U	0.22	R	0.2	U	0.17	U	0.24	UJ	0.32	UJ
	2,4-Dinitrotoluene	121-14-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2,6-Dinitrotoluene	606-20-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Fluoranthene	206-44-0	mg/kg	0.49		0.28		0.38		0.41		0.27		0.31		0.036	J	0.16		0.94		0.16		0.34		2.1		0.069	J
	4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	4-Bromophenyl phenyl ether	101-55-3	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Bis(2-chloroisopropyl)ether	108-60-1	mg/kg	0.24	U	0.23	U	0.24	U	0.28	U	0.27	U	0.28	U	0.23	U	0.25	U	0.27	U	0.24	U	0.2	U	0.29	U	0.38	U
	Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	U	0.21	U	0.22	U	0.25	U	0.25	U	0.25	U	0.2	U	0.22	U	0.24	U	0.22	U	0.18	U	0.26	U	0.35	U
	Hexachlorobutadiene	87-68-3	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Hexachlorocyclopentadiene	77-47-4	mg/kg	0.57	UJ	0.55	U	0.58	U	0.67	U	0.66	U	0.67	U	0.54	U	0.6	U	0.63	U	0.58	U	0.49	U	0.68	U	0.92	U
	Hexachloroethane	67-72-1	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	0.19	U	0.15	U	0.17	U	0.18	U	0.16	U	0.14	U	0.19	U	0.26	U
	Isophorone	78-59-1	mg/kg	0.18	U	0.17	U	0.18	U	0.21	U	0.21	U	0.21	U	0.17	U	0.19	U	0.2	U	0.18	U	0.15	U	0.22	U	0.29	U
	Naphthalene	91-20-3	mg/kg	0.2	U	0.14	J	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Nitrobenzene	98-95-3	mg/kg	0.18	U	0.17	U	0.18	U	0.21	U	0.21	U	0.21	U	0.17	U	0.19	U	0.2	U	0.18	U	0.15	U	0.22	U	0.29	U
	NDPA/DPA	86-30-6	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	0.19	U	0.15	U	0.17	U	0.18	U	0.16	U	0.14	U	0.19	U	0.26	U
	n-Nitrosodi-n-propylamine	621-64-7	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.2	U	0.19	U	0.2	U	0.4		0.74	J	0.26	J	0.19	U	0.21	U	0.092	J	0.2	U	0.17	U	0.067	J	0.38	
	Butyl benzyl phthalate	85-68-7	mg/kg	0.2	U	0.19	U	0.2	U	0.2	J	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.07	J	0.32	U
	Di-n-butylphthalate	84-74-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Di-n-octylphthalate	117-84-0	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Diethyl phthalate	84-66-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Dimethyl phthalate	131-11-3	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Benzo(a)anthracene	56-55-3	mg/kg	0.24		0.14		0.18		0.23		0.14		0.16		0.11	U	0.068	J	0.44		0.08	J	0.18		0.96		0.19	U
	Benzo(a)pyrene	50-32-8	mg/kg	0.18		0.14	J	0.19		0.22		0.14	J	0.17	J	0.15	U	0.072	J	0.48		0.083	J	0.19		1		0.26	U
	Benzo(b)fluoranthene	205-99-2	mg/kg	0.28		0.18		0.25		0.37		0.19		0.23		0.11	U	0.1	J	0.62		0.12		0.24		1.4		0.19	U
	Benzo(k)fluoranthene	207-08-9	mg/kg	0.1	J	0.062	J	0.091	J	0.15		0.082	J	0.089	J	0.11	U	0.042	J	0.25		0.042	J	0.11		0.51		0.19	U
	Chrysene	218-01-9	mg/kg	0.27		0.16		0.21		0.29		0.17		0.2		0.11	U	0.09	J	0.51		0.095	J	0.2		1.2		0.19	U
	Acenaphthylene	208-96-8	mg/kg	0.084	J	0.15	U	0.16	U	0.19	U	0.18	U	0.19	U	0.15	U	0.17	U	0.05	J	0.16	U	0.14	U	0.12	J	0.26	U
	Anthracene	120-12-7	mg/kg	0.1	J	0.082	J	0.043	J	0.043	J	0.14	U	0.14	U	0.11	U	0.12	U	0.06	J	0.12	U	0.032	J	0.18		0.19	U
	Benzo(ghi)perylene	191-24-2	mg/kg	0.12	J	0.1	J	0.13	J	0.22		0.097	J	0.12	J	0.15	U	0.061	J	0.33		0.062	J	0.15		0.79		0.26	U
	Fluorene	86-73-7	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Phenanthrene	85-01-8	mg/kg	0.19		0.17		0.18		0.16		0.11	J	0.14		0.11	U	0.077	J	0.3		0.051	J	0.14		0.9		0.19	U
	Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.12	U	0.12	U	0.12	U	0.14	U	0.14	U	0.14	U	0.11	U	0.12	U	0.082	J	0.12	U	0.037	J	0.18		0.19	U
	Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.13	J	0.11	J	0.15	J	0.2		0.1	J	0.13	J	0.15	U	0.058	J	0.36		0.062	J	0.14		0.83		0.26	U
	Pyrene	129-00-0	mg/kg	0.4		0.26		0.34		0.4		0.26		0.3		0.11	U	0.15		0.89		0.15		0.32		1.9		0.19	U
	Biphenyl	92-52-4	mg/kg	0.46	U	0.44	U	0.47	U	0.53	U	0.52	U	0.54	U	0.43	U	0.48	U	0.5	U	0.46	U	0.39	U	0.55	U	0.73	U
	4-Chloroaniline	106-47-8	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2-Nitroaniline	88-74-4	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	3-Nitroaniline	99-09-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	4-Nitroaniline	100-01-6	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Dibenzofuran	132-64-9	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2-Methylnaphthalene	91-57-6	mg/kg	0.24	U	0.072	J	0.24	U	0.28	U	0.27	U	0.28	U	0.23	U	0.25	U	0.27	U	0.24	U	0.2	U	0.29	U	0.38	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Acetophenone	98-86-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2,4,6-Trichlorophenol	88-06-2	mg/kg	0.12	U	0.12	U	0.12	U	0.14	U	0.14	U	0.14	U	0.11	U	0.12	U	0.13	U	0.12	U	0.1	U	0.14	U	0.19	U
	p-Chloro-m-cresol	59-50-7	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2-Chlorophenol	95-57-8	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2,4-Dichlorophenol	120-83-2	mg/kg	0.18	U	0.17	U	0.18	U	0.21	U	0.21	U	0.21	U	0.17	U	0.19	U	0.2	U	0.18	U	0.15	U	0.22	U	0.29	U
	2,4-Dimethylphenol	105-67-9	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2-Nitrophenol	88-75-5	mg/kg	0.43	U	0.42	U	0.44	U	0.5	U	0.49	U	0.51	U	0.41	U	0.45	U	0.48	U	0.44	U	0.37	U	0.52	U	0.69	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-1		SS-2		SS-3		SS-4		SS-5		FDSS1-06192015		SS-6		SS-7		SS-8		SS-9		SS-10		SS-11		SS-12	
	SAMPLING DATE			6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
	LAB SAMPLE ID			L1513932-01		L1513932-02		L1513932-03		L1513932-04		L1513932-05		L1513932-06		L1513932-07		L1513932-08		L1513932-09		L1513932-10		L1513932-11		L1513932-12		L1513932-13	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	4-Nitrophenol	100-02-7	mg/kg	0.28	U	0.27	U	0.29	U	0.33	U	0.32	U	0.33	U	0.27	U	0.29	U	0.31	U	0.28	U	0.24	U	0.34	U	0.45	U
	2,4-Dinitrophenol	51-28-5	mg/kg	0.96	U	0.93	U	0.98	U	1.1	U	1.1	U	1.1	U	0.91	U	1	U	1.1	U	0.98	U	0.82	U	1.2	U	1.5	U
	4,6-Dinitro-o-cresol	534-52-1	mg/kg	0.52	U	0.5	U	0.53	U	0.6	U	0.6	U	0.61	U	0.49	U	0.54	U	0.58	U	0.53	U	0.44	U	0.62	U	0.84	U
	Pentachlorophenol	87-86-5	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	0.19	U	0.15	U	0.17	U	0.18	U	0.16	U	0.14	U	0.19	U	0.26	U
	Phenol	108-95-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	2-Methylphenol	95-48-7	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	3-Methylphenol/4-Methylphenol	108-39-4	mg/kg	0.29	U	0.28	U	0.29	U	0.34	U	0.33	U	0.34	U	0.27	U	0.3	U	0.32	U	0.29	U	0.25	U	0.34	U	0.46	U
	2,4,5-Trichlorophenol	95-95-4	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.32	U
	Carbazole	86-74-8	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.24	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.088	J	0.32	U
	Benzaldehyde	100-52-7	mg/kg	0.26	U	0.31		0.31		0.91		1.5		-		-		-		-		-		-		-		-	
	Caprolactam	105-60-2	mg/kg	0.3		0.19	U	0.2	U	1.9		0.49		-		-		-		-		-		-		-		-	
	Atrazine	1912-24-9	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	-		-		-		-		-		-		-		-	
	2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	-		-		-		-		-		-		-		-	
Total Metals - Westborough Lab																													
	Aluminum, Total	7429-90-5	mg/kg	12000	J	8200	J	11000	J	12000	J	11000	J	11000	J	11000	J	9500	J	13000	J	9700	J	7000	J	9200	J	14000	J
	Antimony, Total	7440-36-0	mg/kg	4.7	UJ	4.6	UJ	4.8	UJ	5.4	UJ	5.3	UJ	5.6	UJ	4.3	UJ	4.9	UJ	5	UJ	4.8	UJ	4	UJ	5.5	UJ	7.6	UJ
	Arsenic, Total	7440-38-2	mg/kg	14		7.8		7.2		7		7.6		8.1		6.9		8.6		6.8		8		3.1		4.7		6	
	Barium, Total	7440-39-3	mg/kg	55	J	48	J	49	J	59	J	69	J	80	J	61	J	84	J	71	J	41	J	31	J	65	J	1200	J
	Beryllium, Total	7440-41-7	mg/kg	0.32	J	0.31	J	0.41	J	0.51	J	0.48	J	0.5	J	0.48		0.41	J	0.52		0.4	J	0.28	J	0.42	J	0.56	J
	Cadmium, Total	7440-43-9	mg/kg	0.3	J	0.93	UJ	0.97	UJ	1.1	UJ	1	UJ	1.1	UJ	0.87	UJ	0.99	UJ	0.99	UJ	0.96	UJ	0.81	UJ	1.1	UJ	1.5	J
	Calcium, Total	7440-70-2	mg/kg	15000	J	16000	J	13000	J	10000	J	6300	J	6000	J	5200	J	6800	J	12000	J	11000	J	9700	J	10000	J	54000	J
	Chromium, Total	7440-47-3	mg/kg	21		13		15		26		12		14		13		10		15		12		10		14		29	
	Cobalt, Total	7440-48-4	mg/kg	11		6.4		8.2		11		7		8.2		9.8		6		9.4		7.9		4.8		7.5		12	
	Copper, Total	7440-50-8	mg/kg	37		27		34		89		26		30		26		25		30		25		18		34		49	
	Iron, Total	7439-89-6	mg/kg	27000	J	19000	J	22000	J	32000	J	20000	J	24000	J	24000	J	18000	J	25000	J	21000	J	16000	J	20000	J	31000	J
	Lead, Total	7439-92-1	mg/kg	970		44		52		49		37		47		22		43		33		13		13		41		130	
	Magnesium, Total	7439-95-4	mg/kg	9600	J	4000	J	5600	J	8600	J	3500	J	4200	J	4600	J	3200	J	5200	J	5400	J	5300	J	5000	J	8600	J
	Manganese, Total	7439-96-5	mg/kg	630	J	480	J	720	J	770	J	670	J	760	J	1100	J	650	J	1400	J	580	J	400	J	1300	J	1100	J
	Mercury, Total	7439-97-6	mg/kg	0.11		0.07	J	0.076	J	0.12		0.12		0.12		0.08		0.14		0.07	J	0.06	J	0.02	J	0.1		0.56	
	Nickel, Total	7440-02-0	mg/kg	24	J	15	J	18	J	29	J	18	J	21	J	19	J	19	J	22	J	18	J	11	J	17	J	24	J
	Potassium, Total	7440-09-7	mg/kg	810		780		830		870		1100		1400		800		1300		1100		850		640		770		900	
	Selenium, Total	7782-49-2	mg/kg	0.54	J	0.43	J	0.38	J	0.71	J	0.56	J	0.6	J	0.27	J	0.46	J	0.46	J	0.55	J	0.36	J	0.43	J	0.61	J
	Silver, Total	7440-22-4	mg/kg	0.94	U	0.93	U	0.97	U	0.56	J	1	U	0.26	J	0.87	U	0.42	J	0.99	U	0.96	U	0.81	U	1.1	U	1.5	U
	Sodium, Total	7440-23-5	mg/kg	100	J	120	J	91	J	310		540	J	270	J	77	J	510		170	J	54	J	50	J	64	J	530	
	Thallium, Total	7440-28-0	mg/kg	1.9	UJ	1.8	UJ	1.9	UJ	2.1	UJ	2.1	UJ	2.2	UJ	1.7	UJ	2	UJ	2	UJ	1.9	UJ	1.6	UJ	2.2	UJ	3	UJ
	Vanadium, Total	7440-62-2	mg/kg	30		14		17		34		24		28		16		32		22		17		12		17		21	
	Zinc, Total	7440-66-6	mg/kg	220	J	120	J	91	J	320	J	71	J	90	J	68	J	86	J	83	J	80	J	66	J	140	J	940	J
Volatile Organics by 8260/5035 - Westborough Lab																													
	Methylene chloride	75-09-2	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.015	U	0.01	U	0.014	U	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	1,1-Dichloroethane	75-34-3	mg/kg	0.0017	U	0.0016	U	0.0016	U	0.002	U	0.0027	U	0.0023	U	0.0016	U	0.0021	U	0.002	U	0.002	UJ	0.0014	U	0.0025	U	0.0025	U
	Chloroform	67-66-3	mg/kg	0.0017	U	0.0016	U	0.0016	U	0.002	U	0.0027	U	0.0023	U	0.0016	U	0.0021	U	0.002	U	0.002	UJ	0.0014	U	0.0025	U	0.0025	U
	Carbon tetrachloride	56-23-5	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	1,2-Dichloropropane	78-87-5	mg/kg	0.004	U	0.0036	U	0.0037	U	0.0046	U	0.0064	U	0.0053	U	0.0036	U	0.0049	U	0.0047	U	0.0048	UJ	0.0032	U	0.0059	U	0.0058	U
	Dibromochloromethane	124-48-1	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	1,1,2-Trichloroethane	79-00-5	mg/kg	0.0017	U	0.0016	U	0.0016	U	0.002	U	0.0027	U	0.0023	U	0.0016	U	0.0021	U	0.002	U	0.002	UJ	0.0014	U	0.0025	U	0.0025	U
	Tetrachloroethene	127-18-4	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Chlorobenzene	108-90-7	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Trichlorofluoromethane	75-69-4	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	1,2-Dichloroethane	107-06-2	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-1		SS-2		SS-3		SS-4		SS-5		FDSS1-06192015		SS-6		SS-7		SS-8		SS-9		SS-10		SS-11		SS-12	
	SAMPLING DATE			6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
	LAB SAMPLE ID			L1513932-01		L1513932-02		L1513932-03		L1513932-04		L1513932-05		L1513932-06		L1513932-07		L1513932-08		L1513932-09		L1513932-10		L1513932-11		L1513932-12		L1513932-13	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	1,1,1-Trichloroethane	71-55-6	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Bromodichloromethane	75-27-4	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	trans-1,3-Dichloropropene	10061-02-6	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	cis-1,3-Dichloropropene	10061-01-5	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Bromoform	75-25-2	mg/kg	0.0045	U	0.0042	U	0.0043	U	0.0053	U	0.0073	U	0.006	U	0.0042	U	0.0056	U	0.0053	U	0.0055	UJ	0.0037	U	0.0068	U	0.0066	U
	1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Benzene	71-43-2	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Toluene	108-88-3	mg/kg	0.0017	U	0.0016	U	0.0016	U	0.002	U	0.0027	U	0.0023	U	0.0016	U	0.0021	U	0.002	U	0.002	UJ	0.0014	U	0.0025	U	0.0025	U
	Ethylbenzene	100-41-4	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Chloromethane	74-87-3	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	Bromomethane	74-83-9	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	Vinyl chloride	75-01-4	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	Chloroethane	75-00-3	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	1,1-Dichloroethene	75-35-4	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	trans-1,2-Dichloroethene	156-60-5	mg/kg	0.0017	U	0.0016	U	0.0016	U	0.002	U	0.0027	U	0.0023	U	0.0016	U	0.0021	U	0.002	U	0.002	UJ	0.0014	U	0.0025	U	0.0025	U
	Trichloroethene	79-01-6	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	1,2-Dichlorobenzene	95-50-1	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	1,3-Dichlorobenzene	541-73-1	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	1,4-Dichlorobenzene	106-46-7	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	Methyl tert butyl ether	1634-04-4	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	p/m-Xylene	179601-23-1	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	o-Xylene	95-47-6	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	cis-1,2-Dichloroethene	156-59-2	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Styrene	100-42-5	mg/kg	0.0023	U	0.0021	U	0.0021	U	0.0026	U	0.0037	U	0.003	U	0.0021	U	0.0028	U	0.0027	U	0.0027	UJ	0.0018	U	0.0034	U	0.0033	U
	Dichlorodifluoromethane	75-71-8	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.015	U	0.01	U	0.014	U	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	Acetone	67-64-1	mg/kg	0.011	U	0.01	U	0.011	U	0.0047	J	0.16	J	0.064	J	0.01	U	0.18		0.0055	J	0.0096	UJ	0.0016	U	0.0069	U	0.0033	U
	Carbon disulfide	75-15-0	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.015	U	0.01	U	0.014	U	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	2-Butanone	78-93-3	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.0047	J	0.015	U	0.01	U	0.0044	J	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	4-Methyl-2-pentanone	108-10-1	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.015	U	0.01	U	0.014	U	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	2-Hexanone	591-78-6	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.015	U	0.01	U	0.014	U	0.013	U	0.014	UJ	0.0092	U	0.017	U	0.017	U
	Bromochloromethane	74-97-5	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	1,2-Dibromoethane	106-93-4	mg/kg	0.0045	U	0.0042	U	0.0043	U	0.0053	U	0.0073	U	0.006	U	0.0042	U	0.0056	U	0.0053	U	0.0055	UJ	0.0037	U	0.0068	U	0.0066	U
	1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	Hexachlorobutadiene	87-68-3	mg/kg	-		-		-		-		-		-		-		-		-		-		-		-		-	
	Isopropylbenzene	98-82-8	mg/kg	0.0011	U	0.001	U	0.0011	U	0.0013	U	0.0018	U	0.0015	U	0.001	U	0.0014	U	0.0013	U	0.0014	UJ	0.00092	U	0.0017	U	0.0017	U
	Naphthalene	91-20-3	mg/kg	-		-		-		-		-		-		-		-		-		-		-		-		-	
	1,2,3-Trichlorobenzene	87-61-6	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0056	U	0.0052	U	0.0053	U	0.0066	U	0.0092	U	0.0076	U	0.0052	U	0.0071	U	0.0066	U	0.0068	UJ	0.0046	U	0.0085	U	0.0083	U
	Methyl Acetate	79-20-9	mg/kg	0.023	U	0.021	U	0.021	U	0.026	U	0.037	U	0.03	U	0.021	U	0.028	U	0.027	U	0.027	UJ	0.018	U	0.034	U	0.033	U
	Cyclohexane	110-82-7	mg/kg	0.023	U	0.021	U	0.021	U	0.026	U	0.037	U	0.03	U	0.021	U	0.028	U	0.027	U	0.027	UJ	0.018	U	0.034	U	0.033	U
	1,4-Dioxane	123-91-1	mg/kg	0.11	U	0.1	U	0.11	U	0.13	U	0.18	U	0.15	U	0.1	U	0.14	U	0.13	U	0.14	UJ	0.092	U	0.17	U	0.17	U
	Freon-113	76-13-1	mg/kg	0.023	U	0.021	U	0.021	U	0.026	U	0.037	U	0.03	U	0.021	U	0.028	U	0.027	U	0.027	UJ	0.018	U	0.034	U	0.033	U
	Methyl cyclohexane	108-87-2	mg/kg	0.0045	U	0.0042	U	0.0043	U	0.0053	U	0.0073	U	0.006	U	0.0042	U	0.0056	U	0.0053	U	0.0055	UJ	0.0037	U	0.0068	U	0.0066	U

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC columns is greater than 25%; the lower value is flagged with a P;
I - Indicates that the lower value for two columns has been reported due to obvious interference;
mg/kg - Milligrams per Liter;

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-13		SS-14		SS-15		SS-16		SS-17		SS-18		SS-19		SS-20		SS-21	
	SAMPLING DATE			6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015	
	LAB SAMPLE ID			L1514071-01		L1514071-02		L1514071-03		L1514071-04		L1514071-05		L1514071-06		L1514071-07		L1514071-08		L1514071-09	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
General Chemistry - Westborough Lab																					
	Solids, Total	NONE	%	84.5		92		85.6		87.6		86.5		69.8		78.6		73.6		90.2	
	Cyanide, Total	57-12-5	mg/kg	1.1	U	1	U	1.1	U	1.1	U	1.1	U	1.4	U	1.2	U	1.3	U	1	U
	Chromium, Hexavalent	18540-29-9	mg/kg	0.95	U	-		0.93	U	-		-		1.1	U	-	-	-	-	-	-
Organochlorine Pesticides by GC - Westborough Lab																					
	Delta-BHC	319-86-8	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Lindane	58-89-9	mg/kg	0.000766	U	0.00071	U	0.000775	U	0.000754	U	0.000762	U	0.00092	U	0.000801	U	0.000896	U	0.00071	U
	Alpha-BHC	319-84-6	mg/kg	0.000766	U	0.00071	U	0.000775	U	0.000754	U	0.000762	U	0.00092	U	0.000801	U	0.000896	U	0.00071	U
	Beta-BHC	319-85-7	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Heptachlor	76-44-8	mg/kg	0.00092	U	0.000851	U	0.00093	U	0.000904	U	0.000914	U	0.0011	U	0.000961	U	0.00108	U	0.000852	U
	Aldrin	309-00-2	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Heptachlor epoxide	1024-57-3	mg/kg	0.00345	U	0.00319	U	0.00349	U	0.00339	U	0.00343	U	0.00414	U	0.0036	U	0.00403	U	0.00319	U
	Endrin	72-20-8	mg/kg	0.000766	U	0.00071	U	0.000775	U	0.000754	U	0.000762	U	0.00092	U	0.000801	U	0.000896	U	0.00071	U
	Endrin ketone	53494-70-5	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Dieldrin	60-57-1	mg/kg	0.00115	U	0.00106	U	0.00116	U	0.00113	U	0.00114	U	0.00138	U	0.0012	U	0.00134	U	0.00106	U
	4,4'-DDE	72-55-9	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	4,4'-DDD	72-54-8	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	4,4'-DDT	50-29-3	mg/kg	0.00338	J	0.00319	U	0.00349	U	0.00339	U	0.00343	U	0.00462		0.0051		0.00218	J	0.00885	
	Endosulfan I	959-98-8	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Endosulfan II	33213-65-9	mg/kg	0.00184	U	0.0017	U	0.00186	U	0.00181	U	0.00183	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	Endosulfan sulfate	1031-07-8	mg/kg	0.000766	U	0.00071	U	0.000775	U	0.000754	U	0.000762	U	0.00092	U	0.000801	U	0.000896	U	0.00071	U
	Methoxychlor	72-43-5	mg/kg	0.00345	U	0.00319	U	0.00349	U	0.00339	U	0.00343	U	0.00414	U	0.0036	U	0.00403	U	0.00319	U
	Toxaphene	8001-35-2	mg/kg	0.0345	U	0.0319	U	0.0349	U	0.0339	U	0.0343	U	0.0414	U	0.036	U	0.0403	U	0.0319	U
	cis-Chlordane	5103-71-9	mg/kg	0.0023	U	0.00213	U	0.00232	U	0.00226	U	0.00228	U	0.00276	U	0.0024	U	0.00269	U	0.00213	U
	trans-Chlordane	5103-74-2	mg/kg	0.0023	U	0.00213	U	0.00232	U	0.00226	U	0.00228	U	0.00276	U	0.0024	U	0.00269	U	0.00213	U
	Chlordane	57-74-9	mg/kg	0.0149	U	0.0138	U	0.0151	U	0.0147	U	0.0148	U	0.0179	U	0.0156	U	0.0175	U	0.0138	U
Polychlorinated Biphenyls by GC - Westborough Lab																					
	Aroclor 1016	12674-11-2	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1221	11104-28-2	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1232	11141-16-5	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1242	53469-21-9	mg/kg	0.039	U	0.0358	U	0.113		0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1248	12672-29-6	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1254	11097-69-1	mg/kg	0.039	U	0.0358	U	0.82		0.0968		0.0642		0.0156	J	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1260	11096-82-5	mg/kg	0.039	U	0.0358	U	0.223		0.0698	J	0.0347	J	0.0314	J	0.0125	J	0.0125	J	0.015	J
	Aroclor 1262	37324-23-5	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1268	11100-14-4	mg/kg	0.039	U	0.0358	U	0.0773	U	0.0374	U	0.0375	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	PCBs, Total	1336-36-3	mg/kg	0.039	U	0.0358	U	1.16		0.167	J	0.0989	J	0.047	J	0.0125	J	0.0125	J	0.015	J
Semivolatile Organics by GC/MS - Westborough Lab																					
	Acenaphthene	83-32-9	mg/kg	0.15	U	0.14	U	0.081	J	1		0.092	J	0.13	J	0.16	U	0.18	U	0.075	J
	Hexachlorobenzene	118-74-1	mg/kg	0.12	U	0.11	U	0.12	U	0.11	U	0.11	U	0.14	U	0.12	U	0.13	U	0.11	U
	Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.17	U	0.16	U	0.17	U	0.17	U	0.17	U	0.21	U	0.18	U	0.2	U	0.16	U
	2-Chloronaphthalene	91-58-7	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-13		SS-14		SS-15		SS-16		SS-17		SS-18		SS-19		SS-20		SS-21	
	SAMPLING DATE			6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015	
	LAB SAMPLE ID			L1514071-01		L1514071-02		L1514071-03		L1514071-04		L1514071-05		L1514071-06		L1514071-07		L1514071-08		L1514071-09	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.19	UJ	0.18	UJ	0.19	UJ	0.19	UJ	0.19	UJ	0.24	U	0.21	U	0.22	U	0.18	U
	2,4-Dinitrotoluene	121-14-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2,6-Dinitrotoluene	606-20-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Fluoranthene	206-44-0	mg/kg	0.15		0.11	U	0.87		11		1.3		5.1		0.22		0.13		3.3	
	4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	4-Bromophenyl phenyl ether	101-55-3	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Bis(2-chloroisopropyl)ether	108-60-1	mg/kg	0.23	U	0.22	U	0.23	U	0.22	U	0.22	U	0.28	U	0.25	U	0.27	U	0.22	U
	Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.21	U	0.19	U	0.21	U	0.2	U	0.2	U	0.25	U	0.22	U	0.24	U	0.2	U
	Hexachlorobutadiene	87-68-3	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Hexachlorocyclopentadiene	77-47-4	mg/kg	0.55	U	0.52	U	0.55	U	0.53	U	0.54	U	0.67	U	0.59	U	0.64	U	0.52	U
	Hexachloroethane	67-72-1	mg/kg	0.15	U	0.14	U	0.15	U	0.15	U	0.15	U	0.19	U	0.16	U	0.18	U	0.14	U
	Isophorone	78-59-1	mg/kg	0.17	U	0.16	U	0.17	U	0.17	U	0.17	U	0.21	U	0.18	U	0.2	U	0.16	U
	Naphthalene	91-20-3	mg/kg	0.19	U	0.18	U	0.19	U	1.1		0.079	J	0.31		0.21	U	0.22	U	0.12	J
	Nitrobenzene	98-95-3	mg/kg	0.17	U	0.16	U	0.17	U	0.17	U	0.17	U	0.21	U	0.18	U	0.2	U	0.16	U
	NDPA/DPA	86-30-6	mg/kg	0.15	U	0.14	U	0.15	U	0.15	U	0.15	U	0.19	U	0.16	U	0.18	U	0.14	U
	n-Nitrosodi-n-propylamine	621-64-7	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.079	J	0.18	U	0.19	U	0.19	U	0.19	U	0.31		1.1		0.11	J	0.28	
	Butyl benzyl phthalate	85-68-7	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.13	J	0.049	J	0.22	U	0.18	U
	Di-n-butylphthalate	84-74-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Di-n-octylphthalate	117-84-0	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Diethyl phthalate	84-66-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Dimethyl phthalate	131-11-3	mg/kg	0.19	U	0.18	U	0.19	U	0.64		0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Benzo(a)anthracene	56-55-3	mg/kg	0.098	J	0.11	U	0.42		4.9		0.63		1.9		0.13		0.074	J	1.9	
	Benzo(a)pyrene	50-32-8	mg/kg	0.092	J	0.14	U	0.36		4.1		0.54		2.3		0.15	J	0.083	J	2.3	
	Benzo(b)fluoranthene	205-99-2	mg/kg	0.12		0.11	U	0.47		5.2		0.67		4.1		0.23		0.12	J	3.3	
	Benzo(k)fluoranthene	207-08-9	mg/kg	0.056	J	0.11	U	0.2		2.2		0.32		1.4		0.077	J	0.13	U	1.2	
	Chrysene	218-01-9	mg/kg	0.11	J	0.11	U	0.42		4.8		0.63		3.1		0.17		0.094	J	2.3	
	Acenaphthylene	208-96-8	mg/kg	0.15	U	0.14	U	0.15	U	0.084	J	0.15	U	0.15	J	0.16	U	0.18	U	1.5	
	Anthracene	120-12-7	mg/kg	0.12	U	0.11	U	0.14		2.4		0.21		0.32		0.12	U	0.13	U	0.62	
	Benzo(ghi)perylene	191-24-2	mg/kg	0.064	J	0.14	U	0.24		2.4		0.36		2		0.14	J	0.055	J	1.6	
	Fluorene	86-73-7	mg/kg	0.19	U	0.18	U	0.066	J	0.92		0.083	J	0.093	J	0.21	U	0.22	U	0.18	U
	Phenanthrene	85-01-8	mg/kg	0.065	J	0.11	U	0.6		8.5		0.9		2.8		0.11	J	0.052	J	0.75	
	Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.12	U	0.11	U	0.061	J	0.67		0.098	J	0.51		0.12	U	0.13	U	0.37	
	Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.07	J	0.14	U	0.25		2.7		0.39		2.3		0.13	J	0.066	J	1.9	
	Pyrene	129-00-0	mg/kg	0.14		0.11	U	0.74		8.9		1.1		3.8		0.21		0.12	J	3.3	
	Biphenyl	92-52-4	mg/kg	0.44	U	0.41	U	0.44	U	0.097	J	0.43	U	0.54	U	0.47	U	0.51	U	0.41	U
	4-Chloroaniline	106-47-8	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2-Nitroaniline	88-74-4	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	3-Nitroaniline	99-09-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	4-Nitroaniline	100-01-6	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Dibenzofuran	132-64-9	mg/kg	0.19	U	0.18	U	0.19	U	0.65		0.19	U	0.099	J	0.21	U	0.22	U	0.18	U
	2-Methylnaphthalene	91-57-6	mg/kg	0.23	U	0.22	U	0.23	U	0.4		0.061	J	0.28	U	0.25	U	0.27	U	0.22	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Acetophenone	98-86-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.078	J	0.21	U	0.22	U	0.18	U
	2,4,6-Trichlorophenol	88-06-2	mg/kg	0.12	U	0.11	U	0.12	U	0.11	U	0.11	U	0.14	U	0.12	U	0.13	U	0.11	U
	p-Chloro-m-cresol	59-50-7	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2-Chlorophenol	95-57-8	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2,4-Dichlorophenol	120-83-2	mg/kg	0.17	U	0.16	U	0.17	U	0.17	U	0.17	U	0.21	U	0.18	U	0.2	U	0.16	U
	2,4-Dimethylphenol	105-67-9	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2-Nitrophenol	88-75-5	mg/kg	0.41	U	0.39	U	0.42	U	0.4	U	0.4	U	0.51	U	0.45	U	0.48	U	0.39	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-13		SS-14		SS-15		SS-16		SS-17		SS-18		SS-19		SS-20		SS-21	
	SAMPLING DATE			6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015	
	LAB SAMPLE ID			L1514071-01		L1514071-02		L1514071-03		L1514071-04		L1514071-05		L1514071-06		L1514071-07		L1514071-08		L1514071-09	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	4-Nitrophenol	100-02-7	mg/kg	0.27	U	0.25	U	0.27	U	0.26	U	0.26	U	0.33	U	0.29	U	0.31	U	0.25	U
	2,4-Dinitrophenol	51-28-5	mg/kg	0.92	U	0.87	U	0.92	U	0.9	U	0.9	U	1.1	U	0.99	U	1.1	U	0.87	U
	4,6-Dinitro-o-cresol	534-52-1	mg/kg	0.5	U	0.47	U	0.5	U	0.48	U	0.49	U	0.61	U	0.54	U	0.58	U	0.47	U
	Pentachlorophenol	87-86-5	mg/kg	0.15	U	0.14	U	0.15	U	0.15	U	0.15	U	0.19	U	0.16	U	0.18	U	0.14	U
	Phenol	108-95-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	2-Methylphenol	95-48-7	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	3-Methylphenol/4-Methylphenol	108-39-4	mg/kg	0.28	U	0.26	U	0.28	U	0.27	U	0.27	U	0.079	J	0.3	U	0.32	U	0.26	U
	2,4,5-Trichlorophenol	95-95-4	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
	Carbazole	86-74-8	mg/kg	0.19	U	0.18	U	0.069	J	1.3		0.11	J	0.44		0.21	U	0.22	U	0.1	J
	Benzaldehyde	100-52-7	mg/kg	0.25	U	0.24	U	0.25	U	0.25	U	0.25	U	0.31	U	0.27	U	0.29	U	0.24	U
	Caprolactam	105-60-2	mg/kg	0.19	U	0.18	U	0.19	U	0.082	J	0.057	J	1.3		0.63		0.27		0.49	
	Atrazine	1912-24-9	mg/kg	0.15	U	0.14	U	0.15	U	0.15	U	0.15	U	0.19	U	0.16	U	0.18	U	0.14	U
	2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.24	U	0.21	U	0.22	U	0.18	U
Total Metals - Westborough Lab																					
	Aluminum, Total	7429-90-5	mg/kg	10000		8600		10000		10000		10000		10000		9200		12000		9000	
	Antimony, Total	7440-36-0	mg/kg	4.6	U	4.3	U	4.6	U	4.5	U	4.6	U	5.7	U	5	U	5.3	U	4.4	U
	Arsenic, Total	7440-38-2	mg/kg	5.3		2.2	U	11		12		11		9		2.9		3.7		2.8	
	Barium, Total	7440-39-3	mg/kg	41		15		71		72		72		63		56		62		51	
	Beryllium, Total	7440-41-7	mg/kg	0.49		0.43	U	0.48		0.51		0.46		0.6		0.44	J	0.55		0.4	J
	Cadmium, Total	7440-43-9	mg/kg	0.92	U	0.86	U	0.19	J	0.15	J	0.14	J	0.39	J	1.7		0.39	J	2.6	
	Calcium, Total	7440-70-2	mg/kg	4500		7100		27000		13000		11000		6800		3200		3100		3500	
	Chromium, Total	7440-47-3	mg/kg	16		4		16		18		20		18		16		18		15	
	Cobalt, Total	7440-48-4	mg/kg	10		12		8.4		10		9.2		10		9.7		11		8	
	Copper, Total	7440-50-8	mg/kg	31		160		45		69		33		46		41		34		36	
	Iron, Total	7439-89-6	mg/kg	23000		26000		22000		23000		23000		27000		30000		26000		21000	
	Lead, Total	7439-92-1	mg/kg	41	J	15	J	68	J	160	J	130	J	100	J	81	J	55	J	76	J
	Magnesium, Total	7439-95-4	mg/kg	4900		4800		14000		5900		5600		5600		3900		5000		4000	
	Manganese, Total	7439-96-5	mg/kg	660		180		780		590		580		380		670		730		590	
	Mercury, Total	7439-97-6	mg/kg	0.06	J	0.07	U	0.07	J	0.14		0.17		0.17		0.18		0.06	J	0.09	
	Nickel, Total	7440-02-0	mg/kg	21		9.8		19		22		21		25		23		26		23	
	Potassium, Total	7440-09-7	mg/kg	600		640		680		720		610		610		700		900		720	
	Selenium, Total	7782-49-2	mg/kg	1.8	U	1.7	U	1.9	U	1.8	U	1.8	U	0.43	J	2	U	2.1	U	1.7	U
	Silver, Total	7440-22-4	mg/kg	0.27	J	0.24	J	0.3	J	0.33	J	0.92	U	0.62	J	0.55	J	0.45	J	0.73	J
	Sodium, Total	7440-23-5	mg/kg	38	J	800		150	J	66	J	78	J	150	J	55	J	57	J	89	J
	Thallium, Total	7440-28-0	mg/kg	1.8	U	1.7	U	1.9	U	1.8	U	1.8	U	2.3	U	2	U	2.1	U	1.7	U
	Vanadium, Total	7440-62-2	mg/kg	16		83		23		18		18		28		23		25		31	
	Zinc, Total	7440-66-6	mg/kg	86	J	52	J	110	J	130	J	110	J	130	J	140	J	99	J	130	J
Volatile Organics by 8260/5035 - Westborough Lab																					
	Methylene chloride	75-09-2	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.013	U	0.023	U	0.011	U
	1,1-Dichloroethane	75-34-3	mg/kg	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0015	U	0.0019	U	0.0019	U	0.0035	U	0.0017	U
	Chloroform	67-66-3	mg/kg	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0015	U	0.0019	U	0.0019	U	0.0035	U	0.0017	U
	Carbon tetrachloride	56-23-5	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	1,2-Dichloropropane	78-87-5	mg/kg	0.0034	U	0.0031	U	0.003	U	0.0032	U	0.0035	U	0.0045	U	0.0045	U	0.0082	U	0.0039	U
	Dibromochloromethane	124-48-1	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	1,1,2-Trichloroethane	79-00-5	mg/kg	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0015	U	0.0019	U	0.0019	U	0.0035	U	0.0017	U
	Tetrachloroethene	127-18-4	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Chlorobenzene	108-90-7	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Trichlorofluoromethane	75-69-4	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,2-Dichloroethane	107-06-2	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U

TABLE 2.3.5-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-13		SS-14		SS-15		SS-16		SS-17		SS-18		SS-19		SS-20		SS-21	
	SAMPLING DATE			6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015	
	LAB SAMPLE ID			L1514071-01		L1514071-02		L1514071-03		L1514071-04		L1514071-05		L1514071-06		L1514071-07		L1514071-08		L1514071-09	
	SAMPLE TYPE			Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)			0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	1,1,1-Trichloroethane	71-55-6	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Bromodichloromethane	75-27-4	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	trans-1,3-Dichloropropene	10061-02-6	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	cis-1,3-Dichloropropene	10061-01-5	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Bromoform	75-25-2	mg/kg	0.0039	U	0.0035	U	0.0034	U	0.0036	U	0.004	U	0.0051	U	0.0052	U	0.0094	U	0.0044	U
	1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Benzene	71-43-2	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Toluene	108-88-3	mg/kg	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0015	U	0.0019	U	0.0019	U	0.0035	U	0.0017	U
	Ethylbenzene	100-41-4	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Chloromethane	74-87-3	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	Bromomethane	74-83-9	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	Vinyl chloride	75-01-4	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	Chloroethane	75-00-3	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	1,1-Dichloroethene	75-35-4	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	trans-1,2-Dichloroethene	156-60-5	mg/kg	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0015	U	0.0019	U	0.0019	U	0.0035	U	0.0017	U
	Trichloroethene	79-01-6	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	1,2-Dichlorobenzene	95-50-1	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,3-Dichlorobenzene	541-73-1	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,4-Dichlorobenzene	106-46-7	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	Methyl tert butyl ether	1634-04-4	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	p/m-Xylene	179601-23-1	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	o-Xylene	95-47-6	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	cis-1,2-Dichloroethene	156-59-2	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Styrene	100-42-5	mg/kg	0.0019	U	0.0018	U	0.0017	U	0.0018	U	0.002	U	0.0026	U	0.0026	U	0.0047	U	0.0022	U
	Dichlorodifluoromethane	75-71-8	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.013	U	0.023	U	0.011	U
	Acetone	67-64-1	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.045		0.026		0.039	
	Carbon disulfide	75-15-0	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.013	U	0.023	U	0.011	U
	2-Butanone	78-93-3	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.013	U	0.023	U	0.0035	J
	4-Methyl-2-pentanone	108-10-1	mg/kg	0.0097	U	0.0088	U	0.0086	U	0.009	U	0.01	U	0.013	U	0.013	U	0.023	U	0.011	U
	2-Hexanone	591-78-6	mg/kg	0.0097	UJ	0.0088	UJ	0.0086	UJ	0.009	UJ	0.01	UJ	0.013	UJ	0.013	UJ	0.023	UJ	0.011	UJ
	Bromochloromethane	74-97-5	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,2-Dibromoethane	106-93-4	mg/kg	0.0039	U	0.0035	U	0.0034	U	0.0036	U	0.004	U	0.0051	U	0.0052	U	0.0094	U	0.0044	U
	1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	Hexachlorobutadiene	87-68-3	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	Isopropylbenzene	98-82-8	mg/kg	0.00097	U	0.00088	U	0.00086	U	0.0009	U	0.001	U	0.0013	U	0.0013	U	0.0023	U	0.0011	U
	Naphthalene	91-20-3	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,2,3-Trichlorobenzene	87-61-6	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0048	U	0.0044	U	0.0043	U	0.0045	U	0.005	U	0.0064	U	0.0065	U	0.012	U	0.0055	U
	Methyl Acetate	79-20-9	mg/kg	0.019	U	0.018	U	0.017	U	0.018	U	0.02	U	0.026	U	0.026	U	0.047	U	0.022	U
	Cyclohexane	110-82-7	mg/kg	0.019	U	0.018	U	0.017	U	0.018	U	0.02	U	0.026	U	0.026	U	0.047	U	0.022	U
	1,4-Dioxane	123-91-1	mg/kg	0.097	U	0.088	U	0.086	U	0.09	U	0.1	U	0.13	U	0.13	U	0.23	U	0.11	U
	Freon-113	76-13-1	mg/kg	0.019	U	0.018	U	0.017	U	0.018	U	0.02	U	0.026	U	0.026	U	0.047	U	0.022	U
	Methyl cyclohexane	108-87-2	mg/kg	0.0039	U	0.0035	U	0.0034	U	0.0036	U	0.004	U	0.0051	U	0.0052	U	0.0094	U	0.0044	U

Notes:
U - Compound/analyte analyzed, but not detected above lin
detection;
J - Indicates an estimated value below the method detectio
P - Indicates a pesticide/Aroclor target analyte when the co
difference between two GC columns is greater than 25%
value is flagged with a P;
I - Indicates that the lower value for two columns has been
obvious interference;
mg/kg - Milligrams per Liter;

TABLE 2.3.5-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				SS-1		SS-2		SS-3		SS-4		SS-5		SS-6		SS-7		SS-8		SS-9		SS-10		SS-11		SS-18		SS-19		SS-20		SS-21	
	SAMPLING DATE				6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/22/2015		6/22/2015		6/22/2015		6/22/2015	
	LAB SAMPLE ID				L1513932-01		L1513932-02		L1513932-03		L1513932-04		L1513932-05		L1513932-06		L1513932-07		L1513932-08		L1513932-09		L1513932-10		L1513932-11		L1514071-06		L1514071-07		L1514071-08		L1514071-09	
	SAMPLE TYPE				Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint		Endpoint	
	SAMPLE DEPTH (in.)		Restricted		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2		0-2	
		CasNum	Commerical	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
General Chemistry - Westborough Lab																																		
	Solids, Total	NONE	NS	%	81.8		84.2		80.6		71.2		71.9		87.5		78.6		75.1		81.2		94.9		68.5		69.8		78.6		73.6		90.2	
	Cyanide, Total	57-12-5	27	mg/kg	1.2	U	0.53	U	0.58	J	0.54	J	1.3	U	1.1	U	1.3	U	1.3	U	1.2	U	1	U	1.4	U	1.4	U	1.2	U	1.3	U	1	U
Organochlorine Pesticides by GC - Westborough Lab																																		
	Heptachlor	76-44-8	15	mg/kg	0.000939	U	0.000542	J	0.000987	U	0.00112	U	0.00109	U	0.00089	U	0.000996	U	0.001	U	0.000966	U	0.000816	U	0.00113	U	0.0011	U	0.000961	U	0.00108	U	0.000852	U
	Dieldrin	60-57-1	1.4	mg/kg	0.00117	U	0.00274		0.00122	J	0.00232	J	0.00245	U	0.00111	U	0.00124	U	0.00126	U	0.00121	U	0.0088	J	0.00142	U	0.00138	U	0.0012	U	0.00134	U	0.00106	U
	4,4'-DDE	72-55-9	62	mg/kg	0.00188	U	0.00181	U	0.00117	J	0.00223	U	0.000898	U	0.000764	J	0.00199	U	0.00201	U	0.00193	U	0.00163	U	0.00227	U	0.00221	U	0.00192	U	0.00215	U	0.0017	U
	4,4'-DDT	50-29-3	47	mg/kg	0.00216	J	0.00389	J	0.00223	J	0.00494		0.0036	U	0.00188	J	0.00287	J	0.00202	J	0.00347	J	0.00734	J	0.00425	U	0.00462		0.0051		0.00218	J	0.00885	
	cis-Chlordane	5103-71-9	24	mg/kg	0.00235	U	0.00072	U	0.00247	U	0.00143	U	0.00273	U	0.00223	U	0.00249	U	0.00251	U	0.00242	U	0.00204	U	0.00283	U	0.00276	U	0.0024	U	0.00269	U	0.00213	U
	trans-Chlordane	5103-74-2	14 (POG)	mg/kg	0.00235	U	0.0021	U	0.00247	U	0.00108	U	0.00273	U	0.00223	U	0.00249	U	0.00251	U	0.00242	U	0.00204	U	0.00283	U	0.00276	U	0.0024	U	0.00269	U	0.00213	U
	Chlordane	57-74-9	NS	mg/kg	0.0153	U	0.0225	U	0.00885	U	0.0167	U	0.0177	U	0.0145	U	0.0162	U	0.0163	U	0.0157	U	0.0132	U	0.0184	U	0.0179	U	0.0156	U	0.0175	U	0.0138	U
Polychlorinated Biphenyls by GC - Westborough Lab																																		
	Aroclor 1242	53469-21-9	See total	mg/kg	0.0394	U	0.0375	U	0.0393	U	0.0128	J	0.0446	U	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0469	U	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1254	11097-69-1	See total	mg/kg	0.0394	U	0.0489		0.03	J	0.0183	J	0.0446	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0446		0.49		0.0156	J	0.0404	U	0.0444	U	0.0359	U
	Aroclor 1260	11096-82-5	See total	mg/kg	0.0394	U	0.0266	J	0.0393	U	0.0234	J	0.0212	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0335	U	0.0458	U	0.0314	J	0.0125	J	0.0125	J	0.015	J
	PCBs, Total	1336-36-3	1	mg/kg	0.0394	U	0.0755	J	0.03	J	0.0545	J	0.0212	J	0.036	U	0.04	U	0.0417	U	0.0409	UJ	0.0446		0.49		0.047	J	0.0125	J	0.0125	J	0.015	J
Semivolatile Organics by GC/MS - Westborough Lab																																		
	Acenaphthene	83-32-9	500	mg/kg	0.16	U	0.15	U	0.16	U	0.19	U	0.18	U	0.15	U	0.17	U	0.18	U	0.16	U	0.14	U	0.05	J	0.13	J	0.16	U	0.18	U	0.075	J
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	R	0.2	U	0.17	U	0.24	UJ	0.24	U	0.21	U	0.22	U	0.18	U
	Fluoranthene	206-44-0	500	mg/kg	0.49		0.28		0.38		0.41		0.27		0.036	J	0.16		0.94		0.16		0.34		2.1		5.1		0.22		0.13		3.3	
	Hexachlorocyclopentadiene	77-47-4	NS	mg/kg	0.57	UJ	0.55	U	0.58	U	0.67	U	0.66	U	0.54	U	0.6	U	0.63	U	0.58	U	0.49	U	0.68	U	0.67	U	0.59	U	0.64	U	0.52	U
	Naphthalene	91-20-3	500	mg/kg	0.2	U	0.14	J	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.31		0.21	U	0.22	U	0.12	J
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.2	U	0.19	U	0.2	U	0.4		0.74	J	0.19	U	0.21	U	0.092	J	0.2	U	0.17	U	0.067	J	0.31		1.1		0.11	J	0.28	
	Butyl benzyl phthalate	85-68-7	NS	mg/kg	0.2	U	0.19	U	0.2	U	0.2	J	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.07	J	0.13	J	0.049	J	0.22	U	0.18	U
	Dimethyl phthalate	131-11-3	100 (PER)	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.24	U	0.21	U	0.22	U	0.18	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.24		0.14		0.18		0.23		0.14		0.11	U	0.068	J	0.44		0.08	J	0.18		0.96		1.9		0.13		0.074	J	1.9	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.18		0.14	J	0.19		0.22		0.14	J	0.15	U	0.072	J	0.48		0.083	J	0.19		1		2.3		0.15	J	0.083	J	2.3	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.28		0.18		0.25		0.37		0.19		0.11	U	0.1	J	0.62		0.12		0.24		1.4		4.1		0.23		0.12	J	3.3	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.1	J	0.062	J	0.091	J	0.15		0.082	J	0.11	U	0.042	J	0.25		0.042	J	0.11		0.51		1.4		0.077	J	0.13	U	1.2	
	Chrysene	218-01-9	56	mg/kg	0.27		0.16		0.21		0.29		0.17		0.11	U	0.09	J	0.51		0.095	J	0.2		1.2		3.1		0.17		0.094	J	2.3	
	Acenaphthylene	208-96-8	500	mg/kg	0.084	J	0.15	U	0.16	U	0.19	U	0.18	U	0.15	U	0.17	U	0.05	J	0.16	U	0.14	U	0.12	J	0.15	J	0.16	U	0.18	U	1.5	
	Anthracene	120-12-7	500	mg/kg	0.1	J	0.082	J	0.043	J	0.043	J	0.14	U	0.11	U	0.12	U	0.06	J	0.12	U	0.032	J	0.18		0.32		0.12	U	0.13	U	0.62	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.12	J	0.1	J	0.13	J	0.22		0.097	J	0.15	U	0.061	J	0.33		0.062	J	0.15		0.79		2		0.14	J	0.055	J	1.6	
	Fluorene	86-73-7	500	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.093	J	0.21	U	0.22	U	0.18	U
	Phenanthrene	85-01-8	500	mg/kg	0.19		0.17		0.18		0.16		0.11		0.11	U	0.077	J	0.3		0.051	J	0.14		0.9		2.8		0.11	J	0.052	J	0.75	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.12	U	0.12	U	0.12	U	0.14	U	0.14	U	0.11	U	0.12	U	0.082	J	0.12	U	0.037	J	0.18		0.51		0.12	U	0.13	U	0.37	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.13	J	0.11	J	0.15	J	0.2		0.1	J	0.15	U	0.058	J	0.36		0.062	J	0.14		0.83		2.3		0.13	J	0.066	J	1.9	
	Pyrene	129-00-0	500	mg/kg	0.4		0.26		0.34		0.4		0.26		0.11	U	0.15		0.89		0.15		0.32		1.9		3.8		0.21		0.12	J	3.3	
	Biphenyl	92-52-4	NS	mg/kg	0.46	U	0.44	U	0.47	U	0.53	U	0.52	U	0.43	U	0.48	U	0.5	U	0.46	U	0.39	U	0.55	U	0.54	U	0.47	U	0.51	U	0.41	U
	Dibenzofuran	132-64-9	350	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.099	J	0.21	U	0.22	U	0.18	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.24	U	0.072	J	0.24	U	0.28	U	0.27	U	0.23	U	0.25	U	0.27	U	0.24	U	0.2	U	0.29	U	0.28	U	0.25	U	0.27	U	0.22	U
	Acetophenone	98-86-2	NS	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.24	U	0.078	J	0.21	U	0.22	U	0.18	U
	3-Methylphenol/4-Methylphenol	108-39-4	500	mg/kg	0.29	U	0.28	U	0.29	U	0.34	U	0.33	U	0.27	U	0.3	U	0.32	U	0.29	U	0.25	U	0.34	U	0.079	J	0.3	U	0.32	U	0.26	U
	Carbazole	86-74-8	NS	mg/kg	0.2	U	0.19	U	0.2	U	0.23	U	0.23	U	0.19	U	0.21	U	0.22	U	0.2	U	0.17	U	0.088	J	0.44		0.21	U	0.22	U	0.1	J
	Benzaldehyde	100-52-7	NS	mg/kg	0.26	U	0.31		0.31		0.91		1.5		-		-		-		-		-		-		0.31	U	0.27	U	0.29	U	0.24	U
	Caprolactam	105-60-2	NS	mg/kg	0.3		0.19	U	0.2	U	1.9		0.49		-		-		-		-		-		-		1.3		0.63		0.27		0.49	
Total Metals - Westborough Lab																																		
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	12000	J	8200	J	11000	J	12000	J	11000	J	11000	J	9500	J	13000	J	9700	J	7000	J	9200	J	10000		9200		12000		9000	
	Antimony, Total	7440-36-0		mg/kg	4.7	UJ	4.6	UJ	4.8	UJ	5.4	UJ	5.3	UJ	4.3	UJ	4.9	UJ	5	UJ	4.8	UJ	4	UJ	5.5	UJ	5.7	U	5	U	5.3	U	4.4	U
	Arsenic, Total	7440-38-2	16	mg/kg	14		7.8		7.2		7		7.6		6.9		8.6		6.8		8		3.1		4.7		9		2.9		3.7		2.8	
	Barium, Total	7440-39-3	400	mg/kg	55	J	48	J	49	J	59	J	69	J	61	J	84	J	71	J	41	J	31	J	65	J	63		56		62		51	
	Beryllium, Total	7440-41-7	590	mg/kg	0.32	J	0.31	J	0.41	J	0.51	J	0.48	J	0.48		0.41	J	0.52		0.4	J	0.28	J	0.42	J	0.6		0.44	J	0.55		0.4	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.3	J	0.93	UJ	0.97	UJ	1.1	UJ	1	UJ	0.87	UJ	0.99	UJ	0.99	UJ	0.96	UJ	0.81	UJ	1.1	UJ	0.39	J	1.7		0.39	J	2.6	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	15000	J	16000	J	13000	J	10000	J	6300	J	5200	J	6800	J	12000	J	11000	J	9700	J	10000	J	6800		3200		3100		3500	
	Chromium, Total	7440-47-3	30	mg/kg	21		13		15		26		12		13		10		15		12		10		14		18		16		18		15	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	11		6.4		8.2		11		7		9.8		6		9.4		7.9		4.8		7.5		10		9.7		11		8	
	Copper, Total	7440-50-8	270	mg/kg	37		27		34		89		26		26		25		30		25		18		34		46		41		34		36	
	Iron, Total	7439-89-6	NS	mg/kg	27000	J	19000	J	22000	J	32000	J	20000	J	24000	J	18000	J	25000	J	21000	J	16000	J	20000	J	27000		30000		26000		21000	
	Lead, Total	7439-92-1	1000	mg/kg	970		44		52		49		37		22		43		33		13		13		41		100	J	81	J	55	J	76	J
	Magnesium, Total	7439-95-4	NS	mg/kg	9600		4000	J	5600	J	8600	J	3500	J	4600	J	3200	J	5200	J	5400	J	5300	J	5000	J	5600		3900		5000		4000	
	Manganese, Total	7439-96-5	10000	mg/kg	630		480	J	720	J	770	J	670	J	1100	J	650	J	1400	J	580	J	400	J	1300	J	380		670		730		590	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.11		0.07	J	0.076	J	0.12		0.12		0.08		0.14		0.7	J	0.06	J	0.02	J	0.1		0.17		0.18		0.06	J	0.09	
	Nickel, Total	7440-02-0	310	mg/kg	24		15	J	18	J	29	J	18	J	19	J	19	J	22	J	18	J	11	J	17	J	25		23		26		23	
	Potassium, Total	7440-09-7	NS	mg/kg	810		780		830		870		1100		800		1300		1100		850		640		770		610		700		900		720	
	Selenium, Total	7782-49-2	1500	mg/kg	0.54	J	0.43	J	0.38	J	0.71	J	0.56	J	0.27	J	0.46	J	0.46	J	0.55	J	0.36	J	0.43	J	0.43	J	2	U	2.1	U	1.7	U
	Silver, Total	7440-22-4	1500	mg/kg	0.94	U	0.93	U	0.97	U	0.56	J	1	J	0.87	U	0.42	J	0.99	U	0.96	U	0.81	U	1.1	U	0.62	J	0.55	J	0.45	J	0.73	J
	Sodium, Total	7440-23-5	NS	mg/kg	100	J	120	J	91	J	310		540	J	77	J	510		170	J	54	J	50	J	64	J	150	J	55	J	57	J	89	J
	Thallium, Total	7440-28-0		mg/kg	1.9	UJ	1.8	UJ	1.9	UJ	2.1	UJ	2.1	UJ	1.7	UJ	2	UJ	2	UJ	1.9	UJ	1.6	UJ	2.2	UJ	2.3	U	2	U	2.1	U	1.7	U
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	30		14		17		34		24		16		32		22		17		12		17		28		23		25		31	
	Zinc, Total	7440-66-6	10000	mg/kg	220	J	120	J	91	J	320	J	71	J	68	J	86	J	83	J	80	J	66	J	140	J	130	J	140	J	99	J	130	J
Volatile Organics by 8260/5035 - Westborough Lab																																		
	Acetone	67-64-1	500	mg/kg	0.011	U	0.01	U	0.011	U	0.0047	J	0.16	J	0.01	U	0.18		0.0055	UJ	0.0096	J	0.0016	U	0.0069	U	0.013	U	0.045		0.026		0.039	
	2-Butanone	78-93-3	500	mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.0047	U	0.01	U	0.0044	J	0.013	UJ	0.014	U	0.0092	U	0.017	U	0.013	U	0.013	U	0.023	U	0.0035	J
	2-Hexanone	591-78-6		mg/kg	0.011	U	0.01	U	0.011	U	0.013	U	0.018	U	0.01	U	0.014	U	0.013	U	0.014	U	0.0092	U	0.017	U	0.013	UJ	0.013	UJ	0.023	UJ	0.011	UJ

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC columns is greater than 25%; the lower value is flagged with a P;
I - Indicates that the lower value for two columns has been reported due to obvious interference;
NS - denotes no standard per 6 NYCRR Part 375;
PER - denotes protection of ecological resources SCO per CP-51;
POG - denotes protection of groundwater resources SCO per CP-51;
mg/kg - Milligrams per Kilogram;
Values shaded and in **BOLD** denote exceedences of the 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives.

TABLE 2.3.5.1-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA (6 TO 12" DEPTH BELOW GRADE)
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				**SB-18_6-12**		**SB-10_6-12**		**FIELD DUPLICATE**		**SB-20_6-12**		**SB-12_6-12**	
	SAMPLING DATE				**8/22/2016**		**8/22/2016**		**8/22/2016**		**8/22/2016**		**8/22/2016**	
	LAB SAMPLE ID				**L1626357-01**		**L1626357-03**		**L1626357-04**		**L1626357-05**		**L1626357-06**	
	SAMPLE TYPE				**Surface Soil**		**Surface Soil**		**QC Duplicate (SB-10)**		**Surface Soil**		**Surface Soil**	
	SAMPLE DEPTH (ft.)				**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**	
		CasNum	**NY-RESC**	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
General Chemistry														
	Solids, Total	NONE	NA	%	81		91.2		91.5		85.8		62.6	
Polychlorinated Biphenyls by GC														
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0394	U	0.039		0.0404		0.0387	U	0.051	U
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0394	U	0.035	U	0.035	U	0.0387	U	0.0512	
	PCBs, Total	1336-36-3	1	mg/kg	0.0394	U	0.039		0.0404		0.0387	U	0.0512	
Semivolatile Organics by GC/MS														
	Acenaphthene	83-32-9	500	mg/kg	0.16	U	0.14	U	0.038	J	0.15	U	0.21	U
	Fluoranthene	206-44-0	500	mg/kg	0.29		0.29	J	0.79	J	0.19		0.072	J
	Naphthalene	91-20-3	500	mg/kg	0.042	J	0.18	U	0.18	U	0.19	U	0.26	U
	Bis(2-ethylhexyl)phthalate	117-81-7	NS	mg/kg	0.12	J	0.18	U	0.18	U	0.71		1.8	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.2		0.16	J	0.32	J	0.1	J	0.045	J
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.28		0.16	J	0.32	J	0.11	J	0.21	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.38		0.22	J	0.43	J	0.15		0.065	J
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.11	J	0.08	J	0.14	J	0.045	J	0.16	U
	Chrysene	218-01-9	56	mg/kg	0.26		0.17	J	0.33	J	0.1	J	0.051	J
	Acenaphthylene	208-96-8	500	mg/kg	0.058	J	0.14	U	0.052	J	0.035	J	0.21	U
	Anthracene	120-12-7	500	mg/kg	0.044	J	0.11	U	0.12		0.11	U	0.16	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.25		0.12	J	0.22	J	0.073	J	0.032	J
	Fluorene	86-73-7	500	mg/kg	0.2	U	0.18	U	0.058	J	0.19	U	0.26	U
	Phenanthrene	85-01-8	500	mg/kg	0.12		0.088	J	0.48	J	0.068	J	0.033	J
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.079	J	0.03	J	0.053	J	0.11	U	0.16	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.22		0.12	J	0.22		0.082	J	0.21	U
	Pyrene	129-00-0	500	mg/kg	0.28		0.26	J	0.65	J	0.17		0.073	J
	Dibenzofuran	132-64-9	350	mg/kg	0.2	U	0.18	U	0.021	J	0.19	U	0.26	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.025	J	0.21	U	0.21	U	0.23	U	0.32	U
	Acetophenone	98-86-2	NS	mg/kg	0.033	J	0.18	U	0.18	U	0.19	U	0.26	U
	2,4-Dinitrophenol	51-28-5		mg/kg	0.98	UJ	0.86	UJ	0.85	UJ	0.92	U	1.3	U
	4,6-Dinitro-o-cresol	534-52-1		mg/kg	0.53	UJ	0.46	UJ	0.46	UJ	0.5	U	0.69	U
	Carbazole	86-74-8	NS	mg/kg	0.021	J	0.18	U	0.02	J	0.19	U	0.26	U
	Caprolactam	105-60-2	NS	mg/kg	0.73		0.18	U	0.18	U	0.19	U	0.094	J
Total Metals														
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	12000		4500		5000		8400		11000	
	Arsenic, Total	7440-38-2	16	mg/kg	7		1.9		2.8		5.8		8.5	
	Barium, Total	7440-39-3	400	mg/kg	46		26		23		38		240	
	Beryllium, Total	7440-41-7	590	mg/kg	0.4	J	0.44	U	0.13	J	0.3	J	0.26	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.25	J	0.87	U	0.87	U	0.32	J	16	
	Calcium, Total	7440-70-2	NS	mg/kg	3600		8800		3700		8900		18000	
	Chromium, Total	7440-47-3	1500	mg/kg	17		8		7.3		12		48	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	10		3.6		5.6		8.4		9.4	

TABLE 2.3.5.1-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA (6 TO 12" DEPTH BELOW GRADE)
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				**SB-18_6-12**		**SB-10_6-12**		**FIELD DUPLICATE**		**SB-20_6-12**		**SB-12_6-12**	
	SAMPLING DATE				**8/22/2016**		**8/22/2016**		**8/22/2016**		**8/22/2016**		**8/22/2016**	
	LAB SAMPLE ID				**L1626357-01**		**L1626357-03**		**L1626357-04**		**L1626357-05**		**L1626357-06**	
	SAMPLE TYPE				**Surface Soil**		**Surface Soil**		**QC Duplicate (SB-10)**		**Surface Soil**		**Surface Soil**	
	SAMPLE DEPTH (ft.)				**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**		**6 TO 12" BGS**	
	Copper, Total	7440-50-8	270	mg/kg	34		9.2		13		27		100	
	Iron, Total	7439-89-6	NS	mg/kg	26000		9800		11000		19000		52000	
	Lead, Total	7439-92-1	1000	mg/kg	69		9		14		32		140	
	Magnesium, Total	7439-95-4	NS	mg/kg	5000		3900		3200		4100		5200	
	Manganese, Total	7439-96-5	10000	mg/kg	620		260		270		490		710	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.18		0.05	J	0.06	J	0.12		0.38	
	Nickel, Total	7440-02-0	310	mg/kg	23		7.3		10		18		28	
	Potassium, Total	7440-09-7	NS	mg/kg	550		740		440		540		580	
	Sodium, Total	7440-23-5	NS	mg/kg	190		48	J	48	J	76	J	300	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17		8.9		9.8		16		25	
	Zinc, Total	7440-66-6	10000	mg/kg	100		36		44		93		270	
Volatile Organics by 8260/5035														
	Tetrachloroethene	127-18-4	150	mg/kg	0.00096	J	0.00084	J	0.00064	J	0.00059	J	0.00058	J
	Toluene	108-88-3	500	mg/kg	0.0028		0.0026		0.0025		0.0018	J	0.002	
	Ethylbenzene	100-41-4	390	mg/kg	0.00015	J	0.0009	U	0.00014	J	0.00096	UJ	0.0012	U
	Bromomethane	74-83-9		mg/kg	0.0021	UJ	0.0018	UJ	0.0017	UJ	0.0019	UJ	0.0024	UJ
	Chloroethane	75-00-3		mg/kg	0.0021	UJ	0.0018	UJ	0.0017	UJ	0.0019	UJ	0.0024	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.00065	J	0.00054	J	0.00068	J	0.00043	J	0.0004	J
	Acetone	67-64-1	500	mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	U
	2-Butanone	78-93-3	500	mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	UJ
	2-Hexanone	591-78-6		mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	UJ
	Methyl Acetate	79-20-9		mg/kg	0.021	UJ	0.018	UJ	0.017	UJ	0.019	UJ	0.024	UJ

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
*NY-RESC: Commercial Criteria, New York Restricted use.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.3.6.1-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE SOIL ANALYTICAL DATA (6 TO 12" DEPTH BELOW GRADE)
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				SB-18_6-12		SB-10_6-12		FIELD DUPLICATE		SB-20_6-12		SB-12_6-12	
	SAMPLING DATE				8/22/2016		8/22/2016		8/22/2016		8/22/2016		8/22/2016	
	LAB SAMPLE ID				L1626357-01		L1626357-03		L1626357-04		L1626357-05		L1626357-06	
	SAMPLE TYPE				Surface Soil		Surface Soil		QC Duplicate (SB-10)		Surface Soil		Surface Soil	
	SAMPLE DEPTH (ft.)				6 TO 12" BGS		6 TO 12" BGS		6 TO 12" BGS		6 TO 12" BGS		6 TO 12" BGS	
	Copper, Total	7440-50-8	270	mg/kg	34		9.2		13		27		100	
	Iron, Total	7439-89-6	NS	mg/kg	26000		9800		11000		19000		52000	
	Lead, Total	7439-92-1	1000	mg/kg	69		9		14		32		140	
	Magnesium, Total	7439-95-4	NS	mg/kg	5000		3900		3200		4100		5200	
	Manganese, Total	7439-96-5	10000	mg/kg	620		260		270		490		710	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.18		0.05	J	0.06	J	0.12		0.38	
	Nickel, Total	7440-02-0	310	mg/kg	23		7.3		10		18		28	
	Potassium, Total	7440-09-7	NS	mg/kg	550		740		440		540		580	
	Sodium, Total	7440-23-5	NS	mg/kg	190		48	J	48	J	76	J	300	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17		8.9		9.8		16		25	
	Zinc, Total	7440-66-6	10000	mg/kg	100		36		44		93		270	
Volatile Organics by 8260/5035														
	Tetrachloroethene	127-18-4	150	mg/kg	0.00096	J	0.00084	J	0.00064	J	0.00059	J	0.00058	J
	Toluene	108-88-3	500	mg/kg	0.0028		0.0026		0.0025		0.0018	J	0.002	
	Ethylbenzene	100-41-4	390	mg/kg	0.00015	J	0.0009	U	0.00014	J	0.00096	UJ	0.0012	U
	Bromomethane	74-83-9		mg/kg	0.0021	UJ	0.0018	UJ	0.0017	UJ	0.0019	UJ	0.0024	UJ
	Chloroethane	75-00-3		mg/kg	0.0021	UJ	0.0018	UJ	0.0017	UJ	0.0019	UJ	0.0024	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.00065	J	0.00054	J	0.00068	J	0.00043	J	0.0004	J
	Acetone	67-64-1	500	mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	U
	2-Butanone	78-93-3	500	mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	UJ
	2-Hexanone	591-78-6		mg/kg	0.011	UJ	0.009	UJ	0.0087	UJ	0.0096	UJ	0.012	UJ
	Methyl Acetate	79-20-9		mg/kg	0.021	UJ	0.018	UJ	0.017	UJ	0.019	UJ	0.024	UJ

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
*NY-RESC: Commercial Criteria, New York Restricted use.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			MW-1_06232015		TRANSPORT BLANK 06232015		MW-2_06232015		FDGW1-06232015		MW-3_06232015		EBGW1-06232015		MW-11_06232015		MW-16_06292015		MW-9_06292015		MW-17_06292015	
	SAMPLING DATE			6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514248-01		L1514248-02		L1514248-03		L1514248-04		L1514248-05		L1514248-06		L1514248-07		L1514840-03		L1514840-04		L1514840-05	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																							
	Cyanide, Total	57-12-5	ug/l	2	U	-	-	2	U	1	U	2	U	1	J	3	U	3	J	2	J	2	J
Organochlorine Pesticides by GC																							
	Delta-BHC	319-86-8	ug/l	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
	Lindane	58-89-9	ug/l	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
	Alpha-BHC	319-84-6	ug/l	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
	Beta-BHC	319-85-7	ug/l	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
	Heptachlor	76-44-8	ug/l	0.02	U	-	-	0.02	U	0.02	U	0.01	J	0.02	U	0.02	U	0.02	U	0.034	J	0.011	J
	Aldrin	309-00-2	ug/l	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
	Heptachlor epoxide	1024-57-3	ug/l	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
	Endrin	72-20-8	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	Endrin ketone	53494-70-5	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	Dieldrin	60-57-1	ug/l	0.04	U	-	-	0.04	U	0.037	J	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	4,4'-DDE	72-55-9	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	4,4'-DDD	72-54-8	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	4,4'-DDT	50-29-3	ug/l	0.04	U	-	-	0.024	J	0.034	J	0.04	U	0.04	U	0.04	U	0.04	U	0.02	J	0.04	U
	Endosulfan I	959-98-8	ug/l	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
	Endosulfan II	33213-65-9	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	Endosulfan sulfate	1031-07-8	ug/l	0.04	U	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	Methoxychlor	72-43-5	ug/l	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
	Toxaphene	8001-35-2	ug/l	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
	cis-Chlordane	5103-71-9	ug/l	0.02	U	-	-	0.035		0.032		0.02	U	0.02	U	0.02	U	0.02	U	0.014	J	0.02	U
	trans-Chlordane	5103-74-2	ug/l	0.02	U	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.025	J	0.012	J
	Chlordane	57-74-9	ug/l	0.2	U	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.166	J	0.137	J
Polychlorinated Biphenyls by GC																							
	Aroclor 1016	12674-11-2	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1221	11104-28-2	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1232	11141-16-5	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1242	53469-21-9	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1248	12672-29-6	ug/l	0.083	U	-	-	2.63	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1254	11097-69-1	ug/l	0.083	U	-	-	4.28	J	0.505	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1260	11096-82-5	ug/l	0.083	U	-	-	2.63	UJ	0.164	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1262	37324-23-5	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1268	11100-14-4	ug/l	0.083	U	-	-	2.63	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	PCBs, Total	1336-36-3	ug/l	0.083	U	-	-	4.28	J	0.669	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
Semivolatile Organics by GC/MS																							
	Acenaphthene	83-32-9	ug/l	0.73	J	-	-	6.2		5.6		2.8		2	U	160		2	U	2	U	2	U
	Hexachlorobenzene	118-74-1	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Bis(2-chloroethyl)ether	111-44-4	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	2-Chloronaphthalene	91-58-7	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	3,3'-Dichlorobenzidine	91-94-1	ug/l	5	UJ	-	-	5	UJ	5	UJ	5	UJ	5	UJ	200	UJ	5	U	5	U	5	U
	2,4-Dinitrotoluene	121-14-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2,6-Dinitrotoluene	606-20-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Fluoranthene	206-44-0	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	59	J	2	U	2	U	2	U
	4-Chlorophenyl phenyl ether	7005-72-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	4-Bromophenyl phenyl ether	101-55-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Bis(2-chloroisopropyl)ether	108-60-1	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Bis(2-chloroethoxy)methane	111-91-1	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Hexachlorobutadiene	87-68-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			MW-1_06232015		TRANSPORT BLANK 06232015		MW-2_06232015		FDGW1-06232015		MW-3_06232015		EBGW1-06232015		MW-11_06232015		MW-16_06292015		MW-9_06292015		MW-17_06292015	
	SAMPLING DATE			6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514248-01		L1514248-02		L1514248-03		L1514248-04		L1514248-05		L1514248-06		L1514248-07		L1514840-03		L1514840-04		L1514840-05	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Hexachlorocyclopentadiene	77-47-4	ug/l	20	U	-	-	20	U	20	U	20	U	20	U	800	U	20	UJ	20	UJ	20	UJ
	Hexachloroethane	67-72-1	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	UJ	2	UJ	2	UJ
	Isophorone	78-59-1	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Naphthalene	91-20-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Nitrobenzene	98-95-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	NDPA/DPA	86-30-6	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	n-Nitrosodi-n-propylamine	621-64-7	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Bis(2-ethylhexyl)phthalate	117-81-7	ug/l	3	U	-	-	1.8	J	3	U	1.7	J	3	U	120	U	3	U	3	U	3	U
	Butyl benzyl phthalate	85-68-7	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Di-n-butylphthalate	84-74-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Di-n-octylphthalate	117-84-0	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Diethyl phthalate	84-66-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Dimethyl phthalate	131-11-3	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Benzo(a)anthracene	56-55-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Benzo(a)pyrene	50-32-8	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Chrysene	218-01-9	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Acenaphthylene	208-96-8	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Anthracene	120-12-7	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Benzo(ghi)perylene	191-24-2	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Fluorene	86-73-7	ug/l	2	U	-	-	11		9.8		4.3		2	U	300		2	U	2	U	2	U
	Phenanthrene	85-01-8	ug/l	2	U	-	-	10		8.9		2.9		2	U	290		2	U	2	U	2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Pyrene	129-00-0	ug/l	2	U	-	-	1.8	J	1.4	J	2	U	2	U	84		2	U	2	U	2	U
	Biphenyl	92-52-4	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	4-Chloroaniline	106-47-8	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	R	5	R	5	R
	2-Nitroaniline	88-74-4	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	3-Nitroaniline	99-09-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	UJ	5	UJ	5	UJ
	4-Nitroaniline	100-01-6	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Dibenzofuran	132-64-9	ug/l	2	U	-	-	4.7		4.3		2.1		2	U	80	U	2	U	2	U	2	U
	2-Methylnaphthalene	91-57-6	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	Acetophenone	98-86-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2,4,6-Trichlorophenol	88-06-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	p-Chloro-m-cresol	59-50-7	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	2-Chlorophenol	95-57-8	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	2,4-Dichlorophenol	120-83-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2,4-Dimethylphenol	105-67-9	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2-Nitrophenol	88-75-5	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	4-Nitrophenol	100-02-7	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	2,4-Dinitrophenol	51-28-5	ug/l	20	U	-	-	20	U	20	U	20	U	20	U	800	U	20	U	20	U	20	U
	4,6-Dinitro-o-cresol	534-52-1	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	Pentachlorophenol	87-86-5	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	Phenol	108-95-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2-Methylphenol	95-48-7	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	3-Methylphenol/4-Methylphenol	108-39-4	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	2,4,5-Trichlorophenol	95-95-4	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Carbazole	86-74-8	ug/l	2	U	-	-	2	U	2	U	2	U	2	U	80	U	2	U	2	U	2	U
	Benzaldehyde	100-52-7	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
	Caprolactam	105-60-2	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	R	10	R	10	R

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			MW-1_06232015		TRANSPORT BLANK 06232015		MW-2_06232015		FDGW1-06232015		MW-3_06232015		EBGW1-06232015		MW-11_06232015		MW-16_06292015		MW-9_06292015		MW-17_06292015	
	SAMPLING DATE			6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514248-01		L1514248-02		L1514248-03		L1514248-04		L1514248-05		L1514248-06		L1514248-07		L1514840-03		L1514840-04		L1514840-05	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Atrazine	1912-24-9	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	400	U	10	U	10	U	10	U
	2,3,4,6-Tetrachlorophenol	58-90-2	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	200	U	5	U	5	U	5	U
Semivolatile Organics by GC/MS-SIM																							
	Acenaphthene	83-32-9	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	2-Chloronaphthalene	91-58-7	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Fluoranthene	206-44-0	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Hexachlorobutadiene	87-68-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	U	0.5	U	0.5	U
	Naphthalene	91-20-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Benzo(a)anthracene	56-55-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Benzo(a)pyrene	50-32-8	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Chrysene	218-01-9	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Acenaphthylene	208-96-8	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Anthracene	120-12-7	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Benzo(ghi)perylene	191-24-2	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Fluorene	86-73-7	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Phenanthrene	85-01-8	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Pyrene	129-00-0	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	2-Methylnaphthalene	91-57-6	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	U	0.2	U	0.2	U
	Pentachlorophenol	87-86-5	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	U	0.8	U	0.8	U
	Hexachlorobenzene	118-74-1	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	U	0.8	U	0.8	U
	Hexachloroethane	67-72-1	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	U	0.8	U	0.8	U
Total Metals																							
	Aluminum, Total	7429-90-5	ug/l	140		-	-	30	J	40	J	280		100	U	1100		6100		41	J	3800	
	Antimony, Total	7440-36-0	ug/l	50	U	-	-	51.2		13.7	J	50	U	50	U	50	U	50	U	50	U	34.3	J
	Arsenic, Total	7440-38-2	ug/l	8	U	-	-	21		20	U	13		2	J	16	U	15		2	J	4.9	J
	Barium, Total	7440-39-3	ug/l	118		-	-	361		352		220		10	U	273		59.7		113		49.2	
	Beryllium, Total	7440-41-7	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	Cadmium, Total	7440-43-9	ug/l	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	Calcium, Total	7440-70-2	ug/l	120000	J	-	-	150000	J	150000	J	110000	J	150	J	150000	J	120000		140000		190000	
	Chromium, Total	7440-47-3	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	2	J	12		2.9	J	8.1	J
	Cobalt, Total	7440-48-4	ug/l	20	U	-	-	20	U	20	U	20	U	20	U	20	U	7.8	J	20	U	5.3	J
	Copper, Total	7440-50-8	ug/l	3.1	J	-	-	3.1	J	3.4	J	2.8	J	10	U	6.5	J	30	U	10	U	14.7	U
	Iron, Total	7439-89-6	ug/l	680		-	-	12000		11000		14000		29	J	20000		15000		1000		7400	
	Lead, Total	7439-92-1	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	10	U	8.3	J	10	U	4.8	J
	Magnesium, Total	7439-95-4	ug/l	13000	J	-	-	19000	J	19000	J	11000	J	31	J	34000	J	24000		29000		56000	
	Manganese, Total	7439-96-5	ug/l	199	U	-	-	1840		1820		1970		21.6		3430		905		3480		1160	
	Mercury, Total	7439-97-6	ug/l	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
	Nickel, Total	7440-02-0	ug/l	25	U	-	-	25	U	25	U	25	U	25	U	25	U	15.1	J	25	U	9.5	J
	Potassium, Total	7440-09-7	ug/l	5700		-	-	7000		6800		6400		2500	U	6700		12000		5200		2300	J
	Selenium, Total	7782-49-2	ug/l	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
	Silver, Total	7440-22-4	ug/l	7	U	-	-	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U
	Sodium, Total	7440-23-5	ug/l	32000		-	-	15000		14000		84000		340	J	230000		150000		89000		59000	
	Thallium, Total	7440-28-0	ug/l	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
	Vanadium, Total	7440-62-2	ug/l	2.4	J	-	-	5.1	J	5.2	J	1.9	J	10	U	2.2	J	7.9	J	1.7	J	5.9	J
	Zinc, Total	7440-66-6	ug/l	50	U	-	-	50	U	50	U	19.2	J	50	U	82.5		57.2		50	U	24.5	J
Volatile Organics by GC/MS																							
	Methylene chloride	75-09-2	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,1-Dichloroethane	75-34-3	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Chloroform	67-66-3	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			MW-1_06232015		TRANSPORT BLANK 06232015		MW-2_06232015		FDGW1-06232015		MW-3_06232015		EBGW1-06232015		MW-11_06232015		MW-16_06292015		MW-9_06292015		MW-17_06292015	
	SAMPLING DATE			6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514248-01		L1514248-02		L1514248-03		L1514248-04		L1514248-05		L1514248-06		L1514248-07		L1514840-03		L1514840-04		L1514840-05	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	1,2-Dichloropropane	78-87-5	ug/l	1	U	1	U	5	U	5	U	5	U	1	U	1	U	1	U	1	U	1	U
	Dibromochloromethane	124-48-1	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	1,1,2-Trichloroethane	79-00-5	ug/l	1.5	U	1.5	U	7.5	U	7.5	U	7.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
	Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Chlorobenzene	108-90-7	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichlorofluoromethane	75-69-4	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	1,1,1-Trichloroethane	71-55-6	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Bromodichloromethane	75-27-4	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Bromoform	75-25-2	ug/l	2	U	2	U	10	U	10	U	10	U	2	U	2	U	2	U	2	U	2	U
	1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Benzene	71-43-2	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Toluene	108-88-3	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Ethylbenzene	100-41-4	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Chloromethane	74-87-3	ug/l	2.5	UJ	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Bromomethane	74-83-9	ug/l	2.5	U	2.5	UJ	12	UJ	12	UJ	12	UJ	2.5	UJ	2.5	UJ	2.5	U	2.5	U	2.5	U
	Vinyl chloride	75-01-4	ug/l	1	U	1	U	5	U	5	U	5	U	1	U	1	U	1	U	1	U	1	U
	Chloroethane	75-00-3	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	trans-1,2-Dichloroethene	156-60-5	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichloroethene	79-01-6	ug/l	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	1,2-Dichlorobenzene	95-50-1	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,3-Dichlorobenzene	541-73-1	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,4-Dichlorobenzene	106-46-7	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl tert butyl ether	1634-04-4	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	p/m-Xylene	179601-23-1	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	o-Xylene	95-47-6	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	cis-1,2-Dichloroethene	156-59-2	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Styrene	100-42-5	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Dichlorodifluoromethane	75-71-8	ug/l	5	UJ	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U
	Acetone	67-64-1	ug/l	5	U	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U
	Carbon disulfide	75-15-0	ug/l	5	U	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U
	2-Butanone	78-93-3	ug/l	5	U	5	U	14	J	13	J	16	J	5	U	5	U	5	U	5	U	5	U
	4-Methyl-2-pentanone	108-10-1	ug/l	5	UJ	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U
	2-Hexanone	591-78-6	ug/l	5	U	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U
	Bromochloromethane	74-97-5	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,2-Dibromoethane	106-93-4	ug/l	2	U	2	U	10	U	10	U	10	U	2	U	2	U	2	U	2	U	2	U
	1,2-Dibromo-3-chloropropane	96-12-8	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Isopropylbenzene	98-82-8	ug/l	2.5	U	2.5	U	3.6	J	12	U	12	U	2.5	U	0.96	J	2.5	U	2.5	U	2.5	U
	1,2,3-Trichlorobenzene	87-61-6	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ
	1,2,4-Trichlorobenzene	120-82-1	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl Acetate	79-20-9	ug/l	2	U	2	U	10	U	10	U	10	U	2	U	2	U	2	U	2	U	2	U
	Cyclohexane	110-82-7	ug/l	10	U	10	U	50	U	50	U	50	U	10	U	0.68	J	10	U	10	U	10	U
	1,4-Dioxane	123-91-1	ug/l	250	U	250	U	1200	U	1200	U	1200	U	250	U	250	U	250	U	250	U	250	U
	Freon-113	76-13-1	ug/l	2.5	U	2.5	U	12	U	12	U	12	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl cyclohexane	108-87-2	ug/l	10	U	10	U	50	U	50	U	50	U	10	U	1.2	J	10	U	10	U	10	U

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC
I - Indicates that the lower value for two columns has been reported due to obvious interference;
ug/l - Micrograms per Liter;

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			TB06292015		MW-8_06292015		MW-7_06292015		MW-6_06292015		MW-5_06292015		MW-4_06292015		MW-18_06292015		MW-10R_06292015		MW-13_06292015		MW-15_06292015	
	SAMPLING DATE			6/17/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-06		L1514840-07		L1514840-08		L1514840-09		L1514840-10		L1514840-13		L1514840-14		L1514840-15		L1514840-16		L1514840-17	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																							
	Cyanide, Total	57-12-5	ug/l	-	-	2	J	2	J	2	J	2	J	2	J	-	-	-	-	2	J	1	J
Organochlorine Pesticides by GC																							
	Delta-BHC	319-86-8	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Lindane	58-89-9	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Alpha-BHC	319-84-6	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Beta-BHC	319-85-7	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Heptachlor	76-44-8	ug/l	-	-	0.025		0.02	U	0.02	U	0.02	U	0.006	J	-	-	-	-	0.027		0.02	U
	Aldrin	309-00-2	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Heptachlor epoxide	1024-57-3	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Endrin	72-20-8	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	Endrin ketone	53494-70-5	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	Dieldrin	60-57-1	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	4,4'-DDE	72-55-9	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	4,4'-DDD	72-54-8	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	4,4'-DDT	50-29-3	ug/l	-	-	0.02	J	0.019	J	0.02	J	0.02	J	0.018	J	-	-	-	-	0.018	J	0.04	U
	Endosulfan I	959-98-8	ug/l	-	-	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	-	-	-	-	0.02	U	0.02	U
	Endosulfan II	33213-65-9	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	Endosulfan sulfate	1031-07-8	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	-	-	0.04	U	0.04	U
	Methoxychlor	72-43-5	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	-	0.2	U	0.2	U
	Toxaphene	8001-35-2	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	-	0.2	U	0.2	U
	cis-Chlordane	5103-71-9	ug/l	-	-	0.021	J	0.02	U	0.02	U	0.02	U	0.008	J	-	-	-	-	0.022	J	0.02	U
	trans-Chlordane	5103-74-2	ug/l	-	-	0.063	J	0.02	U	0.02	U	0.02	U	0.015	J	-	-	-	-	0.027	J	0.02	J
	Chlordane	57-74-9	ug/l	-	-	0.592	J	0.2	U	0.09	J	0.2	U	0.087	J	-	-	-	-	0.297	J	0.2	U
Polychlorinated Biphenyls by GC																							
	Aroclor 1016	12674-11-2	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1221	11104-28-2	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1232	11141-16-5	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1242	53469-21-9	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1248	12672-29-6	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1254	11097-69-1	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1260	11096-82-5	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1262	37324-23-5	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	Aroclor 1268	11100-14-4	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
	PCBs, Total	1336-36-3	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	-	-	0.083	U	0.083	U
Semivolatile Organics by GC/MS																							
	Acenaphthene	83-32-9	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Hexachlorobenzene	118-74-1	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Bis(2-chloroethyl)ether	111-44-4	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	2-Chloronaphthalene	91-58-7	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	3,3'-Dichlorobenzidine	91-94-1	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2,4-Dinitrotoluene	121-14-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2,6-Dinitrotoluene	606-20-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Fluoranthene	206-44-0	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	4-Chlorophenyl phenyl ether	7005-72-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	4-Bromophenyl phenyl ether	101-55-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Bis(2-chloroisopropyl)ether	108-60-1	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Bis(2-chloroethoxy)methane	111-91-1	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Hexachlorobutadiene	87-68-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			TB06292015		MW-8_06292015		MW-7_06292015		MW-6_06292015		MW-5_06292015		MW-4_06292015		MW-18_06292015		MW-10R_06292015		MW-13_06292015		MW-15_06292015	
	SAMPLING DATE			6/17/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-06		L1514840-07		L1514840-08		L1514840-09		L1514840-10		L1514840-13		L1514840-14		L1514840-15		L1514840-16		L1514840-17	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Hexachlorocyclopentadiene	77-47-4	ug/l	-	-	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ	-	-	20	UJ	20	UJ
	Hexachloroethane	67-72-1	ug/l	-	-	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	-	-	2	UJ	2	UJ
	Isophorone	78-59-1	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Naphthalene	91-20-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	1.4	J
	Nitrobenzene	98-95-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	NDPA/DPA	86-30-6	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	n-Nitrosodi-n-propylamine	621-64-7	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Bis(2-ethylhexyl)phthalate	117-81-7	ug/l	-	-	3	U	3	U	3	U	3	U	64		3	U	-	-	3	U	3	U
	Butyl benzyl phthalate	85-68-7	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Di-n-butylphthalate	84-74-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Di-n-octylphthalate	117-84-0	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Diethyl phthalate	84-66-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Dimethyl phthalate	131-11-3	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Benzo(a)anthracene	56-55-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Benzo(a)pyrene	50-32-8	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Chrysene	218-01-9	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Acenaphthylene	208-96-8	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Anthracene	120-12-7	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Benzo(ghi)perylene	191-24-2	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Fluorene	86-73-7	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Phenanthrene	85-01-8	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Pyrene	129-00-0	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Biphenyl	92-52-4	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	4-Chloroaniline	106-47-8	ug/l	-	-	5	R	5	R	5	R	5	R	5	R	5	R	-	-	5	R	5	R
	2-Nitroaniline	88-74-4	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	3-Nitroaniline	99-09-2	ug/l	-	-	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	-	-	5	UJ	5	UJ
	4-Nitroaniline	100-01-6	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Dibenzofuran	132-64-9	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	2-Methylnaphthalene	91-57-6	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	Acetophenone	98-86-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2,4,6-Trichlorophenol	88-06-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	p-Chloro-m-cresol	59-50-7	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	2-Chlorophenol	95-57-8	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	2,4-Dichlorophenol	120-83-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2,4-Dimethylphenol	105-67-9	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2-Nitrophenol	88-75-5	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	4-Nitrophenol	100-02-7	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	2,4-Dinitrophenol	51-28-5	ug/l	-	-	20	U	20	U	20	U	20	U	20	U	20	U	-	-	20	U	20	U
	4,6-Dinitro-o-cresol	534-52-1	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	Pentachlorophenol	87-86-5	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	Phenol	108-95-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2-Methylphenol	95-48-7	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	3-Methylphenol/4-Methylphenol	108-39-4	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	2,4,5-Trichlorophenol	95-95-4	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Carbazole	86-74-8	ug/l	-	-	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U
	Benzaldehyde	100-52-7	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Caprolactam	105-60-2	ug/l	-	-	10	R	10	R	10	R	10	R	10	R	10	R	-	-	10	R	10	R

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			TB06292015		MW-8_06292015		MW-7_06292015		MW-6_06292015		MW-5_06292015		MW-4_06292015		MW-18_06292015		MW-10R_06292015		MW-13_06292015		MW-15_06292015	
	SAMPLING DATE			6/17/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-06		L1514840-07		L1514840-08		L1514840-09		L1514840-10		L1514840-13		L1514840-14		L1514840-15		L1514840-16		L1514840-17	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Atrazine	1912-24-9	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	2,3,4,6-Tetrachlorophenol	58-90-2	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
Semivolatile Organics by GC/MS-SIM																							
	Acenaphthene	83-32-9	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	2-Chloronaphthalene	91-58-7	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Fluoranthene	206-44-0	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Hexachlorobutadiene	87-68-3	ug/l	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U
	Naphthalene	91-20-3	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Benzo(a)anthracene	56-55-3	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Benzo(a)pyrene	50-32-8	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Chrysene	218-01-9	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Acenaphthylene	208-96-8	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Anthracene	120-12-7	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Benzo(ghi)perylene	191-24-2	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Fluorene	86-73-7	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Phenanthrene	85-01-8	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Pyrene	129-00-0	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	2-Methylnaphthalene	91-57-6	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Pentachlorophenol	87-86-5	ug/l	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U
	Hexachlorobenzene	118-74-1	ug/l	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U
	Hexachloroethane	67-72-1	ug/l	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U
Total Metals																							
	Aluminum, Total	7429-90-5	ug/l	-	-	98	J	43	J	100		25	J	1800		1000		-	-	41	J	92	J
	Antimony, Total	7440-36-0	ug/l	-	-	50	U	50	U	50	U	50	U	50	U	50	U	-	-	50	U	50	U
	Arsenic, Total	7440-38-2	ug/l	-	-	5		7.9		4.2	J	2.9	J	17.3		4	J	-	-	9		23	
	Barium, Total	7440-39-3	ug/l	-	-	214		240		218		97		191		75.2		-	-	144		120	
	Beryllium, Total	7440-41-7	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Cadmium, Total	7440-43-9	ug/l	-	-	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U
	Calcium, Total	7440-70-2	ug/l	-	-	110000		89000		160000		83000		170000		220000		-	-	160000		110000	
	Chromium, Total	7440-47-3	ug/l	-	-	2.4	J	2.6	J	2.2	J	10	U	4.9	J	5.5	J	-	-	2.2	J	10	U
	Cobalt, Total	7440-48-4	ug/l	-	-	20	U	20	U	20	U	20	U	20	U	20	U	-	-	20	U	20	U
	Copper, Total	7440-50-8	ug/l	-	-	14.3	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	19.4	U
	Iron, Total	7439-89-6	ug/l	-	-	9500		9700		600		1100		13000		2600		-	-	16000		4800	
	Lead, Total	7439-92-1	ug/l	-	-	4.8	J	10	U	2	J	10	U	20.4		3.7	J	-	-	10	U	10	U
	Magnesium, Total	7439-95-4	ug/l	-	-	23000		16000		41000		14000		35000		52000		-	-	36000		22000	
	Manganese, Total	7439-96-5	ug/l	-	-	1400		1790		1580		671		5160		2460		-	-	4770		2790	
	Mercury, Total	7439-97-6	ug/l	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U
	Nickel, Total	7440-02-0	ug/l	-	-	25	U	25	U	25	U	25	U	4	J	5.5	J	-	-	25	U	25	U
	Potassium, Total	7440-09-7	ug/l	-	-	7800		4700		11000		7000		11000		5900		-	-	6500		3200	
	Selenium, Total	7782-49-2	ug/l	-	-	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U
	Silver, Total	7440-22-4	ug/l	-	-	7	U	7	U	7	U	7	U	7	U	7	U	-	-	7	U	7	U
	Sodium, Total	7440-23-5	ug/l	-	-	52000		99000		100000		84000		240000		140000		-	-	130000		30000	
	Thallium, Total	7440-28-0	ug/l	-	-	20	U	20	U	20	U	20	U	20	U	20	U	-	-	20	U	20	U
	Vanadium, Total	7440-62-2	ug/l	-	-	10	U	10	U	2.8	J	10	U	4.3	J	3.4	J	-	-	10	U	1.4	J
	Zinc, Total	7440-66-6	ug/l	-	-	50	U	15.4	J	50	U	50	U	28.4	J	12.2	J	-	-	50	U	8	J
Volatile Organics by GC/MS																							
	Methylene chloride	75-09-2	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,1-Dichloroethane	75-34-3	ug/l	2.5	U	2.5	U	2.5	U	2.2	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Chloroform	67-66-3	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Carbon tetrachloride	56-23-5	ug/l	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

TABLE 2.3.6-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			TB06292015		MW-8_06292015		MW-7_06292015		MW-6_06292015		MW-5_06292015		MW-4_06292015		MW-18_06292015		MW-10R_06292015		MW-13_06292015		MW-15_06292015	
	SAMPLING DATE			6/17/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-06		L1514840-07		L1514840-08		L1514840-09		L1514840-10		L1514840-13		L1514840-14		L1514840-15		L1514840-16		L1514840-17	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	1,2-Dichloropropane	78-87-5	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
	Dibromochloromethane	124-48-1	ug/l	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
	1,1,2-Trichloroethane	79-00-5	ug/l	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
	Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U	0.5	U	0.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Chlorobenzene	108-90-7	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichlorofluoromethane	75-69-4	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,2-Dichloroethane	107-06-2	ug/l	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
	1,1,1-Trichloroethane	71-55-6	ug/l	2.5	U	2.5	U	2.5	U	1.9	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Bromodichloromethane	75-27-4	ug/l	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	10061-02-6	ug/l	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
	cis-1,3-Dichloropropene	10061-01-5	ug/l	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	75-25-2	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	1,1,2,2-Tetrachloroethane	79-34-5	ug/l	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
	Benzene	71-43-2	ug/l	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	4.4	
	Toluene	108-88-3	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	1.9	J
	Ethylbenzene	100-41-4	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	5	
	Chloromethane	74-87-3	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ
	Bromomethane	74-83-9	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Vinyl chloride	75-01-4	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	UJ	1	UJ
	Chloroethane	75-00-3	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ
	1,1-Dichloroethene	75-35-4	ug/l	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-1,2-Dichloroethene	156-60-5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichloroethene	79-01-6	ug/l	0.5	U	0.5	U	0.5	U	0.88		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	1,2-Dichlorobenzene	95-50-1	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,3-Dichlorobenzene	541-73-1	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,4-Dichlorobenzene	106-46-7	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl tert butyl ether	1634-04-4	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	p/m-Xylene	179601-23-1	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	4.9	
	o-Xylene	95-47-6	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	cis-1,2-Dichloroethene	156-59-2	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Styrene	100-42-5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Dichlorodifluoromethane	75-71-8	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	Acetone	67-64-1	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	2.2	J	19		5	U	2.6	J
	Carbon disulfide	75-15-0	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	2-Butanone	78-93-3	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	8.2		56		5	U	5	U
	4-Methyl-2-pentanone	108-10-1	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	2-Hexanone	591-78-6	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	Bromochloromethane	74-97-5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	1,2-Dibromoethane	106-93-4	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	1,2-Dibromo-3-chloropropane	96-12-8	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Isopropylbenzene	98-82-8	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	8.6	
	1,2,3-Trichlorobenzene	87-61-6	ug/l	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	U	2.5	U	2.5	U	2.5	U
	1,2,4-Trichlorobenzene	120-82-1	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl Acetate	79-20-9	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	Cyclohexane	110-82-7	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	38	
	1,4-Dioxane	123-91-1	ug/l	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U
	Freon-113	76-13-1	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Methyl cyclohexane	108-87-2	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	14	

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC
I - Indicates that the lower value for two columns has been reported due to obvious interference;
ug/l - Micrograms per Liter;

TABLE 2.3.6-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				MW-1_06232015		MW-2_06232015		FDGW1-06232015		MW-3_06232015		MW-4_06292015		MW-5_06292015		MW-6_06292015		MW-7_06292015		MW-8_06292015		MW-9_06292015	
	SAMPLING DATE				6/23/2015		6/23/2015		6/23/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015	
	LAB SAMPLE ID				L1514248-01		L1514248-03		L1514248-04		L1514248-05		L1514840-13		L1514840-10		L1514840-09		L1514840-08		L1514840-07		L1514840-04	
		CasNum	NY-AWQS	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
General Chemistry																								
	Cyanide, Total	57-12-5	200	ug/l	2	U	2	U	1	U	2	U	2	J	2	J	2	J	2	J	2	J	2	J
Organochlorine Pesticides by GC																								
	Heptachlor	76-44-8	0.04	ug/l	0.02	U	0.02	U	0.02	U	0.01	J	0.006	J	0.02	U	0.02	U	0.02	U	0.025		0.034	
	Dieldrin	60-57-1	0.004	ug/l	0.04	U	0.04	U	**0.037**	J	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
	4,4'-DDT	50-29-3	0.2	ug/l	0.04	U	0.024	J	0.034	J	0.04	U	0.018	J	0.02	J	0.02	J	0.019	J	0.02	J	0.02	J
	cis-Chlordane	5103-71-9	NS	ug/l	0.02	U	0.035		0.032		0.02	U	0.008	J	0.02	U	0.02	U	0.02	U	0.021	PI	0.014	J
	trans-Chlordane	5103-74-2	NS	ug/l	0.02	U	0.02	U	0.02	U	0.02	U	0.015	J	0.02	U	0.02	U	0.02	U	0.063	PI	0.025	PI
	Chlordane	57-74-9	0.05	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	**0.087**	J	0.2	U	**0.09**	J	0.2	U	**0.592**	P	**0.166**	J
Polychlorinated Biphenyls by GC																								
	Aroclor 1254	11097-69-1	0.09	ug/l	0.083	U	**4.28**	J	**0.505**	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	Aroclor 1260	11096-82-5	0.09	ug/l	0.083	U	2.63	UJ	**0.164**	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
	PCBs, Total	1336-36-3	NS	ug/l	0.083	U	4.28	J	0.669	J	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U
Semivolatile Organics by GC/MS																								
	Acenaphthene	83-32-9	20	ug/l	0.73	J	6.2		5.6		2.8		2	U	2	U	2	U	2	U	2	U	2	U
	Fluoranthene	206-44-0	50	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	Naphthalene	91-20-3	10	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	3	U	1.8	J	3	U	1.7	J	**64**		3	U	3	U	3	U	3	U	3	U
	Fluorene	86-73-7	50	ug/l	2	U	11		9.8		4.3		2	U	2	U	2	U	2	U	2	U	2	U
	Phenanthrene	85-01-8	50	ug/l	2	U	10		8.9		2.9		2	U	2	U	2	U	2	U	2	U	2	U
	Pyrene	129-00-0	50	ug/l	2	U	1.8	J	1.4	J	2	U	2	U	2	U	2	U	2	U	2	U	2	U
	Dibenzofuran	132-64-9	NS	ug/l	2	U	4.7		4.3		2.1		2	U	2	U	2	U	2	U	2	U	2	U
Semivolatile Organics by GC/MS-SIM																								
Total Metals																								
	Aluminum, Total	7429-90-5	NS	ug/l	140		30	J	40	J	280		1800		25	J	100		43	J	98	J	41	J
	Antimony, Total	7440-36-0	3	ug/l	50	U	**51.2**		**13.7**	J	50	U	50	U	50	U	50	U	50	U	50	U	50	U
	Arsenic, Total	7440-38-2	25	ug/l	8	U	21		20	U	13		17.3		2.9	J	4.2	J	7.9		5		2	J
	Barium, Total	7440-39-3	1000	ug/l	118		361		352		220		191		97		218		240		214		113	
	Calcium, Total	7440-70-2	NS	ug/l	120000	J	150000	J	150000	J	110000	J	170000		83000		160000		89000		110000		140000	
	Chromium, Total	7440-47-3	50	ug/l	10	U	10	U	10	U	10	U	4.9	J	10	U	2.2	J	2.6	J	2.4	J	2.9	J
	Cobalt, Total	7440-48-4	NS	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
	Copper, Total	7440-50-8	200	ug/l	3.1	J	3.1	J	3.4	J	2.8	J	9.4	J	5.3	J	4.8	J	4.8	J	14.3		5	J
	Iron, Total	7439-89-6	300	ug/l	**680**		**12000**		**11000**		**14000**		**13000**		**1100**		**600**		**9700**		**9500**		**1000**	
	Lead, Total	7439-92-1	25	ug/l	10	U	10	U	10	U	10	U	20.4		10	U	2	J	10	U	4.8	J	10	U
	Magnesium, Total	7439-95-4	35000	ug/l	13000	J	19000	J	19000	J	11000	J	**35000**		14000		**41000**		16000		23000		29000	
	Manganese, Total	7439-96-5	300	ug/l	199	U	**1840**		**1820**		**1970**		**5160**		**671**		**1580**		**1790**		**1400**		**3480**	
	Nickel, Total	7440-02-0	100	ug/l	25	U	25	U	25	U	25	U	4	J	25	U	25	U	25	U	25	U	25	U
	Potassium, Total	7440-09-7	NS	ug/l	5700		7000		6800		6400		11000		7000		11000		4700		7800		5200	
	Sodium, Total	7440-23-5	20000	ug/l	**32000**		15000		14000		**84000**		**240000**		**84000**		**100000**		**99000**		**52000**		**89000**	
	Vanadium, Total	7440-62-2	NS	ug/l	2.4	J	5.1	J	5.2	J	1.9	J	4.3	J	10	U	2.8	J	10	U	10	U	1.7	J
	Zinc, Total	7440-66-6	2000	ug/l	50	U	50	U	50	U	19.2	J	28.4	J	50	U	50	U	15.4	J	50	U	50	U
Volatile Organics by GC/MS																								
	1,1-Dichloroethane	75-34-3	5	ug/l	2.5	U	**12**	U	**12**	U	**12**	U	2.5	U	2.5	U	2.2	J	2.5	U	2.5	U	2.5	U
	Tetrachloroethene	127-18-4	5	ug/l	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.8		0.5	U	0.5	U	0.5	U
	1,1,1-Trichloroethane	71-55-6	5	ug/l	2.5	U	**12**	U	**12**	U	**12**	U	2.5	U	2.5	U	1.9	J	2.5	U	2.5	U	2.5	U
	Benzene	71-43-2	1	ug/l	0.5	U	**2.5**	U	**2.5**	U	**2.5**	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Toluene	108-88-3	5	ug/l	2.5	U	**12**	U	**12**	U	**12**	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Ethylbenzene	100-41-4	5	ug/l	2.5	U	**12**	U	**12**	U	**12**	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichloroethene	79-01-6	5	ug/l	0.5	U	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.88		0.5	U	0.5	U	0.5	U
	p/m-Xylene	179601-23-1	5	ug/l	2.5	U	**12**	U	**12**	U	**12**	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Acetone	67-64-1	50	ug/l	5	U	25	U	25	U	25	U	5	U	5	U	5	U	5	U	5	U	5	U
	2-Butanone	78-93-3	50	ug/l	5	U	14	J	13	J	16	J	5	U	5	U	5	U	5	U	5	U	5	U
	Isopropylbenzene	98-82-8	5	ug/l	2.5	U	3.6	J	**12**	U	**12**	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Cyclohexane	110-82-7	NS	ug/l	10	U	50	U	50	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U
	Methyl cyclohexane	108-87-2	NS	ug/l	10	U	50	U	50	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U

Notes:

U - Compound/analyte analyzed, but not detected above limit of laboratory detection;

J - Indicates an estimated value below the method detection limit;

P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC columns is greater than 25%; the lower value is flagged with a P;

I - Indicates that the lower value for two columns has been reported due to obvious interference;

NS - denotes no standard per Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1;

ug/l - Micrograms per Liter;

TABLE 2.3.6-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

Values shaded and in **BOLD** denote exceedences of TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations for Groundwater.

TABLE 2.3.6-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

	LOCATION				MW-10R_06292015		MW-11_06232015		MW-13_06292015		MW-15_06292015		MW-16_06292015		MW-17_06292015		MW-18_06292015		EBGW1-06232015		TRANSPORT BLANK 06232015		TB06292015	
	SAMPLING DATE				6/29/2015		6/23/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/29/2015		6/23/2015		6/23/2015		6/17/2015	
	LAB SAMPLE ID				L1514840-15		L1514248-07		L1514840-16		L1514840-17		L1514840-03		L1514840-05		L1514840-14		L1514248-06		L1514248-02		L1514840-06	
		CasNum	NY-AWQS	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
General Chemistry																								
	Cyanide, Total	57-12-5	200	ug/l	-	-	3	U	2	J	1	J	3	J	2	J	-	-	1	J	-	-	-	-
Organochlorine Pesticides by GC																								
	Heptachlor	76-44-8	0.04	ug/l	-	-	0.02	U	0.027		0.02	U	0.02	U	0.011	J	-	-	0.02	U	-	-	-	-
	Dieldrin	60-57-1	0.004	ug/l	-	-	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	-	-	0.04	U	-	-	-	-
	4,4'-DDT	50-29-3	0.2	ug/l	-	-	0.04	U	0.018	J	0.04	U	0.04	U	0.04	U	-	-	0.04	U	-	-	-	-
	cis-Chlordane	5103-71-9	NS	ug/l	-	-	0.02	U	0.022		0.02	U	0.02	U	0.02	U	-	-	0.02	U	-	-	-	-
	trans-Chlordane	5103-74-2	NS	ug/l	-	-	0.02	U	0.027	PI	0.02	PI	0.02	U	0.012	J	-	-	0.02	U	-	-	-	-
	Chlordane	57-74-9	0.05	ug/l	-	-	0.2	U	**0.297**	PI	0.2	U	0.2	U	**0.137**	J	-	-	0.2	U	-	-	-	-
Polychlorinated Biphenyls by GC																								
	Aroclor 1254	11097-69-1	0.09	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	0.083	U	-	-	-	-
	Aroclor 1260	11096-82-5	0.09	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	0.083	U	-	-	-	-
	PCBs, Total	1336-36-3	NS	ug/l	-	-	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	-	-	0.083	U	-	-	-	-
Semivolatile Organics by GC/MS																								
	Acenaphthene	83-32-9	20	ug/l	-	-	**160**		2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
	Fluoranthene	206-44-0	50	ug/l	-	-	**59**	J	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
	Naphthalene	91-20-3	10	ug/l	-	-	80	U	2	U	1.4	J	2	U	2	U	2	U	2	U	-	-	-	-
	Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	-	-	120	U	3	U	3	U	3	U	3	U	3	U	3	U	-	-	-	-
	Fluorene	86-73-7	50	ug/l	-	-	**300**		2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
	Phenanthrene	85-01-8	50	ug/l	-	-	**290**		2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
	Pyrene	129-00-0	50	ug/l	-	-	**84**		2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
	Dibenzofuran	132-64-9	NS	ug/l	-	-	80	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-
Semivolatile Organics by GC/MS-SIM																								
Total Metals																								
	Aluminum, Total	7429-90-5	NS	ug/l	-	-	1100		41	J	92	J	6100		3800		1000		100	U	-	-	-	-
	Antimony, Total	7440-36-0	3	ug/l	-	-	50	U	50	U	50	U	50	U	34.3	J	50	U	50	U	-	-	-	-
	Arsenic, Total	7440-38-2	25	ug/l	-	-	16	U	9		23		15		4.9	J	4	J	2	J	-	-	-	-
	Barium, Total	7440-39-3	1000	ug/l	-	-	273		144		120		59.7		49.2		75.2		10	U	-	-	-	-
	Calcium, Total	7440-70-2	NS	ug/l	-	-	150000	J	160000		110000		120000		190000		220000		150	J	-	-	-	-
	Chromium, Total	7440-47-3	50	ug/l	-	-	2	J	2.2	J	10	U	12		8.1	J	5.5	J	10	U	-	-	-	-
	Cobalt, Total	7440-48-4	NS	ug/l	-	-	20	U	20	U	20	U	7.8	J	5.3	J	20	U	20	U	-	-	-	-
	Copper, Total	7440-50-8	200	ug/l	-	-	6.5	J	4.8	J	19.4		30		14.7		10		10	U	-	-	-	-
	Iron, Total	7439-89-6	300	ug/l	-	-	**20000**		**16000**		**4800**		**15000**		**7400**		**2600**		29	J	-	-	-	-
	Lead, Total	7439-92-1	25	ug/l	-	-	10	U	10	U	10	U	8.3	J	4.8	J	3.7	J	10	U	-	-	-	-
	Magnesium, Total	7439-95-4	35000	ug/l	-	-	34000	J	**36000**		22000		24000		**56000**		**52000**		31	J	-	-	-	-
	Manganese, Total	7439-96-5	300	ug/l	-	-	**3430**		**4770**		**2790**		**905**		**1160**		**2460**		21.6		-	-	-	-
	Nickel, Total	7440-02-0	100	ug/l	-	-	25	U	25	U	25	U	15.1	J	9.5	J	5.5	J	25	U	-	-	-	-
	Potassium, Total	7440-09-7	NS	ug/l	-	-	6700		6500		3200		12000		2300	J	5900		2500	U	-	-	-	-
	Sodium, Total	7440-23-5	20000	ug/l	-	-	**230000**		**130000**		**30000**		**150000**		**59000**		**140000**		340	J	-	-	-	-
	Vanadium, Total	7440-62-2	NS	ug/l	-	-	2.2	J	10	U	1.4	J	7.9	J	5.9	J	3.4	J	10	U	-	-	-	-
	Zinc, Total	7440-66-6	2000	ug/l	-	-	82.5		50	U	8	J	57.2		24.5	J	12.2	J	50	U	-	-	-	-
Volatile Organics by GC/MS																								
	1,1-Dichloroethane	75-34-3	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Tetrachloroethene	127-18-4	5	ug/l	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
	1,1,1-Trichloroethane	71-55-6	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Benzene	71-43-2	1	ug/l	0.5	U	0.5	U	0.5	U	**4.4**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	Toluene	108-88-3	5	ug/l	2.5	U	2.5	U	2.5	U	1.9	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Ethylbenzene	100-41-4	5	ug/l	2.5	U	2.5	U	2.5	U	**5**		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Trichloroethene	79-01-6	5	ug/l	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
	p/m-Xylene	179601-23-1	5	ug/l	2.5	U	2.5	U	2.5	U	4.9		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Acetone	67-64-1	50	ug/l	19		5	U	5	U	2.6	J	5	U	5	U	2.2	J	5	U	5	U	5	U
	2-Butanone	78-93-3	50	ug/l	**56**		5	U	5	U	5	U	5	U	5	U	8.2		5	U	5	U	5	U
	Isopropylbenzene	98-82-8	5	ug/l	2.5	U	0.96	J	2.5	U	**8.6**		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Cyclohexane	110-82-7	NS	ug/l	10	U	0.68	J	10	U	38		10	U	10	U	10	U	10	U	10	U	10	U
	Methyl cyclohexane	108-87-2	NS	ug/l	10	U	1.2	J	10	U	14		10	U	10	U	10	U	10	U	10	U	10	U

Notes:

U - Compound/analyte analyzed, but not detected above limit of laboratory detection;

J - Indicates an estimated value below the method detection limit;

P - Indicates a pesticide/Aroclor target analyte when the concentration difference between two GC columns is greater than 25%; the lower value is flagged with a P;

I - Indicates that the lower value for two columns has been reported due to obvious interference;

NS - denotes no standard per Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1;

ug/l - Micrograms per Liter;

TABLE 2.3.6-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

GROUNDWATER ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

Values shaded and in **BOLD** denote exceedences of TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations for Groundwater.

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			S.S. #1		I.A. #1		I.A. #1		S.S. #3		S.S. #4		S.S. #5		S.S. #2	
	SAMPLING DATE			4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015	
	LAB SAMPLE ID			L1506599-01		L1506599-02		L1506599-02 R1		L1506599-03		L1506599-04		L1506599-05		L1506599-06	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																	
	Dichlorodifluoromethane	75-71-8	ug/m3	1.76		1.68		-	-	9.89	U	1.88		8.55		1.5	
	Chloromethane	74-87-3	ug/m3	0.413	U	1.52		-	-	4.13	U	0.413	U	0.413	U	0.991	
	Freon-114	76-14-2	ug/m3	1.4	U	1.4	U	-	-	14	U	1.4	U	1.4	U	1.4	U
	Vinyl chloride	75-01-4	ug/m3	0.511	U	-	-	-	-	5.11	U	0.511	U	0.511	U	0.511	U
	1,3-Butadiene	106-99-0	ug/m3	1.5		0.442	U	-	-	4.42	U	0.442	U	0.442	U	0.796	
	Bromomethane	74-83-9	ug/m3	0.777	U	0.777	U	-	-	7.77	U	0.777	U	0.777	U	0.777	U
	Chloroethane	75-00-3	ug/m3	0.528	U	0.528	U	-	-	5.28	U	0.528	U	0.528	U	0.528	U
	Ethanol	64-17-5	ug/m3	11.6		1010	E	1050		47.1	U	8.54		9.31		11.9	
	Vinyl bromide	593-60-2	ug/m3	0.874	U	0.874	U	-	-	8.74	U	0.874	U	0.874	U	0.874	U
	Acetone	67-64-1	ug/m3	190		63.2		-	-	23.8	U	37.3		46.1		48.9	
	Trichlorofluoromethane	75-69-4	ug/m3	1.48		1.52		-	-	11.2	U	1.15		2.3		1.12	U
	Isopropanol	67-63-0	ug/m3	5.16		347	E	354		12.3	U	2.48		2.78		2.35	
	1,1-Dichloroethene	75-35-4	ug/m3	0.793	U	-	-	-	-	7.93	U	0.793	U	0.793	U	0.793	U
	Tertiary butyl Alcohol	75-65-0	ug/m3	7.94		1.52	U	-	-	15.2	U	14.4		6.73		28.6	
	Methylene chloride	75-09-2	ug/m3	1.74	U	1.74	U	-	-	17.4	U	7.54		6.6		4.27	
	3-Chloropropene	107-05-1	ug/m3	0.626	U	0.626	U	-	-	6.26	U	0.626	U	0.626	U	0.626	U
	Carbon disulfide	75-15-0	ug/m3	0.944		0.623	U	-	-	6.23	U	1.16		0.623	U	4.24	
	Freon-113	76-13-1	ug/m3	1.53	U	1.53	U	-	-	15.3	U	1.53	U	1.53	U	1.53	U
	trans-1,2-Dichloroethene	156-60-5	ug/m3	0.793	U	0.793	U	-	-	7.93	U	0.793	U	0.793	U	0.793	U
	1,1-Dichloroethane	75-34-3	ug/m3	0.809	U	0.809	U	-	-	8.09	U	0.809	U	2.23		0.809	U
	Methyl tert butyl ether	1634-04-4	ug/m3	0.721	U	0.721	U	-	-	7.21	U	0.721	U	0.721	U	0.721	U
	2-Butanone	78-93-3	ug/m3	34.8		2.46		-	-	14.7	U	7.99		6.02		5.04	
	cis-1,2-Dichloroethene	156-59-2	ug/m3	0.793	U	-	-	-	-	7.93	U	0.793	U	0.793	U	0.793	U
	Ethyl Acetate	141-78-6	ug/m3	1.8	U	3.89		-	-	18	U	1.8	U	1.8	U	1.8	U
	Chloroform	67-66-3	ug/m3	6.35		0.977	U	-	-	22.5		4.8		17.5		8.06	
	Tetrahydrofuran	109-99-9	ug/m3	5.93		1.47	U	-	-	14.7	U	8.73		3.13		5.34	
	1,2-Dichloroethane	107-06-2	ug/m3	0.809	U	0.809	U	-	-	8.09	U	0.809	U	0.809	U	0.809	U
	n-Hexane	110-54-3	ug/m3	1.93		1.08		-	-	7.05	U	2.32		1.76		2.88	
	1,1,1-Trichloroethane	71-55-6	ug/m3	3.93		-	-	-	-	3460		130		28.2		1.69	
	Benzene	71-43-2	ug/m3	1.92		0.965		-	-	6.39	U	1.39		1.15		3.18	
	Carbon tetrachloride	56-23-5	ug/m3	1.26	U	-	-	-	-	12.6	U	1.26	U	1.61		1.26	U
	Cyclohexane	110-82-7	ug/m3	0.688	U	0.688	U	-	-	6.88	U	0.688	U	4.51		4.58	

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			S.S. #1		I.A. #1		I.A. #1		S.S. #3		S.S. #4		S.S. #5		S.S. #2	
	SAMPLING DATE			4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015	
	LAB SAMPLE ID			L1506599-01		L1506599-02		L1506599-02 R1		L1506599-03		L1506599-04		L1506599-05		L1506599-06	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	1,2-Dichloropropane	78-87-5	ug/m3	0.924	U	0.924	U	-	-	9.24	U	0.924	U	0.924	U	0.924	U
	Bromodichloromethane	75-27-4	ug/m3	1.34	U	1.34	U	-	-	13.4	U	1.34	U	1.34	U	1.34	U
	1,4-Dioxane	123-91-1	ug/m3	0.721	U	2.37		-	-	7.21	U	0.721	U	0.721	U	0.721	U
	Trichloroethene	79-01-6	ug/m3	7.36		-	-	-	-	34.7		1.07	U	58.6		1.07	U
	2,2,4-Trimethylpentane	540-84-1	ug/m3	0.934	U	0.934	U	-	-	9.34	U	0.934	U	0.934	U	0.934	U
	Xylenes, Total	1330-20-7	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Heptane	142-82-5	ug/m3	3.78		1.03		-	-	8.2	U	3.27		2.7		3.82	
	cis-1,3-Dichloropropene	10061-01-5	ug/m3	0.908	U	0.908	U	-	-	9.08	U	0.908	U	0.908	U	0.908	U
	4-Methyl-2-pentanone	108-10-1	ug/m3	21.2		2.05	U	-	-	20.5	U	2.05	U	2.05	U	2.05	U
	trans-1,3-Dichloropropene	10061-02-6	ug/m3	0.908	U	0.908	U	-	-	9.08	U	0.908	U	0.908	U	0.908	U
	1,1,2-Trichloroethane	79-00-5	ug/m3	1.09	U	1.09	U	-	-	10.9	U	1.09	U	1.09	U	1.09	U
	Toluene	108-88-3	ug/m3	18.4		5.2		-	-	22.1		22.6		18.2		17.2	
	2-Hexanone	591-78-6	ug/m3	3.87		0.82	U	-	-	8.2	U	0.82	U	0.82	U	0.82	U
	Dibromochloromethane	124-48-1	ug/m3	1.7	U	1.7	U	-	-	17	U	1.7	U	1.7	U	1.7	U
	1,2-Dibromoethane	106-93-4	ug/m3	1.54	U	1.54	U	-	-	15.4	U	1.54	U	1.54	U	1.54	U
	Tetrachloroethene	127-18-4	ug/m3	5.23		-	-	-	-	13.6	U	3.59		97.6		3.25	
	Chlorobenzene	108-90-7	ug/m3	0.921	U	0.921	U	-	-	9.21	U	0.921	U	0.921	U	0.921	U
	Ethylbenzene	100-41-4	ug/m3	7.47		3.05		-	-	8.69	U	7.12		6.82		7.34	
	p/m-Xylene	179601-23-1	ug/m3	20.2		5.86		-	-	20.5		16.1		17		15.4	
	Bromoform	75-25-2	ug/m3	2.07	U	2.07	U	-	-	20.7	U	2.07	U	2.07	U	2.07	U
	Styrene	100-42-5	ug/m3	4.98		0.864		-	-	8.52	U	3.81		4.73		3.83	
	1,1,2,2-Tetrachloroethane	79-34-5	ug/m3	1.37	U	1.37	U	-	-	13.7	U	1.37	U	1.37	U	1.37	U
	o-Xylene	95-47-6	ug/m3	5.86		2.29		-	-	8.69	U	4.2		4.82		3.98	
	4-Ethyltoluene	622-96-8	ug/m3	1.58		0.983	U	-	-	9.83	U	0.983	U	1.05		0.983	U
	1,3,5-Trimethylbenzene	108-67-8	ug/m3	1.06		0.983	U	-	-	9.83	U	0.983	U	0.983	U	0.983	U
	1,2,4-Trimethylbenzene	95-63-6	ug/m3	3.44		0.983	U	-	-	9.83	U	2.09		1.84		1.51	
	Benzyl chloride	100-44-7	ug/m3	1.04	U	1.04	U	-	-	10.4	U	1.04	U	1.04	U	1.04	U
	1,3-Dichlorobenzene	541-73-1	ug/m3	1.2	U	1.2	U	-	-	12	U	1.2	U	1.2	U	1.2	U
	1,4-Dichlorobenzene	106-46-7	ug/m3	1.2	U	1.2	U	-	-	12	U	1.2	U	1.2	U	1.2	U
	1,2-Dichlorobenzene	95-50-1	ug/m3	1.2	U	1.2	U	-	-	12	U	1.2	U	1.2	U	1.2	U
	1,2,4-Trichlorobenzene	120-82-1	ug/m3	1.48	U	1.48	U	-	-	14.8	U	1.48	U	1.48	U	1.48	U
	Hexachlorobutadiene	87-68-3	ug/m3	2.13	U	2.13	U	-	-	21.3	U	2.13	U	2.13	U	2.13	U
Volatile Organics in Air by SIM																	
	Vinyl chloride	75-01-4	ug/m3	-	-	0.051	U	-	-	-	-	-	-	-	-	-	-
	1,1-Dichloroethene	75-35-4	ug/m3	-	-	0.079	U	-	-	-	-	-	-	-	-	-	-
	cis-1,2-Dichloroethene	156-59-2	ug/m3	-	-	0.079	U	-	-	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	71-55-6	ug/m3	-	-	0.109	U	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	56-23-5	ug/m3	-	-	0.484		-	-	-	-	-	-	-	-	-	-
	Trichloroethene	79-01-6	ug/m3	-	-	0.107	U	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	127-18-4	ug/m3	-	-	0.183		-	-	-	-	-	-	-	-	-	-

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			I.A. #2		I.A. #3		O.A. #1		O.A. #2		SS-3RE		SS-4RE		SS-5RE		SS-6	
	SAMPLING DATE			4/2/2015		4/2/2015		4/2/2015		4/2/2015		1/12/2016		1/12/2016		1/12/2016		1/12/2016	
	LAB SAMPLE ID			L1506599-07		L1506599-08		L1506599-09		L1506599-10		L1600977-01		L1600977-02		L1600977-03		L1600977-04	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																			
	Dichlorodifluoromethane	75-71-8	ug/m3	2.33		2.64		1.63		1.76		-	-	-	-	-	-	0.989	U
	Chloromethane	74-87-3	ug/m3	1.24		1.46		1.21		1.21		-	-	-	-	-	-	0.413	U
	Freon-114	76-14-2	ug/m3	1.4	U	1.4	U	1.4	U	1.4	U	-	-	-	-	-	-	1.4	U
	Vinyl chloride	75-01-4	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.511	U
	1,3-Butadiene	106-99-0	ug/m3	0.442	U	1.32		0.442	U	0.442	U	-	-	-	-	-	-	0.442	U
	Bromomethane	74-83-9	ug/m3	0.777	U	0.777	U	0.777	U	0.777	U	-	-	-	-	-	-	0.777	U
	Chloroethane	75-00-3	ug/m3	0.528	U	0.528	U	0.528	U	0.528	U	-	-	-	-	-	-	0.528	U
	Ethanol	64-17-5	ug/m3	170		58.4		6.76		6.67		-	-	-	-	-	-	9.42	U
	Vinyl bromide	593-60-2	ug/m3	0.874	U	0.874	U	0.874	U	0.874	U	-	-	-	-	-	-	0.874	U
	Acetone	67-64-1	ug/m3	2.38	U	2.38	U	8.08		6.25		-	-	-	-	-	-	31.1	
	Trichlorofluoromethane	75-69-4	ug/m3	1.92		2.56		1.2		1.14		-	-	-	-	-	-	2.41	
	Isopropanol	67-63-0	ug/m3	102		27.5		1.23	U	1.23	U	-	-	-	-	-	-	2.73	
	1,1-Dichloroethene	75-35-4	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.793	U
	Tertiary butyl Alcohol	75-65-0	ug/m3	1.52	U	2.32		1.52	U	1.52	U	-	-	-	-	-	-	1.52	U
	Methylene chloride	75-09-2	ug/m3	6.84		9.59		1.74	U	8.55		-	-	-	-	-	-	2.95	
	3-Chloropropene	107-05-1	ug/m3	0.626	U	0.626	U	0.626	U	0.626	U	-	-	-	-	-	-	0.626	U
	Carbon disulfide	75-15-0	ug/m3	0.623	U	0.623	U	0.623	U	0.623	U	-	-	-	-	-	-	0.623	U
	Freon-113	76-13-1	ug/m3	1.53	U	1.53	U	1.53	U	1.53	U	-	-	-	-	-	-	1.53	U
	trans-1,2-Dichloroethene	156-60-5	ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	-	-	-	-	-	-	0.793	U
	1,1-Dichloroethane	75-34-3	ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	-	-	-	-	-	-	0.809	U
	Methyl tert butyl ether	1634-04-4	ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	-	-	-	-	-	-	0.721	U
	2-Butanone	78-93-3	ug/m3	5.4		4.72		1.47	U	1.47	U	7.37	U	2.47		21.4		7.11	
	cis-1,2-Dichloroethene	156-59-2	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.793	U
	Ethyl Acetate	141-78-6	ug/m3	9.91		21		1.8	U	1.8	U	-	-	-	-	-	-	1.8	U
	Chloroform	67-66-3	ug/m3	0.977	U	0.977	U	0.977	U	0.977	U	-	-	-	-	-	-	1.02	
	Tetrahydrofuran	109-99-9	ug/m3	1.47	U	1.47	U	1.47	U	1.47	U	-	-	-	-	-	-	1.47	U
	1,2-Dichloroethane	107-06-2	ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	-	-	-	-	-	-	0.809	U
	n-Hexane	110-54-3	ug/m3	1.3		1.47		0.99		1.65		-	-	-	-	-	-	1.16	
	1,1,1-Trichloroethane	71-55-6	ug/m3	-	-	-	-	-	-	-	-	2190		189		79.7		21.4	
	Benzene	71-43-2	ug/m3	1.06		1.56		0.668		0.827		3.19	U	0.818		0.997		0.76	
	Carbon tetrachloride	56-23-5	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.26	U
	Cyclohexane	110-82-7	ug/m3	0.771		0.688	U	0.688	U	0.688	U	3.44	U	0.688	U	0.688	U	0.688	U

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			I.A. #2		I.A. #3		O.A. #1		O.A. #2		SS-3RE		SS-4RE		SS-5RE		SS-6	
	SAMPLING DATE			4/2/2015		4/2/2015		4/2/2015		4/2/2015		1/12/2016		1/12/2016		1/12/2016		1/12/2016	
	LAB SAMPLE ID			L1506599-07		L1506599-08		L1506599-09		L1506599-10		L1600977-01		L1600977-02		L1600977-03		L1600977-04	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	1,2-Dichloropropane	78-87-5	ug/m3	0.924	U	0.924	U	0.924	U	0.924	U	-	-	-	-	-	-	0.924	U
	Bromodichloromethane	75-27-4	ug/m3	1.34	U	1.34	U	1.34	U	1.34	U	-	-	-	-	-	-	1.34	U
	1,4-Dioxane	123-91-1	ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	-	-	-	-	-	-	0.721	U
	Trichloroethene	79-01-6	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07	U
	2,2,4-Trimethylpentane	540-84-1	ug/m3	0.934	U	0.934	U	0.934	U	0.934	U	-	-	-	-	-	-	0.934	U
	Xylenes, Total	1330-20-7	ug/m3	-	-	-	-	-	-	-	-	10.3		4.16		4.43		-	-
	Heptane	142-82-5	ug/m3	1.05		1.08		0.82	U	0.82	U	4.1	U	0.877		1.25		0.82	U
	cis-1,3-Dichloropropene	10061-01-5	ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	-	-	-	-	-	-	0.908	U
	4-Methyl-2-pentanone	108-10-1	ug/m3	2.05	U	2.05	U	2.05	U	2.05	U	-	-	-	-	-	-	2.05	U
	trans-1,3-Dichloropropene	10061-02-6	ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	-	-	-	-	-	-	0.908	U
	1,1,2-Trichloroethane	79-00-5	ug/m3	1.09	U	1.09	U	1.09	U	1.09	U	-	-	-	-	-	-	1.09	U
	Toluene	108-88-3	ug/m3	34.7		24.3		2.5		1.92		3.77	U	50.5		2.26		2.36	
	2-Hexanone	591-78-6	ug/m3	0.82	U	0.82	U	0.82	U	0.82	U	-	-	-	-	-	-	0.82	U
	Dibromochloromethane	124-48-1	ug/m3	1.7	U	1.7	U	1.7	U	1.7	U	-	-	-	-	-	-	1.7	U
	1,2-Dibromoethane	106-93-4	ug/m3	1.54	U	1.54	U	1.54	U	1.54	U	-	-	-	-	-	-	1.54	U
	Tetrachloroethene	127-18-4	ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64.5	
	Chlorobenzene	108-90-7	ug/m3	0.921	U	0.921	U	0.921	U	0.921	U	-	-	-	-	-	-	0.921	U
	Ethylbenzene	100-41-4	ug/m3	14.2		28.6		0.869	U	0.869	U	4.34	U	0.869	U	0.869	U	0.869	U
	p/m-Xylene	179601-23-1	ug/m3	41.8		96.9		1.74	U	1.74	U	8.69	U	3.18		3.02		2.44	
	Bromoform	75-25-2	ug/m3	2.07	U	2.07	U	2.07	U	2.07	U	-	-	-	-	-	-	2.07	U
	Styrene	100-42-5	ug/m3	15.2		60.5		0.852	U	0.852	U	-	-	-	-	-	-	0.852	U
	1,1,2,2-Tetrachloroethane	79-34-5	ug/m3	1.37	U	1.37	U	1.37	U	1.37	U	-	-	-	-	-	-	1.37	U
	o-Xylene	95-47-6	ug/m3	13.6		34.9		0.869	U	0.869	U	4.34	U	0.986		1.42		0.977	
	4-Ethyltoluene	622-96-8	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	-	-	-	-	-	-	0.983	U
	1,3,5-Trimethylbenzene	108-67-8	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	-	-	-	-	-	-	0.983	U
	1,2,4-Trimethylbenzene	95-63-6	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	-	-	-	-	-	-	1.15	
	Benzyl chloride	100-44-7	ug/m3	1.04	U	1.04	U	1.04	U	1.04	U	-	-	-	-	-	-	1.04	U
	1,3-Dichlorobenzene	541-73-1	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	-	-	-	-	-	-	1.2	U
	1,4-Dichlorobenzene	106-46-7	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	-	-	-	-	-	-	1.2	U
	1,2-Dichlorobenzene	95-50-1	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	-	-	-	-	-	-	1.2	U
	1,2,4-Trichlorobenzene	120-82-1	ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	-	-	-	-	-	-	1.48	U
	Hexachlorobutadiene	87-68-3	ug/m3	2.13	U	2.13	U	2.13	U	2.13	U	-	-	-	-	-	-	2.13	U
Volatile Organics in Air by SIM																			
	Vinyl chloride	75-01-4	ug/m3	0.051	U	0.051	U	0.051	U	0.051	U	-	-	-	-	-	-	-	-
	1,1-Dichloroethene	75-35-4	ug/m3	0.079	U	0.079	U	0.079	U	0.079	U	-	-	-	-	-	-	-	-
	cis-1,2-Dichloroethene	156-59-2	ug/m3	0.079	U	0.079	U	0.079	U	0.079	U	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	71-55-6	ug/m3	0.109	U	0.109	U	0.109	U	0.109	U	-	-	-	-	-	-	-	-
	Carbon tetrachloride	56-23-5	ug/m3	0.459		0.484		0.434		0.44		-	-	-	-	-	-	-	-
	Trichloroethene	79-01-6	ug/m3	0.107	U	0.172		0.107	U	0.107	U	-	-	-	-	-	-	-	-
	Tetrachloroethene	127-18-4	ug/m3	0.271		0.827		0.136	U	0.136	U	-	-	-	-	-	-	-	-

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-7		IA-4		IA-5		OA-3		SS-8 RE		IA-6		OA-4	
	SAMPLING DATE			1/12/2016		1/12/2016		1/12/2016		1/12/2016		1/25/2016		1/25/2016		1/25/2016	
	LAB SAMPLE ID			L1600977-05		L1600977-07		L1600977-08		L1600977-09		L1602117-01		L1602117-02		L1602117-03	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																	
	Dichlorodifluoromethane	75-71-8	ug/m3	1.95		2.08		1.37		1.89		3.02		1.48		4.02	
	Chloromethane	74-87-3	ug/m3	0.413	U	1.1		1.26		1.11		0.413	U	1.22		1.24	
	Freon-114	76-14-2	ug/m3	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
	Vinyl chloride	75-01-4	ug/m3	0.511	U	-	-	-	-	-	-	0.511	U	-	-	-	-
	1,3-Butadiene	106-99-0	ug/m3	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	1.16		0.442	U
	Bromomethane	74-83-9	ug/m3	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
	Chloroethane	75-00-3	ug/m3	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
	Ethanol	64-17-5	ug/m3	9.42	U	19.6		203		9.42	U	9.42	U	25.6		9.42	U
	Vinyl bromide	593-60-2	ug/m3	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
	Acetone	67-64-1	ug/m3	36.1		11		77.4		2.87		19.6		41.6		2.38	U
	Trichlorofluoromethane	75-69-4	ug/m3	1.12	U	1.12	U	1.22		1.12	U	1.4		1.21		1.64	
	Isopropanol	67-63-0	ug/m3	1.38		2.56		31		1.23	U	2.43		11.7		1.23	U
	1,1-Dichloroethene	75-35-4	ug/m3	0.793	U	-	-	-	-	-	-	0.793	U	-	-	-	-
	Tertiary butyl Alcohol	75-65-0	ug/m3	1.52	U	1.52	U	1.52	U	1.52	U	4.94		1.52	U	1.52	U
	Methylene chloride	75-09-2	ug/m3	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
	3-Chloropropene	107-05-1	ug/m3	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
	Carbon disulfide	75-15-0	ug/m3	0.925		0.623	U	0.623	U	0.623	U	1.4		0.623	U	0.623	U
	Freon-113	76-13-1	ug/m3	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
	trans-1,2-Dichloroethene	156-60-5	ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
	1,1-Dichloroethane	75-34-3	ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
	Methyl tert butyl ether	1634-04-4	ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
	2-Butanone	78-93-3	ug/m3	3.04		1.83		13.7		1.47	U	3.54		2.35		1.47	U
	cis-1,2-Dichloroethene	156-59-2	ug/m3	0.793	U	-	-	-	-	-	-	0.793	U	-	-	-	-
	Ethyl Acetate	141-78-6	ug/m3	1.8	U	1.8	U	2.84		1.8	U	1.8	U	12.6		1.8	U
	Chloroform	67-66-3	ug/m3	0.977	U	0.977	U	0.977	U	0.977	U	14.5		0.977	U	0.977	U
	Tetrahydrofuran	109-99-9	ug/m3	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
	1,2-Dichloroethane	107-06-2	ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
	n-Hexane	110-54-3	ug/m3	1.75		0.804		0.705	U	0.705	U	0.705	U	0.705	U	0.705	U
	1,1,1-Trichloroethane	71-55-6	ug/m3	23.5		-	-	-	-	-	-	1.09	U	-	-	-	-
	Benzene	71-43-2	ug/m3	10.3		0.767		0.712		0.674		0.639	U	1.36		0.639	U
	Carbon tetrachloride	56-23-5	ug/m3	13		-	-	-	-	-	-	1.26	U	-	-	-	-
	Cyclohexane	110-82-7	ug/m3	1.04		0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U

TABLE 2.3.7-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(ALL RESULTS - VALIDATED)

	LOCATION			SS-7		IA-4		IA-5		OA-3		SS-8 RE		IA-6		OA-4	
	SAMPLING DATE			1/12/2016		1/12/2016		1/12/2016		1/12/2016		1/25/2016		1/25/2016		1/25/2016	
	LAB SAMPLE ID			L1600977-05		L1600977-07		L1600977-08		L1600977-09		L1602117-01		L1602117-02		L1602117-03	
		CasNum	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	1,2-Dichloropropane	78-87-5	ug/m3	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
	Bromodichloromethane	75-27-4	ug/m3	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
	1,4-Dioxane	123-91-1	ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
	Trichloroethene	79-01-6	ug/m3	1.07	U	-	-	-	-	-	-	1.07	U	-	-	-	-
	2,2,4-Trimethylpentane	540-84-1	ug/m3	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
	Xylenes, Total	1330-20-7	ug/m3	-	-	-	-	-	-	-	-	1.72		84.3		5.34	
	Heptane	142-82-5	ug/m3	1.67		0.869		0.82	U	0.82	U	0.82	U	0.975		0.82	U
	cis-1,3-Dichloropropene	10061-01-5	ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
	4-Methyl-2-pentanone	108-10-1	ug/m3	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
	trans-1,3-Dichloropropene	10061-02-6	ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
	1,1,2-Trichloroethane	79-00-5	ug/m3	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
	Toluene	108-88-3	ug/m3	4.07		2.08		2.02		0.795		0.852		9.35		1.05	
	2-Hexanone	591-78-6	ug/m3	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
	Dibromochloromethane	124-48-1	ug/m3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
	1,2-Dibromoethane	106-93-4	ug/m3	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
	Tetrachloroethene	127-18-4	ug/m3	1.36	U	-	-	-	-	-	-	1.36	U	-	-	-	-
	Chlorobenzene	108-90-7	ug/m3	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
	Ethylbenzene	100-41-4	ug/m3	0.882		1.44		2.31		0.869	U	0.869	U	20.2		1.23	
	p/m-Xylene	179601-23-1	ug/m3	1.74	U	4.2		7.04		1.74	U	1.74	U	56.9		3.59	
	Bromoform	75-25-2	ug/m3	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
	Styrene	100-42-5	ug/m3	1.22		0.852	U	0.852	U	0.852	U	0.852	U	41.6		2.21	
	1,1,2,2-Tetrachloroethane	79-34-5	ug/m3	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
	o-Xylene	95-47-6	ug/m3	0.869	U	1.78		3.41		0.869	U	0.869	U	27.4		1.75	
	4-Ethyltoluene	622-96-8	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
	1,3,5-Trimethylbenzene	108-67-8	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
	1,2,4-Trimethylbenzene	95-63-6	ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
	Benzyl chloride	100-44-7	ug/m3	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
	1,3-Dichlorobenzene	541-73-1	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
	1,4-Dichlorobenzene	106-46-7	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
	1,2-Dichlorobenzene	95-50-1	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
	1,2,4-Trichlorobenzene	120-82-1	ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
	Hexachlorobutadiene	87-68-3	ug/m3	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Volatile Organics in Air by SIM																	
	Vinyl chloride	75-01-4	ug/m3	-	-	0.051	U	0.051	U	0.051	U	-	-	0.051	U	0.051	U
	1,1-Dichloroethene	75-35-4	ug/m3	-	-	0.079	U	0.079	U	0.079	U	-	-	0.079	U	0.079	U
	cis-1,2-Dichloroethene	156-59-2	ug/m3	-	-	0.079	U	0.079	U	0.079	U	-	-	0.079	U	0.079	U
	1,1,1-Trichloroethane	71-55-6	ug/m3	-	-	0.109	U	0.109		0.109	U	-	-	0.109	U	0.109	U
	Carbon tetrachloride	56-23-5	ug/m3	-	-	0.459		0.459		0.44		-	-	0.472		0.352	
	Trichloroethene	79-01-6	ug/m3	-	-	0.107	U	0.107	U	0.107	U	-	-	0.107	U	0.107	U
	Tetrachloroethene	127-18-4	ug/m3	-	-	0.156		0.156		0.136	U	-	-	0.136	U	0.136	U

TABLE 2.3.7-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

					SUBSLAB AIR SAMPLES																							
	LOCATION				S.S. #1		S.S. #2		S.S. #3		SS-3RE		S.S. #4		SS-4RE		S.S. #5		SS-5RE		SS-6		SS-7		SS-8 RE	
	SAMPLING DATE				4/2/2015		4/2/2015		4/2/2015		1/12/2016		4/2/2015		1/12/2016		4/2/2015		1/12/2016		1/12/2016		1/12/2016		1/25/2016	
	LAB SAMPLE ID				L1506599-01		L1506599-06		L1506599-03		L1600977-01		L1506599-04		L1600977-02		L1506599-05		L1600977-03		L1600977-04		L1600977-05		L1602117-01	
		CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics in Air - Mansfield Lab																										
	Dichlorodifluoromethane	75-71-8	NS	ug/m3	1.76		1.5		ND (< 9.89)	U	Not Analyzed		1.88		Not Analyzed		8.55		Not Analyzed		ND (< 0.989)	UJ	1.95	J	3.02	
	Chloromethane	74-87-3	NS	ug/m3	ND (< 0.413)	U	0.991		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	ND (< 4.13)	U	ND (< 4.13)	U
	1,3-Butadiene	106-99-0	NS	ug/m3	1.5		0.796		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	ND (< 4.42)	U	ND (< 4.42)	U
	Ethanol	64-17-5	NS	ug/m3	11.6		11.9		ND (< 47.1)	U	Not Analyzed		8.54		Not Analyzed		9.31		Not Analyzed		ND (< 9.42)	UJ	ND (< 9.42)	UJ	ND (< 9.42)	U
	Acetone	67-64-1	NS	ug/m3	190		48.9		ND (< 23.8)	U	Not Analyzed		37.3		Not Analyzed		46.1		Not Analyzed		31.1		36.1		19.6	
	Trichlorofluoromethane	75-69-4	NS	ug/m3	1.48		ND (< 1.12)	U	ND (< 11.2)	U	Not Analyzed		1.15		Not Analyzed		2.3		Not Analyzed		ND (< 2.41)		ND (< 1.12)	U	1.4	
	Isopropanol	67-63-0	NS	ug/m3	5.16		2.35		ND (< 12.3)	U	Not Analyzed		2.48		Not Analyzed		2.78		Not Analyzed		2.73		1.38		2.43	
	Tertiary butyl Alcohol	75-65-0	NS	ug/m3	7.94		28.6		ND (< 15.2)	U	Not Analyzed		14.4		Not Analyzed		6.73		Not Analyzed		ND (< 1.52)	U	ND (< 1.52)	U	4.94	
	Methylene chloride	75-09-2	60	ug/m3	ND (< 1.74)	U	4.27		ND (< 17.4)	U	Not Analyzed		7.54		Not Analyzed		6.6		Not Analyzed		2.95		1.74	U	1.74	U
	Carbon disulfide	75-15-0	NS	ug/m3	0.944		4.24		ND (< 6.23)	U	Not Analyzed		1.16		Not Analyzed		ND (< 0.623)	U	Not Analyzed		0.623	U	0.925		1.4	
	1,1-Dichloroethane	75-34-3	NS	ug/m3	ND (< 0.809)	U	ND (< 8.09)	U	ND (< 8.09)	U	Not Analyzed		ND (< 8.09)	U	Not Analyzed		2.23		Not Analyzed		0.809	U	0.809	U	0.809	U
	2-Butanone	78-93-3	NS	ug/m3	34.8		5.04		ND (< 14.7)	U	ND (< 7.37)	U	ND (< 7.99)	U	2.47		6.02		21.7		7.11		3.04		3.54	
	Ethyl Acetate	141-78-6	NS	ug/m3	ND (< 1.8)	U	ND (< 1.8)	U	ND (< 18)	U	Not Analyzed		ND (< 1.8)	U	Not Analyzed		ND (< 1.8)	U	Not Analyzed		1.8	U	1.8	U	1.8	U
	Chloroform	67-66-3	NS	ug/m3	6.35		8.06		22.5		Not Analyzed		4.8		Not Analyzed		17.5		Not Analyzed		1.02		0.977	U	14.5	
	Tetrahydrofuran	109-99-9	NS	ug/m3	5.93		5.34		ND (< 14.7)	U	Not Analyzed		8.73		Not Analyzed		3.13		Not Analyzed		1.47	U	1.47	U	1.47	U
	n-Hexane	110-54-3	NS	ug/m3	1.93		2.88		ND (< 7.05)	U	Not Analyzed		2.32		Not Analyzed		1.76		Not Analyzed		1.16		1.75		0.705	U
	1,1,1-Trichloroethane	71-55-6	NS	ug/m3	3.93		1.69		3,460		2,160		130		189		28.2		79.7		21.4		23.5		1.09	U
	Benzene	71-43-2	NS	ug/m3	1.92		3.18		ND (< 6.39)	U	ND (< 3.19)	U	1.39		0.818		1.15		0.997		0.76		10.3		0.639	U
	Carbon tetrachloride	56-23-5	NS	ug/m3	ND (< 1.26)	U	ND (< 1.26)	U	ND (< 12.6)	U	Not Analyzed		ND (< 1.26)	U	Not Analyzed		1.61		Not Analyzed		ND (< 1.26)	U	13		ND (< 1.26)	U
	Cyclohexane	110-82-7	NS	ug/m3	ND (< 0.688)	U	4.58		ND (< 6.88)	U	ND (< 3.44)	U	ND (< 0.688)	U	ND (< 0.688)	U	4.51		ND (< 0.688)	U	ND (< 0.688)	U	1.04		ND (< 0.688)	U
	1,4-Dioxane	123-91-1	NS	ug/m3	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 7.21)	U	Not Analyzed		ND (< 0.721)	U	Not Analyzed		ND (< 0.721)	U	Not Analyzed		ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U
	Trichloroethene	79-01-6	NS	ug/m3	7.36		ND (< 1.07)	U	34.7		Not Analyzed		ND (< 1.07)	U	Not Analyzed		58.6		Not Analyzed		ND (< 1.07)	U	ND (< 1.07)	U	ND (< 1.07)	U
	Heptane	142-82-5	NS	ug/m3	3.78		3.82		ND (< 8.2)	U	ND (< 4.1)	U	3.27		0.877		2.7		1.25		ND (< 0.82)	U	1.67		0.82	U
	4-Methyl-2-pentanone	108-10-1	NS	ug/m3	21.2		ND (< 2.05)	U	ND (< 20.5)	U	Not Analyzed		ND (< 2.05)	U	Not Analyzed		ND (< 2.05)	U	Not Analyzed		ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U
	Toluene	108-88-3	NS	ug/m3	18.4		17.2		22.1		ND (< 3.77)	U	22.6		50.5		18.2		2.26		2.36		4.07		0.852	
	2-Hexanone	591-78-6	NS	ug/m3	3.87		ND (< 0.82)	U	ND (< 8.2)	U	Not Analyzed		ND (< 0.82)	U	Not Analyzed		ND (< 0.82)	U	Not Analyzed		ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
	Tetrachloroethene	127-18-4	NS	ug/m3	5.23		3.25		ND (< 13.6)	U	Not Analyzed		3.59		Not Analyzed		97.6		Not Analyzed		64.5		ND (< 1.36)	U	ND (< 1.36)	U
	Ethylbenzene	100-41-4	NS	ug/m3	7.47		7.34		ND (< 8.69)	U	ND (< 4.34)	U	7.12		ND (< 0.869)	U	6.82		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)		ND (< 0.869)	U
	p/m-Xylene	179601-23-1	NS	ug/m3	20.2		15.4		20.5		8.69		16.1		3.18		17		3.02		2.44		ND (< 1.74)	U	ND (< 1.74)	U
	Styrene	100-42-5	NS	ug/m3	4.98		3.83		ND (< 8.52)	U	Not Analyzed		3.81		Not Analyzed		4.73		Not Analyzed		ND (< 0.852)	U	1.22		ND (< 0.852)	U
	o-Xylene	95-47-6	NS	ug/m3	5.86		3.98		ND (< 8.69)	U	ND (< 4.34)	U	4.2		0.986		4.82		1.42		0.977		ND (< 0.869)	U	ND (< 0.869)	U
	4-Ethyltoluene	622-96-8	NS	ug/m3	1.58		ND (< 0.983)	U	ND (< 9.83)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		1.05		Not Analyzed		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
	1,3,5-Trimethylbenzene	108-67-8	NS	ug/m3	1.06		ND (< 0.983)	U	ND (< 9.83)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
	1,2,4-Trimethylbenzene	95-63-6	NS	ug/m3	3.44		1.51		ND (< 9.83)	U	Not Analyzed		2.09		Not Analyzed		1.84		Not Analyzed		1.15		ND (< 0.983)	U	ND (< 0.983)	U
	1,2,4-Trichlorobenzene	120-82-1		ug/m3	1.48	U	1.48	U	14.8	U			1.48	U			1.48	U			1.48	U	1.48	U	1.48	UJ
Volatile Organics in Air by SIM - Mansfield Lab																										
	1,1,1-Trichloroethane	71-55-6	NS	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
	Carbon tetrachloride	56-23-5	NS	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
	Trichloroethene	79-01-6	5	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
	Tetrachloroethene	127-18-4	30	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	

Notes:

U/ND - Compound/analyte analyzed, but not detected above limit of laboratory detection;

J - Indicates an estimated value below the method detection limit;

NS - denotes no standard per NYS DOH Guidance for Evaluating Soil Vapor Intrusion;

ug/m3 - Micrograms per cubic meter;

Values shaded and in **BOLD** denote exceedences of NYS DOH Guidance Values.

TABLE 2.3.7-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

VAPOR INTRUSION ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - VALIDATED)

					INDOOR AMBIENT AIR SAMPLES												OUTDOOR AMBIENT AIR SAMPLES							
	LOCATION				I.A. #1		I.A. #2		I.A. #3		IA-4		IA-5		IA-6		O.A. #1		O.A. #2		OA-3		OA-4	
	SAMPLING DATE				4/2/2015		4/2/2015		4/2/2015		1/12/2016		1/12/2016		1/25/2016		4/2/2015		4/2/2015		1/12/2016		1/25/2016	
	LAB SAMPLE ID				L1506599-02		L1506599-07		L1506599-08		L1600977-07		L1600977-08		L1602117-02		L1506599-09		L1506599-10		L1600977-09		L1602117-03	
		CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics in Air - Mansfield Lab																								
	Dichlorodifluoromethane	75-71-8	NS	ug/m3	1.68		2.33		2.64		2.08	J	1.37	J	1.48		1.63		1.76		1.89	J	4.02	
	Chloromethane	74-87-3	NS	ug/m3	1.52		1.24		1.46		1.1		1.26		1.22		1.21		1.21		1.11		1.24	
	1,3-Butadiene	106-99-0	NS	ug/m3	ND (< 0.442)	U	ND (< 0.442)	U	1.32		ND (< 0.442)	U	ND (< 0.442)	U	1.16		ND (< 0.442)	U	ND (< 0.442)	U	ND (< 0.442)	U	ND (< 0.442)	U
	Ethanol	64-17-5	NS	ug/m3	1050		170		58.4		19.6	J	203	J	25.6		6.76		6.67		ND (< 9.42)	UJ	ND (< 9.42)	U
	Acetone	67-64-1	NS	ug/m3	63.2		ND (< 2.38)	U	ND (< 2.38)	U	11		77.4		41.6		8.08		6.25		2.87		ND (< 2.38)	U
	Trichlorofluoromethane	75-69-4	NS	ug/m3	1.52		1.92		2.56		ND (< 1.12)	U	1.22		1.21		1.2		1.14		ND (< 1.12)	U	1.64	
	Isopropanol	67-63-0	NS	ug/m3	354		102		27.5		2.56		31		11.7		ND (< 1.23)	U	ND (< 1.23)	U	ND (< 1.23)	U	ND (< 1.23)	U
	Tertiary butyl Alcohol	75-65-0	NS	ug/m3	ND (< 1.52)	U	ND (< 1.52)	U	2.32		ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U
	Methylene chloride	75-09-2	60	ug/m3	ND (<1.74)	U	6.84		9.59		ND (<1.74)	U	ND (<1.74)	U	ND (<1.74)	U	ND (<1.74)	U	8.55		ND (<1.74)	U	ND (<1.74)	U
	Carbon disulfide	75-15-0	NS	ug/m3	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U
	1,1-Dichloroethane	75-34-3	NS	ug/m3	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U
	2-Butanone	78-93-3	NS	ug/m3	2.46		5.4		4.72		1.83		13.7		2.35		ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U
	Ethyl Acetate	141-78-6	NS	ug/m3	3.89		9.91		21		ND (< 1.8)	U	2.84		12.6		ND (< 1.8)	U	ND (< 1.8)	U	ND (< 1.8)	U	ND (< 1.8)	U
	Chloroform	67-66-3	NS	ug/m3	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U
	Tetrahydrofuran	109-99-9	NS	ug/m3	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U
	n-Hexane	110-54-3	NS	ug/m3	1.08		1.3		1.47		0.804		ND (< 0.705)	U	ND (< 0.705)	U	0.99		1.65		ND (< 0.705)	U	ND (< 0.705)	U
	1,1,1-Trichloroethane	71-55-6	NS	ug/m3	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	See Below		See Below		See Below		See Below		See Below		See Below		See Below	
	Benzene	71-43-2	NS	ug/m3	0.965		1.06		1.56		0.767		0.712		1.36		0.668		0.827		0.674		0.639	U
	Carbon tetrachloride	56-23-5	NS	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	
	Cyclohexane	110-82-7	NS	ug/m3	ND (< 0.688)	U	< 0.771		ND (< 0.688)	U	0.688	U	0.688	U	0.688	U	ND (< 0.688)	U	ND (< 0.688)	U	0.688	U	0.688	U
	1,4-Dioxane	123-91-1	NS	ug/m3	2.37		ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	0.721	U	0.721	U
	Trichloroethene	79-01-6	NS	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	
	Heptane	142-82-5	NS	ug/m3	1.03		1.05		1.08		0.869		ND (< 0.82)	U	0.975		ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
	4-Methyl-2-pentanone	108-10-1	NS	ug/m3	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U
	Toluene	108-88-3	NS	ug/m3	5.2		34.7		24.3		2.08		2.02		9.35		2.5		1.92		0.795		1.05	
	2-Hexanone	591-78-6	NS	ug/m3	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
	Tetrachloroethene	127-18-4	NS	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	
	Ethylbenzene	100-41-4	NS	ug/m3	3.05		14.2		28.6		1.44		2.31		20.2		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)	U	1.23	
	p/m-Xylene	179601-23-1	NS	ug/m3	5.86		41.8		96.9		4.2		7.04		56.9		ND (< 1.74)	U	ND (< 1.74)	U	ND (< 1.74)	U	3.59	
	Styrene	100-42-5	NS	ug/m3	0.864		15.2		60.5		ND (< 0.852)	U	ND (< 0.852)	U	41.6		ND (< 0.852)	U	ND (< 0.852)	U	ND (< 0.852)	U	2.21	
	o-Xylene	95-47-6	NS	ug/m3	2.29		13.6		34.9		1.78		3.41		27.4		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)	U	1.75	
	4-Ethyltoluene	622-96-8	NS	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
	1,3,5-Trimethylbenzene	108-67-8	NS	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
	1,2,4-Trimethylbenzene	95-63-6	NS	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
	1,2,4-Trichlorobenzene	120-82-1		ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	UJ	1.48	U	1.48	U	1.48	U	1.48	UJ
Volatile Organics in Air by SIM - Mansfield Lab																								
	1,1,1-Trichloroethane	71-55-6	NS	ug/m3	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U
	Carbon tetrachloride	56-23-5	NS	ug/m3	0.484		0.459		0.484		0.459		0.459		0.472		0.434		0.44		0.44		0.352	
	Trichloroethene	79-01-6	5	ug/m3	ND (< 0.107)	U	ND (< 0.107)	U	0.172		ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U
	Tetrachloroethene	127-18-4	30	ug/m3	0.183		0.271		0.827		0.156		0.156		ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U

Notes:

U/ND - Compound/analyte analyzed, but not detected above limit of laboratory detection;

J - Indicates an estimated value below the method detection limit;

NS - denotes no standard per NYS DOH Guidance for Evaluating Soil Vapor Intrusion;

ug/m3 - Micrograms per cubic meter;

Values shaded and in **BOLD** denote exceedences of NYS DOH Guidance Values.

TABLE 2.3.8-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE WATER ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	LOCATION			SW-1_06292015		SW-2_06292015	
	SAMPLING DATE			6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-01		L1514840-02	
		CasNum	Units		Qual		Qual
General Chemistry - Westborough Lab							
	Cyanide, Total	57-12-5	ug/l	3	J	3	J
Organochlorine Pesticides by GC - Westborough Lab							
	Delta-BHC	319-86-8	ug/l	0.02	U	0.02	U
	Lindane	58-89-9	ug/l	0.02	U	0.02	U
	Alpha-BHC	319-84-6	ug/l	0.02	U	0.02	U
	Beta-BHC	319-85-7	ug/l	0.02	U	0.02	U
	Heptachlor	76-44-8	ug/l	0.02	U	0.02	U
	Aldrin	309-00-2	ug/l	0.02	U	0.02	U
	Heptachlor epoxide	1024-57-3	ug/l	0.02	U	0.02	U
	Endrin	72-20-8	ug/l	0.04	U	0.04	U
	Endrin ketone	53494-70-5	ug/l	0.04	U	0.04	U
	Dieldrin	60-57-1	ug/l	0.04	U	0.04	U
	4,4'-DDE	72-55-9	ug/l	0.04	U	0.04	U
	4,4'-DDD	72-54-8	ug/l	0.04	U	0.04	U
	4,4'-DDT	50-29-3	ug/l	0.04	U	0.04	U
	Endosulfan I	959-98-8	ug/l	0.02	U	0.02	U
	Endosulfan II	33213-65-9	ug/l	0.04	U	0.04	U
	Endosulfan sulfate	1031-07-8	ug/l	0.04	U	0.04	U
	Methoxychlor	72-43-5	ug/l	0.2	U	0.2	U
	Toxaphene	8001-35-2	ug/l	0.2	U	0.2	U
	cis-Chlordane	5103-71-9	ug/l	0.02	U	0.02	U
	trans-Chlordane	5103-74-2	ug/l	0.02	U	0.02	U
	Chlordane	57-74-9	ug/l	0.2	U	0.2	U
Polychlorinated Biphenyls by GC - Westborough Lab							
	Aroclor 1016	12674-11-2	ug/l	0.083	U	0.083	U
	Aroclor 1221	11104-28-2	ug/l	0.083	U	0.083	U
	Aroclor 1232	11141-16-5	ug/l	0.083	U	0.083	U
	Aroclor 1242	53469-21-9	ug/l	0.083	U	0.083	U
	Aroclor 1248	12672-29-6	ug/l	0.083	U	0.083	U
	Aroclor 1254	11097-69-1	ug/l	0.083	U	0.083	U
	Aroclor 1260	11096-82-5	ug/l	0.083	U	0.083	U
	Aroclor 1262	37324-23-5	ug/l	0.083	U	0.083	U
	Aroclor 1268	11100-14-4	ug/l	0.083	U	0.083	U
	PCBs, Total	1336-36-3	ug/l	0.083	U	0.083	U
Semivolatile Organics by GC/MS - Westborough Lab							
	Acenaphthene	83-32-9	ug/l	2	U	2	U
	Hexachlorobenzene	118-74-1	ug/l	2	U	2	U
	Bis(2-chloroethyl)ether	111-44-4	ug/l	2	U	2	U
	2-Chloronaphthalene	91-58-7	ug/l	2	U	2	U
	3,3'-Dichlorobenzidine	91-94-1	ug/l	5	U	5	U
	2,4-Dinitrotoluene	121-14-2	ug/l	5	U	5	U
	2,6-Dinitrotoluene	606-20-2	ug/l	5	U	5	U
	Fluoranthene	206-44-0	ug/l	2	U	2	U
	4-Chlorophenyl phenyl ether	7005-72-3	ug/l	2	U	2	U
	4-Bromophenyl phenyl ether	101-55-3	ug/l	2	U	2	U
	Bis(2-chloroisopropyl)ether	108-60-1	ug/l	2	U	2	U
	Bis(2-chloroethoxy)methane	111-91-1	ug/l	5	U	5	U
	Hexachlorobutadiene	87-68-3	ug/l	2	U	2	U
	Hexachlorocyclopentadiene	77-47-4	ug/l	20	U	20	U
	Hexachloroethane	67-72-1	ug/l	2	U	2	U
	Isophorone	78-59-1	ug/l	5	U	5	U
	Naphthalene	91-20-3	ug/l	2	U	2	U
	Nitrobenzene	98-95-3	ug/l	2	U	2	U
	NDPA/DPA	86-30-6	ug/l	2	U	2	U
	n-Nitrosodi-n-propylamine	621-64-7	ug/l	5	U	5	U
	Bis(2-ethylhexyl)phthalate	117-81-7	ug/l	3	U	3	U
	Butyl benzyl phthalate	85-68-7	ug/l	5	U	5	U
	Di-n-butylphthalate	84-74-2	ug/l	5	U	5	U
	Di-n-octylphthalate	117-84-0	ug/l	5	U	5	U
	Diethyl phthalate	84-66-2	ug/l	5	U	5	U
	Dimethyl phthalate	131-11-3	ug/l	5	U	5	U
	Benzo(a)anthracene	56-55-3	ug/l	2	U	2	U
	Benzo(a)pyrene	50-32-8	ug/l	2	U	2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	2	U	2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	2	U	2	U
	Chrysene	218-01-9	ug/l	2	U	2	U

TABLE 2.3.8-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE WATER ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	Acenaphthylene	208-96-8	ug/l	2	U	2	U
	Anthracene	120-12-7	ug/l	2	U	2	U
	Benzo(ghi)perylene	191-24-2	ug/l	2	U	2	U
	Fluorene	86-73-7	ug/l	2	U	2	U
	Phenanthrene	85-01-8	ug/l	2	U	2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	2	U	2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	2	U	2	U
	Pyrene	129-00-0	ug/l	2	U	2	U
	Biphenyl	92-52-4	ug/l	2	U	2	U
	4-Chloroaniline	106-47-8	ug/l	5	U	5	U
	2-Nitroaniline	88-74-4	ug/l	5	U	5	U
	3-Nitroaniline	99-09-2	ug/l	5	U	5	U
	4-Nitroaniline	100-01-6	ug/l	5	U	5	U
	Dibenzofuran	132-64-9	ug/l	2	U	2	U
	2-Methylnaphthalene	91-57-6	ug/l	2	U	2	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	ug/l	10	U	10	U
	Acetophenone	98-86-2	ug/l	5	U	5	U
	2,4,6-Trichlorophenol	88-06-2	ug/l	5	U	5	U
	p-Chloro-m-cresol	59-50-7	ug/l	2	U	2	U
	2-Chlorophenol	95-57-8	ug/l	2	U	2	U
	2,4-Dichlorophenol	120-83-2	ug/l	5	U	5	U
	2,4-Dimethylphenol	105-67-9	ug/l	5	U	5	U
	2-Nitrophenol	88-75-5	ug/l	10	U	10	U
	4-Nitrophenol	100-02-7	ug/l	10	U	10	U
	2,4-Dinitrophenol	51-28-5	ug/l	20	U	20	U
	4,6-Dinitro-o-cresol	534-52-1	ug/l	10	U	10	U
	Pentachlorophenol	87-86-5	ug/l	10	U	10	U
	Phenol	108-95-2	ug/l	5	U	5	U
	2-Methylphenol	95-48-7	ug/l	5	U	5	U
	3-Methylphenol/4-Methylphenol	108-39-4	ug/l	5	U	5	U
	2,4,5-Trichlorophenol	95-95-4	ug/l	5	U	5	U
	Carbazole	86-74-8	ug/l	2	U	2	U
	Benzaldehyde	100-52-7	ug/l	5	U	5	U
	Caprolactam	105-60-2	ug/l	10	U	10	U
	Atrazine	1912-24-9	ug/l	10	U	10	U
	2,3,4,6-Tetrachlorophenol	58-90-2	ug/l	5	U	5	U
Semivolatile Organics by GC/MS-SIM - Westborough Lab							
	Acenaphthene	83-32-9	ug/l	0.2	U	0.2	U
	2-Chloronaphthalene	91-58-7	ug/l	0.2	U	0.2	U
	Fluoranthene	206-44-0	ug/l	0.2	U	0.2	U
	Hexachlorobutadiene	87-68-3	ug/l	0.5	U	0.5	U
	Naphthalene	91-20-3	ug/l	0.2	U	0.2	U
	Benzo(a)anthracene	56-55-3	ug/l	0.2	U	0.2	U
	Benzo(a)pyrene	50-32-8	ug/l	0.2	U	0.2	U
	Benzo(b)fluoranthene	205-99-2	ug/l	0.2	U	0.2	U
	Benzo(k)fluoranthene	207-08-9	ug/l	0.2	U	0.2	U
	Chrysene	218-01-9	ug/l	0.2	U	0.2	U
	Acenaphthylene	208-96-8	ug/l	0.2	U	0.2	U
	Anthracene	120-12-7	ug/l	0.2	U	0.2	U
	Benzo(ghi)perylene	191-24-2	ug/l	0.2	U	0.2	U
	Fluorene	86-73-7	ug/l	0.2	U	0.2	U
	Phenanthrene	85-01-8	ug/l	0.2	U	0.2	U
	Dibenzo(a,h)anthracene	53-70-3	ug/l	0.2	U	0.2	U
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	0.2	U	0.2	U
	Pyrene	129-00-0	ug/l	0.2	U	0.2	U
	2-Methylnaphthalene	91-57-6	ug/l	0.2	U	0.2	U
	Pentachlorophenol	87-86-5	ug/l	0.8	U	0.8	U
	Hexachlorobenzene	118-74-1	ug/l	0.8	U	0.8	U
	Hexachloroethane	67-72-1	ug/l	0.8	U	0.8	U
Total Metals - Westborough Lab							
	Aluminum, Total	7429-90-5	ug/l	20	J	68	J
	Antimony, Total	7440-36-0	ug/l	50	U	50	U
	Arsenic, Total	7440-38-2	ug/l	5		2.3	J
	Barium, Total	7440-39-3	ug/l	58.6		56.8	
	Beryllium, Total	7440-41-7	ug/l	5	U	5	U
	Cadmium, Total	7440-43-9	ug/l	5	U	5	U
	Calcium, Total	7440-70-2	ug/l	49000		81000	
	Chromium, Total	7440-47-3	ug/l	2.7	J	2.6	J
	Cobalt, Total	7440-48-4	ug/l	20	U	20	U

TABLE 2.3.8-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE WATER ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	Copper, Total	7440-50-8	ug/l	5.9	J	5	J
	Iron, Total	7439-89-6	ug/l	820		480	
	Lead, Total	7439-92-1	ug/l	10	U	10	U
	Magnesium, Total	7439-95-4	ug/l	11000		17000	
	Manganese, Total	7439-96-5	ug/l	1180		938	
	Mercury, Total	7439-97-6	ug/l	0.2	U	0.2	U
	Nickel, Total	7440-02-0	ug/l	25	U	25	U
	Potassium, Total	7440-09-7	ug/l	1700	J	2700	
	Selenium, Total	7782-49-2	ug/l	10	U	10	U
	Silver, Total	7440-22-4	ug/l	7	U	7	U
	Sodium, Total	7440-23-5	ug/l	49000		69000	
	Thallium, Total	7440-28-0	ug/l	20	U	20	U
	Vanadium, Total	7440-62-2	ug/l	10	U	1	J
	Zinc, Total	7440-66-6	ug/l	50	U	9.6	J
Volatile Organics by GC/MS - Westborough Lab							
	Methylene chloride	75-09-2	ug/l	2.5	U	2.5	U
	1,1-Dichloroethane	75-34-3	ug/l	2.5	U	2.5	U
	Chloroform	67-66-3	ug/l	2.5	U	2.5	U
	Carbon tetrachloride	56-23-5	ug/l	0.5	U	0.5	U
	1,2-Dichloropropane	78-87-5	ug/l	1	U	1	U
	Dibromochloromethane	124-48-1	ug/l	0.5	U	0.5	U
	1,1,2-Trichloroethane	79-00-5	ug/l	1.5	U	1.5	U
	Tetrachloroethene	127-18-4	ug/l	0.5	U	0.5	U
	Chlorobenzene	108-90-7	ug/l	2.5	U	2.5	U
	Trichlorofluoromethane	75-69-4	ug/l	2.5	U	2.5	U
	1,2-Dichloroethane	107-06-2	ug/l	0.5	U	0.5	U
	1,1,1-Trichloroethane	71-55-6	ug/l	2.5	U	2.5	U
	Bromodichloromethane	75-27-4	ug/l	0.5	U	0.5	U
	trans-1,3-Dichloropropene	10061-02-6	ug/l	0.5	U	0.5	U
	cis-1,3-Dichloropropene	10061-01-5	ug/l	0.5	U	0.5	U
	Bromoform	75-25-2	ug/l	2	U	2	U
	1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.5	U	0.5	U
	Benzene	71-43-2	ug/l	0.5	U	0.5	U
	Toluene	108-88-3	ug/l	2.5	U	2.5	U
	Ethylbenzene	100-41-4	ug/l	2.5	U	2.5	U
	Chloromethane	74-87-3	ug/l	2.5	U	2.5	U
	Bromomethane	74-83-9	ug/l	2.5	U	2.5	U
	Vinyl chloride	75-01-4	ug/l	1	U	1	U
	Chloroethane	75-00-3	ug/l	2.5	U	2.5	U
	1,1-Dichloroethene	75-35-4	ug/l	0.5	U	0.5	U
	trans-1,2-Dichloroethene	156-60-5	ug/l	2.5	U	2.5	U
	Trichloroethene	79-01-6	ug/l	0.5	U	0.5	U
	1,2-Dichlorobenzene	95-50-1	ug/l	2.5	U	2.5	U
	1,3-Dichlorobenzene	541-73-1	ug/l	2.5	U	2.5	U
	1,4-Dichlorobenzene	106-46-7	ug/l	2.5	U	2.5	U
	Methyl tert butyl ether	1634-04-4	ug/l	2.5	U	2.5	U
	p/m-Xylene	179601-23-1	ug/l	2.5	U	2.5	U
	o-Xylene	95-47-6	ug/l	2.5	U	2.5	U
	cis-1,2-Dichloroethene	156-59-2	ug/l	2.5	U	2.5	U
	Styrene	100-42-5	ug/l	2.5	U	2.5	U
	Dichlorodifluoromethane	75-71-8	ug/l	5	U	5	U
	Acetone	67-64-1	ug/l	5	U	5	U
	Carbon disulfide	75-15-0	ug/l	5	U	5	U
	2-Butanone	78-93-3	ug/l	5	U	5	U
	4-Methyl-2-pentanone	108-10-1	ug/l	5	U	5	U
	2-Hexanone	591-78-6	ug/l	5	U	5	U
	Bromochloromethane	74-97-5	ug/l	2.5	U	2.5	U
	1,2-Dibromoethane	106-93-4	ug/l	2	U	2	U
	1,2-Dibromo-3-chloropropane	96-12-8	ug/l	2.5	U	2.5	U
	Isopropylbenzene	98-82-8	ug/l	2.5	U	2.5	U
	1,2,3-Trichlorobenzene	87-61-6	ug/l	2.5	U	2.5	U
	1,2,4-Trichlorobenzene	120-82-1	ug/l	2.5	U	2.5	U
	Methyl Acetate	79-20-9	ug/l	2	U	2	U
	Cyclohexane	110-82-7	ug/l	10	U	10	U
	1,4-Dioxane	123-91-1	ug/l	250	U	250	U
	Freon-113	76-13-1	ug/l	2.5	U	2.5	U
	Methyl cyclohexane	108-87-2	ug/l	10	U	10	U

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
ug/l - Micrograms per Liter;

TABLE 2.3.8-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SURFACE WATER ANALYTICAL DATA
(DETECTED COMPOUNDS ONLY - UNVALIDATED)

	LOCATION				SW-1_06292015		SW-2_06292015	
	SAMPLING DATE				6/29/2015		6/29/2015	
	LAB SAMPLE ID				L1514840-01		L1514840-02	
		CasNum	NY-AWQS SW	Units	Result	Qual	Result	Qual
General Chemistry - Westborough Lab								
	Cyanide, Total	57-12-5	22	ug/l	3	J	3	J
Total Metals - Westborough Lab								
	Aluminum, Total	7429-90-5	100	ug/l	20	J	68	J
	Arsenic, Total	7440-38-2	50	ug/l	5		2.3	J
	Barium, Total	7440-39-3	1000	ug/l	58.6		56.8	
	Calcium, Total	7440-70-2	NS	ug/l	49000		81000	
	Chromium, Total	7440-47-3	50	ug/l	2.7	J	2.6	J
	Copper, Total	7440-50-8	200	ug/l	5.9	J	5	J
	Iron, Total	7439-89-6	300	ug/l	820		480	
	Magnesium, Total	7439-95-4	35000	ug/l	11000		17000	
	Manganese, Total	7439-96-5	300	ug/l	1180		938	
	Potassium, Total	7440-09-7	NS	ug/l	1700	J	2700	
	Sodium, Total	7440-23-5	NS	ug/l	49000		69000	
	Vanadium, Total	7440-62-2	14	ug/l	10	U	1	J
	Zinc, Total	7440-66-6	2000 GV	ug/l	50	U	9.6	J

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
ug/l - Micrograms per Liter;
GV - Guidance value per the Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1;
Values shaded and in **BOLD** denote exceedences of the Division of Water TOGS 1.1.1 Surface Water Standards and Guidance Values.

TABLE 2.3.9-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SEDIMENT ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	LOCATION			SED-1_06292015		SED-2_06292015	
	SAMPLING DATE			6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-11		L1514840-12	
		CasNum	Units	Results	Qual	Results	Qual
General Chemistry							
	Solids, Total	NONE	%	59.9		83.8	
	Cyanide, Total	57-12-5	mg/kg	0.46	J	0.33	J
Organochlorine Pesticides by GC							
	Delta-BHC	319-86-8	mg/kg	0.00254	U	0.00182	U
	Lindane	58-89-9	mg/kg	0.00106	U	0.000758	U
	Alpha-BHC	319-84-6	mg/kg	0.00106	U	0.000758	U
	Beta-BHC	319-85-7	mg/kg	0.00254	U	0.00182	U
	Heptachlor	76-44-8	mg/kg	0.00127	U	0.00091	U
	Aldrin	309-00-2	mg/kg	0.00254	U	0.00182	U
	Heptachlor epoxide	1024-57-3	mg/kg	0.00476	U	0.00341	U
	Endrin	72-20-8	mg/kg	0.00106	U	0.000758	U
	Endrin ketone	53494-70-5	mg/kg	0.00254	U	0.00182	U
	Dieldrin	60-57-1	mg/kg	0.00159	U	0.00114	U
	4,4'-DDE	72-55-9	mg/kg	0.000599	J	0.00182	U
	4,4'-DDD	72-54-8	mg/kg	0.00254	U	0.00182	U
	4,4'-DDT	50-29-3	mg/kg	0.00344	J	0.00341	U
	Endosulfan I	959-98-8	mg/kg	0.00254	U	0.00182	U
	Endosulfan II	33213-65-9	mg/kg	0.00254	U	0.00182	U
	Endosulfan sulfate	1031-07-8	mg/kg	0.00106	U	0.000758	U
	Methoxychlor	72-43-5	mg/kg	0.00476	U	0.00341	U
	Toxaphene	8001-35-2	mg/kg	0.0476	U	0.0341	U
	cis-Chlordane	5103-71-9	mg/kg	0.00318	U	0.00227	U
	trans-Chlordane	5103-74-2	mg/kg	0.00318	U	0.00227	U
	Chlordane	57-74-9	mg/kg	0.0206	U	0.0148	U
Polychlorinated Biphenyls by GC							
	Aroclor 1016	12674-11-2	mg/kg	0.0556	U	0.0397	U
	Aroclor 1221	11104-28-2	mg/kg	0.0556	U	0.0397	U
	Aroclor 1232	11141-16-5	mg/kg	0.0556	U	0.0397	U
	Aroclor 1242	53469-21-9	mg/kg	0.0556	U	0.0397	U
	Aroclor 1248	12672-29-6	mg/kg	0.0556	U	0.0397	U
	Aroclor 1254	11097-69-1	mg/kg	0.0556	U	0.0397	U
	Aroclor 1260	11096-82-5	mg/kg	0.112		0.0397	U
	Aroclor 1262	37324-23-5	mg/kg	0.0556	U	0.0397	U
	Aroclor 1268	11100-14-4	mg/kg	0.0556	U	0.0397	U
	PCBs, Total	1336-36-3	mg/kg	0.112		0.0397	U
Semivolatile Organics by GC/MS							
	Acenaphthene	83-32-9	mg/kg	0.44	U	0.15	U
	Hexachlorobenzene	118-74-1	mg/kg	0.33	U	0.12	U
	Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.49	U	0.17	U
	2-Chloronaphthalene	91-58-7	mg/kg	0.54	U	0.19	U
	3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.54	U	0.19	U
	2,4-Dinitrotoluene	121-14-2	mg/kg	0.54	U	0.19	U
	2,6-Dinitrotoluene	606-20-2	mg/kg	0.54	U	0.19	U
	Fluoranthene	206-44-0	mg/kg	0.33	U	0.12	U
	4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	0.54	U	0.19	U
	4-Bromophenyl phenyl ether	101-55-3	mg/kg	0.54	U	0.19	U
	Bis(2-chloroisopropyl)ether	108-60-1	mg/kg	0.65	U	0.23	U
	Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.59	U	0.21	U
	Hexachlorobutadiene	87-68-3	mg/kg	0.54	U	0.19	U
	Hexachlorocyclopentadiene	77-47-4	mg/kg	1.6	U	0.55	U
	Hexachloroethane	67-72-1	mg/kg	0.44	U	0.15	U
	Isophorone	78-59-1	mg/kg	0.49	U	0.17	U
	Naphthalene	91-20-3	mg/kg	0.54	U	0.19	U
	Nitrobenzene	98-95-3	mg/kg	0.49	U	0.17	U
	NDPA/DPA	86-30-6	mg/kg	0.44	U	0.15	U
	n-Nitrosodi-n-propylamine	621-64-7	mg/kg	0.54	U	0.19	U
	Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	4.9		0.19	U
	Butyl benzyl phthalate	85-68-7	mg/kg	0.54	U	0.19	U
	Di-n-butylphthalate	84-74-2	mg/kg	0.54	U	0.19	U
	Di-n-octylphthalate	117-84-0	mg/kg	0.54	U	0.19	U
	Diethyl phthalate	84-66-2	mg/kg	0.54	U	0.19	U
	Dimethyl phthalate	131-11-3	mg/kg	0.54	U	0.19	U
	Benzo(a)anthracene	56-55-3	mg/kg	0.33	U	0.12	U
	Benzo(a)pyrene	50-32-8	mg/kg	0.44	U	0.15	U
	Benzo(b)fluoranthene	205-99-2	mg/kg	0.33	U	0.12	U
	Benzo(k)fluoranthene	207-08-9	mg/kg	0.33	U	0.12	U
	Chrysene	218-01-9	mg/kg	0.33	U	0.12	U
	Acenaphthylene	208-96-8	mg/kg	0.44	U	0.15	U
	Anthracene	120-12-7	mg/kg	0.33	U	0.12	U
	Benzo(ghi)perylene	191-24-2	mg/kg	0.44	U	0.15	U
	Fluorene	86-73-7	mg/kg	0.54	U	0.19	U
	Phenanthrene	85-01-8	mg/kg	0.33	U	0.12	U
	Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.33	U	0.12	U
	Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.44	U	0.15	U
	Pyrene	129-00-0	mg/kg	0.33	U	0.12	U
	Biphenyl	92-52-4	mg/kg	1.2	U	0.44	U
	4-Chloroaniline	106-47-8	mg/kg	0.54	U	0.19	U
	2-Nitroaniline	88-74-4	mg/kg	0.54	U	0.19	U
	3-Nitroaniline	99-09-2	mg/kg	0.54	U	0.19	U
	4-Nitroaniline	100-01-6	mg/kg	0.54	U	0.19	U
	Dibenzofuran	132-64-9	mg/kg	0.54	U	0.19	U
	2-Methylnaphthalene	91-57-6	mg/kg	0.65	U	0.23	U
	1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.54	U	0.19	U

TABLE 2.3.9-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SEDIMENT ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	LOCATION			SED-1_06292015		SED-2_06292015	
	SAMPLING DATE			6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-11		L1514840-12	
		CasNum	Units	Results	Qual	Results	Qual
	Acetophenone	98-86-2	mg/kg	0.54	U	0.19	U
	2,4,6-Trichlorophenol	88-06-2	mg/kg	0.33	U	0.12	U
	p-Chloro-m-cresol	59-50-7	mg/kg	0.54	U	0.19	U
	2-Chlorophenol	95-57-8	mg/kg	0.54	U	0.19	U
	2,4-Dichlorophenol	120-83-2	mg/kg	0.49	U	0.17	U
	2,4-Dimethylphenol	105-67-9	mg/kg	0.54	U	0.19	U
	2-Nitrophenol	88-75-5	mg/kg	1.2	U	0.42	U
	4-Nitrophenol	100-02-7	mg/kg	0.76	U	0.27	U
	2,4-Dinitrophenol	51-28-5	mg/kg	2.6	U	0.92	U
	4,6-Dinitro-o-cresol	534-52-1	mg/kg	1.4	U	0.5	U
	Pentachlorophenol	87-86-5	mg/kg	0.44	U	0.15	U
	Phenol	108-95-2	mg/kg	0.54	U	0.19	U
	2-Methylphenol	95-48-7	mg/kg	0.54	U	0.19	U
	3-Methylphenol/4-Methylphenol	108-39-4	mg/kg	0.78	U	0.28	U
	2,4,5-Trichlorophenol	95-95-4	mg/kg	0.54	U	0.19	U
	Carbazole	86-74-8	mg/kg	0.54	U	0.19	U
	Benzaldehyde	100-52-7	mg/kg	0.72	U	0.25	U
	Caprolactam	105-60-2	mg/kg	0.19	J	0.19	U
	Atrazine	1912-24-9	mg/kg	0.44	U	0.15	U
	2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.54	U	0.19	U
Total Metals							
	Aluminum, Total	7429-90-5	mg/kg	10000		9900	
	Antimony, Total	7440-36-0	mg/kg	1.3	J	4.8	U
	Arsenic, Total	7440-38-2	mg/kg	7		6.4	
	Barium, Total	7440-39-3	mg/kg	83		46	
	Beryllium, Total	7440-41-7	mg/kg	0.42	J	0.35	J
	Cadmium, Total	7440-43-9	mg/kg	4.2		0.95	U
	Calcium, Total	7440-70-2	mg/kg	11000		12000	
	Chromium, Total	7440-47-3	mg/kg	20		12	
	Cobalt, Total	7440-48-4	mg/kg	9.1		8.2	
	Copper, Total	7440-50-8	mg/kg	46		22	
	Iron, Total	7439-89-6	mg/kg	18000		22000	
	Lead, Total	7439-92-1	mg/kg	87		10	
	Magnesium, Total	7439-95-4	mg/kg	4300		4800	
	Manganese, Total	7439-96-5	mg/kg	480		560	
	Mercury, Total	7439-97-6	mg/kg	0.1	J	0.15	
	Nickel, Total	7440-02-0	mg/kg	21		17	
	Potassium, Total	7440-09-7	mg/kg	980		750	
	Selenium, Total	7782-49-2	mg/kg	0.48	J	1.9	U
	Silver, Total	7440-22-4	mg/kg	1.3	U	0.95	U
	Sodium, Total	7440-23-5	mg/kg	560		92	J
	Thallium, Total	7440-28-0	mg/kg	2.6	U	1.9	U
	Vanadium, Total	7440-62-2	mg/kg	21		13	
	Zinc, Total	7440-66-6	mg/kg	340		54	
Volatile Organics by 8260/5035							
	Methylene chloride	75-09-2	mg/kg	0.017	U	0.0092	U
	1,1-Dichloroethane	75-34-3	mg/kg	0.0025	U	0.0014	U
	Chloroform	67-66-3	mg/kg	0.0025	U	0.0014	U
	Carbon tetrachloride	56-23-5	mg/kg	0.0017	U	0.00092	U
	1,2-Dichloropropane	78-87-5	mg/kg	0.0058	U	0.0032	U
	Dibromochloromethane	124-48-1	mg/kg	0.0017	U	0.00092	U
	1,1,2-Trichloroethane	79-00-5	mg/kg	0.0025	U	0.0014	U
	Tetrachloroethene	127-18-4	mg/kg	0.0017	U	0.00092	U
	Chlorobenzene	108-90-7	mg/kg	0.0017	U	0.00092	U
	Trichlorofluoromethane	75-69-4	mg/kg	0.0083	U	0.0046	U
	1,2-Dichloroethane	107-06-2	mg/kg	0.0017	U	0.00092	U
	1,1,1-Trichloroethane	71-55-6	mg/kg	0.0017	U	0.00092	U
	Bromodichloromethane	75-27-4	mg/kg	0.0017	U	0.00092	U
	trans-1,3-Dichloropropene	10061-02-6	mg/kg	0.0017	U	0.00092	U
	cis-1,3-Dichloropropene	10061-01-5	mg/kg	0.0017	U	0.00092	U
	Bromoform	75-25-2	mg/kg	0.0067	U	0.0037	U
	1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.0017	U	0.00092	U
	Benzene	71-43-2	mg/kg	0.0017	U	0.00092	U
	Toluene	108-88-3	mg/kg	0.0055		0.0014	U
	Ethylbenzene	100-41-4	mg/kg	0.0017	U	0.00092	U
	Chloromethane	74-87-3	mg/kg	0.0083	U	0.0046	U
	Bromomethane	74-83-9	mg/kg	0.0033	U	0.0018	U
	Vinyl chloride	75-01-4	mg/kg	0.0033	U	0.0018	U
	Chloroethane	75-00-3	mg/kg	0.0033	U	0.0018	U
	1,1-Dichloroethene	75-35-4	mg/kg	0.0017	U	0.00092	U
	trans-1,2-Dichloroethene	156-60-5	mg/kg	0.0025	U	0.0014	U
	Trichloroethene	79-01-6	mg/kg	0.0017	U	0.00092	U
	1,2-Dichlorobenzene	95-50-1	mg/kg	0.0083	U	0.0046	U
	1,3-Dichlorobenzene	541-73-1	mg/kg	0.0083	U	0.0046	U
	1,4-Dichlorobenzene	106-46-7	mg/kg	0.0083	U	0.0046	U
	Methyl tert butyl ether	1634-04-4	mg/kg	0.0033	U	0.0018	U
	p/m-Xylene	179601-23-1	mg/kg	0.0033	U	0.0018	U
	o-Xylene	95-47-6	mg/kg	0.0033	U	0.0018	U
	cis-1,2-Dichloroethene	156-59-2	mg/kg	0.0017	U	0.00092	U
	Styrene	100-42-5	mg/kg	0.0033	U	0.0018	U
	Dichlorodifluoromethane	75-71-8	mg/kg	0.017	U	0.0092	U
	Acetone	67-64-1	mg/kg	0.19		0.022	
	Carbon disulfide	75-15-0	mg/kg	0.0073	J	0.0092	U
	2-Butanone	78-93-3	mg/kg	0.044		0.0035	J

TABLE 2.3.9-1
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SEDIMENT ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	LOCATION			SED-1_06292015		SED-2_06292015	
	SAMPLING DATE			6/29/2015		6/29/2015	
	LAB SAMPLE ID			L1514840-11		L1514840-12	
		CasNum	Units	Results	Qual	Results	Qual
	4-Methyl-2-pentanone	108-10-1	mg/kg	0.017	U	0.0092	U
	2-Hexanone	591-78-6	mg/kg	0.017	U	0.0092	U
	Bromochloromethane	74-97-5	mg/kg	0.0083	U	0.0046	U
	1,2-Dibromoethane	106-93-4	mg/kg	0.0067	U	0.0037	U
	1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0.0083	U	0.0046	U
	Isopropylbenzene	98-82-8	mg/kg	0.0017	U	0.00092	U
	1,2,3-Trichlorobenzene	87-61-6	mg/kg	0.0083	U	0.0046	U
	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0083	U	0.0046	U
	Methyl Acetate	79-20-9	mg/kg	0.033	U	0.018	U
	Cyclohexane	110-82-7	mg/kg	0.033	U	0.018	U
	1,4-Dioxane	123-91-1	mg/kg	0.17	U	0.092	U
	Freon-113	76-13-1	mg/kg	0.033	U	0.018	U
	Methyl cyclohexane	108-87-2	mg/kg	0.0067	U	0.0037	U

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection;
J - Indicates an estimated value below the method detection limit;
mg/kg - Milligrams per Liter;

TABLE 2.3.9-2
USAI LIGHTING FACILITY
NEW WINDSOR, NEW YORK

SEDIMENT ANALYTICAL DATA
(ALL RESULTS - UNVALIDATED)

	LOCATION						SED-1_06292015		SED-2_06292015	
	SAMPLING DATE						6/29/2015		6/29/2015	
	LAB SAMPLE ID						L1514840-11		L1514840-12	
		CasNum	Units	CLASS A	CLASS B	CLASS C	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	%	NS	NS	NS	59.9		83.8	
	Cyanide, Total	57-12-5	mg/kg	NS	NS	NS	0.46	J	0.33	J
Organochlorine Pesticides by GC										
	4,4'-DDE	72-55-9	mg/kg	< 0.044	0.44 - 48	> 49	0.000599	J	0.00182	U
	4,4'-DDT	50-29-3	mg/kg	< 0.044	0.44 - 48	> 49	0.00344	J	0.00341	U
Polychlorinated Biphenyls by GC										
	Aroclor 1260	11096-82-5	mg/kg	See total PCBs	See total PCBs	See total PCBs	0.112		0.0397	U
	PCBs, Total	1336-36-3	mg/kg	< 0.1	0.1 - 1	> 1	0.112		0.0397	U
Semivolatile Organics by GC/MS										
	Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	< 360	> 360	NS	4.9		0.19	U
	Caprolactam	105-60-2	mg/kg	NS	NS	NS	0.19	J	0.19	U
Total Metals										
	Aluminum, Total	7429-90-5	mg/kg	NS	NS	NS	10000		9900	
	Antimony, Total	7440-36-0	mg/kg	NS	NS	NS	1.3	J	4.8	U
	Arsenic, Total	7440-38-2	mg/kg	< 10	10 -33	> 33	7		6.4	
	Barium, Total	7440-39-3	mg/kg	NS	NS	NS	83		46	
	Beryllium, Total	7440-41-7	mg/kg	NS	NS	NS	0.42	J	0.35	J
	Cadmium, Total	7440-43-9	mg/kg	< 1	1 - 5	> 5	4.2		0.95	U
	Calcium, Total	7440-70-2	mg/kg	NS	NS	NS	11000		12000	
	Chromium, Total	7440-47-3	mg/kg	NS	NS	NS	20		12	
	Cobalt, Total	7440-48-4	mg/kg	NS	NS	NS	9.1		8.2	
	Copper, Total	7440-50-8	mg/kg	< 32	32 - 150	> 150	46		22	
	Iron, Total	7439-89-6	mg/kg	NS	NS	NS	18000		22000	
	Lead, Total	7439-92-1	mg/kg	< 36	36 - 130	> 130	87		10	
	Magnesium, Total	7439-95-4	mg/kg	NS	NS	NS	4300		4800	
	Manganese, Total	7439-96-5	mg/kg	NS	NS	NS	480		560	
	Mercury, Total	7439-97-6	mg/kg	< 0.2	0.2 - 1	> 49	0.1	J	0.15	
	Nickel, Total	7440-02-0	mg/kg	< 23	23 - 49	> 49	21		17	
	Potassium, Total	7440-09-7	mg/kg	NS	NS	NS	980		750	
	Selenium, Total	7782-49-2	mg/kg	NS	NS	NS	0.48	J	1.9	U
	Sodium, Total	7440-23-5	mg/kg	NS	NS	NS	560		92	J
	Vanadium, Total	7440-62-2	mg/kg	NS	NS	NS	21		13	
	Zinc, Total	7440-66-6	mg/kg	< 120	120 - 460	> 460	340		54	
Volatile Organics by 8260/5035										
	Toluene	108-88-3	mg/kg	< 0.930	0.930 - 4.5	> 4.5	0.0055		0.0014	U
	Acetone	67-64-1	mg/kg	NS	NS	NS	0.19		0.022	
	Carbon disulfide	75-15-0	mg/kg	NS	NS	NS	0.0073	J	0.0092	U
	2-Butanone	78-93-3	mg/kg	NS	NS	NS	0.044		0.0035	J

Notes:
U - Compound/analyte analyzed, but not detected above limit of laboratory detection.
J - Indicates an estimated value below the method detection limit.
Class A sediments are considered to be of low risk to aquatic life.
Class B sediments are slightly to moderatly contaminated and additional testing is required to evaluate the potential risks to aquatic life.
Class C sediments are considered to be highly contaminated and likely to pose a risk to aquatic life.
NS - denotes no standard per NYSDEC Sediment and Assessment of Contaminated Sediment, June 24, 2014, Table 5 Freshwater Sediment Guidance Values.
mg/kg - Milligrams per Kilogram.

TABLE 2.5.1-1
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				151123-SW-3		151123-SW-4		151123-FL-2		151124-SW-5		FD151124 (SW-5)	
	SAMPLING DATE				11/23/2015		11/23/2015		11/23/2015		11/24/2015		11/24/2015	
	LAB SAMPLE ID				L1531075-01		L1531075-02		L1531075-03		L1531075-04		L1531075-05	
	SAMPLE TYPE				End Point		End Point		End Point		End Point		Field Duplicate	
	SAMPLE DEPTH (ft.bgs)				4.5'		4'		5.5'		3.5'		3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry - Westborough Lab														
	Solids, Total	NONE	NS	%	81.9		83.2		83.2		87.4		84.2	
Semivolatile Organics by GC/MS - Westborough Lab														
	Acenaphthene	83-32-9	500	mg/kg	0.25		0.069	J	0.16	U	0.15	U	0.15	U
	Fluoranthene	206-44-0	500	mg/kg	1.2		0.075	J	0.12	U	0.21		0.17	
	Naphthalene	91-20-3	500	mg/kg	0.32		0.2	U	0.19	U	0.19	U	0.19	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.17	J	0.2	U	0.19	U	0.19	U	0.19	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.26		0.12	U	0.12	U	0.12		0.077	J
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.22		0.16	U	0.16	U	0.12	J	0.077	J
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.25		0.12	U	0.12	U	0.16		0.096	J
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.094	J	0.12	U	0.12	U	0.058	J	0.038	J
	Chrysene	218-01-9	56	mg/kg	0.23		0.12	U	0.12	U	0.13		0.079	J
	Anthracene	120-12-7	500	mg/kg	0.26		0.12	U	0.12	U	0.032	J	0.12	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.13	J	0.16	U	0.16	U	0.083	J	0.052	J
	Fluorene	86-73-7	500	mg/kg	0.36		0.12	J	0.19	U	0.19	U	0.19	U
	Phenanthrene	85-01-8	500	mg/kg	1.4		0.25		0.12	U	0.12		0.14	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.056	J	0.12	U	0.12	U	0.11	U	0.12	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.21		0.16	U	0.16	U	0.084	J	0.054	J
	Pyrene	129-00-0	500	mg/kg	0.95		0.072	J	0.12	U	0.21		0.15	
	Dibenzofuran	132-64-9	350	mg/kg	0.16	J	0.2	U	0.19	U	0.19	U	0.19	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.16	J	2		0.23	U	0.23	U	0.23	U
	2,4-Dinitrophenol	51-28-5	20 (PER)	mg/kg	0.95	R	0.95	R	0.93	R	0.91	R	0.92	R
Total Metals - Westborough Lab														
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		13000		7900		9000		9200	
	Antimony, Total	7440-36-0	NS	mg/kg	1.4	J	1.3	J	0.95	J	1.1	J	1.1	J
	Arsenic, Total	7440-38-2	16	mg/kg	6.6		12		4.1		4		3.9	
	Barium, Total	7440-39-3	400	mg/kg	82		160		26		36		38	
	Beryllium, Total	7440-41-7	590	mg/kg	0.59		0.46	J	0.27	J	0.34	J	0.34	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.96	UJ	0.95	UJ	0.93	UJ	0.91	UJ	0.93	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	2500		11000		16000		11000		10000	
	Chromium, Total	7440-47-3	1500	mg/kg	18	J	15	J	10	J	12	J	12	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12	J	9.7	J	6.6	J	8	J	8.2	J
	Copper, Total	7440-50-8	270	mg/kg	27	J	26	J	20	J	29	J	30	J
	Iron, Total	7439-89-6	NS	mg/kg	25000		23000		15000		17000		18000	
	Lead, Total	7439-92-1	1,000	mg/kg	8.6	J	7.7		9.1	J	24	J	25	J
	Magnesium, Total	7439-95-4	NS	mg/kg	4700	J	4800		4200	J	4700	J	4800	J
	Manganese, Total	7439-96-5	10,000	mg/kg	270		1000		390		450		380	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.02	J	0.03	J	0.08	U	0.05	J	0.06	J
	Nickel, Total	7440-02-0	310	mg/kg	24		21	J	14	J	18	J	17	
	Potassium, Total	7440-09-7	NS	mg/kg	1100		1200		410		510		530	J

TABLE 2.5.1-1
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				151123-SW-3		151123-SW-4		151123-FL-2		151124-SW-5		FD151124 (SW-5)	
	SAMPLING DATE				11/23/2015		11/23/2015		11/23/2015		11/24/2015		11/24/2015	
	LAB SAMPLE ID				L1531075-01		L1531075-02		L1531075-03		L1531075-04		L1531075-05	
	SAMPLE TYPE				End Point		End Point		End Point		End Point		Field Duplicate	
	SAMPLE DEPTH (ft.bgs)				4.5'		4'		5.5'		3.5'		3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Sodium, Total	7440-23-5	NS	mg/kg	79	J	270		55	J	51	J	58	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.9	UJ	1.9	UJ	1.9	UJ	1.8	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17	J	20	J	10	J	12	J	12	J
	Zinc, Total	7440-66-6	10,000	mg/kg	68	J	60	J	58	J	76	J	84	J
Volatile Organics by 8260/5035 - Westborough Lab														
	Trichlorofluoromethane	75-69-4	NS	mg/kg	2.9	U	0.57	U	0.59	U	0.0044	UJ	0.0046	UJ
	Benzene	71-43-2	44	mg/kg	0.57	U	0.26		0.052	J	0.00088	U	0.00093	U
	Toluene	108-88-3	500	mg/kg	0.86	U	0.03	J	0.035	J	0.0013	U	0.0014	U
	Chloroethane	75-00-3	NS	mg/kg	1.1	UJ	0.23	U	0.24	U	0.0018	UJ	0.0018	UJ
	Methyl tert butyl ether	1634-04-4	500	mg/kg	1.1	U	0.23	U	0.24	U	0.0062		0.0052	
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	1.1	U	0.053	J	0.12	J	0.0018	U	0.0018	U
	Acetone	67-64-1	500	mg/kg	5.7	U	1.1	U	1.2	U	0.024	J	0.022	J
	4-Methyl-2-pentanone	108-10-1	NS	mg/kg	5.7	U	1.1	UJ	1.2	U	0.0088	U	0.0093	U
	2-Hexanone	591-78-6	NS	mg/kg	5.7	UJ	1.1	UJ	1.2	UJ	0.0088	U	0.0093	U
	Bromochloromethane	74-97-5	NS	mg/kg	2.9	U	0.57	U	0.59	U	0.0044	U	0.0046	U
	Isopropylbenzene	98-82-8	NS	mg/kg	1.8		0.6		0.088	J	0.00088	U	0.00093	U
	Cyclohexane	110-82-7	NS	mg/kg	2.9	J	0.77	J	0.27	J	0.018	U	0.018	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	4.3		1.1		0.53		0.0035	U	0.0037	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-2a
SS-15 EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				FD11232015 (SW-W)		PCB-SW-N		PCB-SW-W	
	SAMPLING DATE				11/23/2015		11/23/2015		11/23/2015	
	LAB SAMPLE ID				L1531076-01		L1531076-02		L1531076-03	
	SAMPLE TYPE				Field Duplicate		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~0.5'		~0.5'		~0.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	91.3		87.2		90.6	
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	1.25		0.252		1.5	J
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.344	J	0.192		0.339	
	PCBs, Total	1336-36-3	10 (Subsurface)	mg/kg	1.59	J	0.444		1.84	J

	LOCATION				PCB-SW-S		PCB-SW-E		PCB-FL-1	
	SAMPLING DATE				11/23/2015		11/23/2015		11/23/2015	
	LAB SAMPLE ID				L1531076-04		L1531076-05		L1531076-06	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~0.5'		~0.5'		1.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	90.7		90.4		87.2	
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	1.59	J	1.52	J	40.5	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.301		0.496	J	8.34	J
	PCBs, Total	1336-36-3	10 (Subsurface)	mg/kg	1.89	J	1.87	J	48.8	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"NS" denotes no standard per 6 NYCRR Part 375.
All of these end point samples were excavated. See Table 2.5.1-2b for end point samples after further excavation.

TABLE 2.5.1-2b
SS-15 EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				121055-15-WEST WALL		121055-15-EAST WALL		121055-15-BOTTOM WALL	
	SAMPLING DATE				12/10/2015		12/10/2015		12/10/2015	
	LAB SAMPLE ID				L1532584-01		L1532584-02		L1532584-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~1.5'		~1.5'		3.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	85.1		83.6		90.1	
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0655		0.0993		0.236	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0144	J	0.0366	J	0.0496	
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.0799	J	0.136	J	0.286	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"NS" denotes no standard per 6 NYCRR Part 375.

TABLE 2.5.1-3
MISC. PIPE EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				151125-PIPE-1		151125-PIPE-2		151125-PIPE-3	
	SAMPLING DATE				11/25/2015		11/25/2015		11/25/2015	
	LAB SAMPLE ID				L1531236-01		L1531236-02		L1531236-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.5'		4.0'		5.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry - Westborough Lab										
	Solids, Total	NONE	NS	%	82.3		84.2		82	
Semivolatile Organics by GC/MS - Westborough Lab										
	Acenaphthene	83-32-9	500	mg/kg	6.4		0.16	U	1.3	
	Fluoranthene	206-44-0	500	mg/kg	56		0.12	U	7.8	
	Hexachlorocyclopentadiene	77-47-4	10 (PER)	mg/kg	1.1	UJ	0.56	UJ	0.57	UJ
	Naphthalene	91-20-3	500	mg/kg	2.4		0.2	U	0.58	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	20		0.12	U	2.8	
	Benzo(a)pyrene	50-32-8	1	mg/kg	21		0.16	U	2.7	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	24		0.12	U	3.2	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	8.7		0.12	U	1.2	
	Chrysene	218-01-9	56	mg/kg	21		0.12	U	2.8	
	Anthracene	120-12-7	500	mg/kg	11		0.044	J	1.9	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	14		0.16	U	1.6	
	Fluorene	86-73-7	500	mg/kg	7.5		0.2	U	1.2	
	Phenanthrene	85-01-8	500	mg/kg	54	E	0.36		7.7	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	3.1		0.12	U	0.34	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	16		0.16	U	1.7	
	Pyrene	129-00-0	500	mg/kg	47		0.077	J	7	
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.31	J	0.44	U	0.083	J
	Dibenzofuran	132-64-9	350	mg/kg	3.7		0.2	U	0.56	
	2-Methylnaphthalene	91-57-6	NS	mg/kg	1.8		0.23	U	0.27	
	2,4-Dinitrophenol	51-28-5	20 (PER)	mg/kg	1.9	U	0.94	R	0.95	U
	Phenol	108-95-2	500	mg/kg	0.24	J	0.2	U	0.2	U
	3-Methylphenol/4-Methylphenol	108-39-4	500	mg/kg	0.32	J	0.28	U	0.28	U
	Carbazole	86-74-8	NS	mg/kg	3.3		0.2	U	0.7	
Total Metals - Westborough Lab										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	57000	J	10000	J	11000	J
	Arsenic, Total	7440-38-2	16	mg/kg	22		2.8		10	
	Barium, Total	7440-39-3	400	mg/kg	300		41		55	
	Beryllium, Total	7440-41-7	590	mg/kg	2.5		0.41	J	0.46	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	4.1	UJ	0.94	UJ	0.97	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	22000	J	16000	J	7300	J
	Chromium, Total	7440-47-3	1500	mg/kg	75		13		14	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	46		8.6		11	
	Copper, Total	7440-50-8	270	mg/kg	120		24		28	

TABLE 2.5.1-3
MISC. PIPE EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				151125-PIPE-1		151125-PIPE-2		151125-PIPE-3	
	SAMPLING DATE				11/25/2015		11/25/2015		11/25/2015	
	LAB SAMPLE ID				L1531236-01		L1531236-02		L1531236-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.5'		4.0'		5.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
	Iron, Total	7439-89-6	NS	mg/kg	100000	J	20000	J	22000	J
	Lead, Total	7439-92-1	1000	mg/kg	23		4.8		6.1	
	Magnesium, Total	7439-95-4	NS	mg/kg	19000	J	5400	J	4400	J
	Manganese, Total	7439-96-5	10000	mg/kg	1800	J	840	J	540	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.05	J	0.04	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	98		19		23	
	Potassium, Total	7440-09-7	NS	mg/kg	4000		700		770	
	Sodium, Total	7440-23-5	NS	mg/kg	320	J	70	J	63	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	8.2	UJ	1.9	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	73		13		15	
	Zinc, Total	7440-66-6	10000	mg/kg	270		53		62	
Volatile Organics by 8260/5035 - Westborough Lab										
	Benzene	71-43-2	44	mg/kg	0.019	J	0.11	U	0.057	U
	Toluene	108-88-3	500	mg/kg	0.018	J	0.11	J	0.014	J
	Ethylbenzene	100-41-4	390	mg/kg	0.016	J	0.11	U	0.057	U
	Chloroethane	75-00-3	NS	mg/kg	0.11	UJ	0.22	UJ	0.11	UJ
	p/m-Xylene	179601-23-1	0.26 (1)	mg/kg	0.11	U	0.13	J	0.11	U
	2-Hexanone	591-78-6	NS	mg/kg	0.57	UJ	1.1	UJ	0.57	UJ
	Isopropylbenzene	98-82-8	NS	mg/kg	0.019	J	0.14		0.057	U
	Cyclohexane	110-82-7	NS	mg/kg	0.054	J	2.2	U	1.1	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.14	J	0.61		0.11	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"E" is a laboratory qualifier that denotes concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrumer
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard for p/m-Xylene is for total xylenes.
"PER" denotes protection of ecological resources SCO per CP-51.
"NS" denotes no standard per 6 NYCRR Part 375.

TABLE 2.5.1-4
8,000 GAL. UST EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				TANK-SW-SOUTH		TANK-SW-WEST		TANK-SW-EAST		TANK-SW-NORTH	
	SAMPLING DATE				12/4/2015		12/4/2015		12/4/2015		12/4/2015	
	LAB SAMPLE ID				L1532044-01		L1532044-02		L1532044-03		L1532044-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~ 4.0'		~ 4.0'		~ 4.0'		~ 4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry - Westborough Lab												
	Solids, Total	NONE	NS	%	86.6		85.2		87.5		90.7	
Polychlorinated Biphenyls by GC - Westborough Lab												
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0754		6.1		0.237		0.814	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0485		1.09		0.0859	J	0.174	J
	PCBs, Total	1336-36-3	1 (Surface) / 10 (Subsurface)	mg/kg	0.124		7.19		0.323	J	0.988	J
Semivolatile Organics by GC/MS - Westborough Lab												
	Fluoranthene	206-44-0	500	mg/kg	0.048	J	0.12	U	0.12		0.044	J
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	0.16	J	0.19	U	0.13	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.11	U	0.12	U	0.056	J	0.11	U
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.15	U	0.15	U	0.053	J	0.14	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.046	J	0.12	U	0.079	J	0.038	J
	Chrysene	218-01-9	56	mg/kg	0.039	J	0.12	U	0.058	J	0.11	U
	Anthracene	120-12-7	500	mg/kg	0.046	J	0.04	J	0.11	U	0.11	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.044	J	0.15	U	0.15	U	0.14	U
	Phenanthrene	85-01-8	500	mg/kg	0.044	J	0.038	J	0.076	J	0.11	U
	Pyrene	129-00-0	500	mg/kg	0.056	J	0.12	U	0.11		0.039	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.23	U	0.1	J	0.22	U	0.22	U
	2,4-Dinitrophenol	51-28-5	20 (PER)	mg/kg	0.91	UJ	0.92	UJ	0.9	UJ	0.87	UJ
	4,6-Dinitro-o-cresol	534-52-1	NS	mg/kg	0.49	UJ	0.5	UJ	0.48	UJ	0.47	UJ
Total Metals - Westborough Lab												
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	9200		7600		8600		8300	
	Arsenic, Total	7440-38-2	16	mg/kg	10	J	6.3	J	6.6	J	7.8	J
	Barium, Total	7440-39-3	400	mg/kg	40		37		36		32	
	Beryllium, Total	7440-41-7	590	mg/kg	0.38	J	0.4	J	0.34	J	0.34	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	1.9	J	0.09	J	0.9	UJ	0.87	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	8200	J	21000	J	15000	J	16000	J
	Chromium, Total	7440-47-3	1500	mg/kg	15	J	11	J	12	J	11	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	9.7	J	8	J	7.5	J	7.7	J
	Copper, Total	7440-50-8	270	mg/kg	32		42		23		24	
	Iron, Total	7439-89-6	NS	mg/kg	18000		16000		18000		17000	
	Lead, Total	7439-92-1	1000	mg/kg	58	J	62		13	J	30	J
	Magnesium, Total	7439-95-4	NS	mg/kg	6300	J	10000	J	4200	J	4600	J
	Manganese, Total	7439-96-5	10000	mg/kg	450		390	J	510		520	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.04	U	0.09	U	0.03	U	0.06	U
	Nickel, Total	7440-02-0	310	mg/kg	22	J	19	J	18	J	17	J

TABLE 2.5.1-4
8,000 GAL. UST EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				TANK-SW-SOUTH		TANK-SW-WEST		TANK-SW-EAST		TANK-SW-NORTH	
	SAMPLING DATE				12/4/2015		12/4/2015		12/4/2015		12/4/2015	
	LAB SAMPLE ID				L1532044-01		L1532044-02		L1532044-03		L1532044-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~ 4.0'		~ 4.0'		~ 4.0'		~ 4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Potassium, Total	7440-09-7	NS	mg/kg	560		500		460		460	
	Sodium, Total	7440-23-5	NS	mg/kg	81	J	110	J	68	J	68	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.8	UJ	1.8	UJ	1.8	UJ	1.7	UJ
	Zinc, Total	7440-66-6	10000	mg/kg	180	J	130	J	62	J	70	J
Volatile Organics by 8260/5035 - Westborough Lab												
	Trichlorofluoromethane	75-69-4	NS	mg/kg	0.0059	UJ	0.0052	UJ	0.0051	UJ	0.3	U
	1,2-Dichloroethane	107-06-2	30	mg/kg	0.0012	U	0.001	U	0.001	U	0.06	U
	1,1,1-Trichloroethane	71-55-6	500	mg/kg	0.0012	U	0.001	U	0.001	U	0.06	U
	Benzene	71-43-2	44	mg/kg	0.0012	U	0.001	U	0.001	U	0.019	J
	Toluene	108-88-3	500	mg/kg	0.0018	U	0.0016	U	0.0015	U	0.046	J
	Ethylbenzene	100-41-4	390	mg/kg	0.0012	U	0.001	U	0.001	U	0.015	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.0024	U	0.0021	U	0.002	U	0.036	J
	Acetone	67-64-1	500	mg/kg	0.035		0.0026	J	0.12		0.6	U
	2-Butanone	78-93-3	500	mg/kg	0.012	U	0.01	U	0.003	J	0.6	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard for p/m-Xylene is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-5
DISTRIBUTION BOX EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				12-5-USAI NORTH SWALL DBOX		12-5-USAI SOUTH SWALL DBOX		12-5-USAI BOT DBOX	
	SAMPLING DATE				12/5/2015		12/5/2015		12/5/2015	
	LAB SAMPLE ID				L1532169-01		L1532169-02		L1532169-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		3.0'		4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry - Westborough Lab										
	Solids, Total	NONE	NA	%	81.9		81.6		80	
Semivolatile Organics by GC/MS - Westborough Lab										
	Fluoranthene	206-44-0	500	mg/kg	0.039	J	0.039	J	0.051	J
	Pyrene	129-00-0	500	mg/kg	0.04	J	0.12	U	0.043	J
Total Metals - Westborough Lab										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	9900		6600		8600	
	Arsenic, Total	7440-38-2	16	mg/kg	27	J	6.5	J	6	J
	Barium, Total	7440-39-3	400	mg/kg	54		31		33	
	Beryllium, Total	7440-41-7	590	mg/kg	0.41	J	0.24	J	0.3	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.07	J	0.92	U	0.95	U
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	3700	J	3000	J	17000	J
	Chromium, Total	7440-47-3	1500	mg/kg	13		7.6		10	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	8.8		5.9		8.7	
	Copper, Total	7440-50-8	270	mg/kg	29		16		19	
	Iron, Total	7439-89-6	NS	mg/kg	22000		14000		18000	
	Lead, Total	7439-92-1	1000	mg/kg	58	J	2.3	J	0.84	J
	Magnesium, Total	7439-95-4	NS	mg/kg	4800		3000		5600	
	Manganese, Total	7439-96-5	10000	mg/kg	320		200		470	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.1		0.04	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	21		12		16	
	Potassium, Total	7440-09-7	NS	mg/kg	650		390		530	
	Sodium, Total	7440-23-5	NS	mg/kg	80	J	48	J	120	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	18		9.4		13	
	Zinc, Total	7440-66-6	10000	mg/kg	120	J	45	J	45	J
Volatile Organics by 8260/5035 - Westborough Lab										
	Chlorobenzene	108-90-7	500	mg/kg	0.00098	U	0.0009	U	0.0009	U
	Trichlorofluoromethane	75-69-4	NS	mg/kg	0.0049	UJ	0.0045	UJ	0.0045	UJ
	Toluene	108-88-3	500	mg/kg	0.0021		0.0022		0.00081	J
	Ethylbenzene	100-41-4	390	mg/kg	0.0013		0.0016		0.00038	J
	Bromomethane	74-83-9	NS	mg/kg	0.002	UJ	0.0018	UJ	0.0018	U
	Vinyl chloride	75-01-4	13	mg/kg	0.002	UJ	0.0018	UJ	0.0018	U
	Chloroethane	75-00-3	NS	mg/kg	0.002	UJ	0.0018	UJ	0.0018	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.0077		0.0084		0.0018	
	o-Xylene	95-47-6	500 (1)	mg/kg	0.0032		0.0033		0.00095	J
	Acetone	67-64-1	500	mg/kg	0.0098	U	0.04		0.019	

TABLE 2.5.1-5
DISTRIBUTION BOX EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				12-5-USAI NORTH SWALL DBOX		12-5-USAI SOUTH SWALL DBOX		12-5-USAI BOT DBOX	
	SAMPLING DATE				12/5/2015		12/5/2015		12/5/2015	
	LAB SAMPLE ID				L1532169-01		L1532169-02		L1532169-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		3.0'		4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
	2-Butanone	78-93-3	500	mg/kg	0.0098	U	0.0061	J	0.0032	J
	2-Hexanone	591-78-6	NS	mg/kg	0.0098	U	0.009	U	0.009	UJ
	Isopropylbenzene	98-82-8	NS	mg/kg	0.00098	U	0.00058	J	0.0009	U
	Cyclohexane	110-82-7	NS	mg/kg	0.02	UJ	0.00056	J	0.0002	J
	Freon-113	76-13-1	NS	mg/kg	0.02	U	0.018	U	0.018	UJ
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.0039	U	0.0006	J	0.0068	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard for p/m-Xylene is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

C.T. MALE ASSOCIATES

TABLE 2.5.1-6a
EXCAVATION AREA WEST OF AFFRON BUILDING
END POINT SAMPLE
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				PIPE TRENCH-FLOOR 1	
	SAMPLING DATE				12/30/2015	
	LAB SAMPLE ID				L1534542-01	
	SAMPLE TYPE				End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'	
		CasNum	NY-RESC	Units	Results	Qual
General Chemistry						
	Solids, Total	NONE	NS	%	83	
Semivolatile Organics by GC/MS						
	Bis(2-chloroisopropyl)ether	108-60-1	NS	mg/kg	0.24	UJ
Total Metals						
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	13000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	4.8	UJ
	Arsenic, Total	7440-38-2	16	mg/kg	8	
	Barium, Total	7440-39-3	400	mg/kg	79	
	Beryllium, Total	7440-41-7	590	mg/kg	0.51	
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.95	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	21000	
	Chromium, Total	7440-47-3	1500	mg/kg	16	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12	
	Copper, Total	7440-50-8	270	mg/kg	30	
	Iron, Total	7439-89-6	NS	mg/kg	29000	
	Lead, Total	7439-92-1	1000	mg/kg	3.9	J
	Magnesium, Total	7439-95-4	NS	mg/kg	6800	J
	Manganese, Total	7439-96-5	10000	mg/kg	790	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	24	J
	Potassium, Total	7440-09-7	NS	mg/kg	870	J
	Selenium, Total	7782-49-2	1500	mg/kg	1.9	UJ
	Sodium, Total	7440-23-5	NS	mg/kg	110	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15	J
	Zinc, Total	7440-66-6	10000	mg/kg	64	J
Volatile Organics by 8260/5035						
	Acetone	67-64-1	500	mg/kg	0.031	
	2-Butanone	78-93-3	500	mg/kg	0.0033	J
	2-Hexanone	591-78-6	NS	mg/kg	0.0097	UJ

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

C.T. MALE ASSOCIATES

TABLE 2.5.1-6b
EXCAVATION AREA WEST OF AFFRON BUILDING END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				123115 NS TRENCH BOT		1-2-16 EW TRENCH #1	
	SAMPLING DATE				12/31/2015		1/2/2016	
	LAB SAMPLE ID				L1600071-01		L1600071-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		3.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	84.8		78.2	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.15	U	0.17	U
	Fluoranthene	206-44-0	500	mg/kg	2.6		0.12	U
	Naphthalene	91-20-3	500	mg/kg	0.19	U	0.21	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	0.21	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	1.1		0.12	U
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.85		0.17	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	1.1		0.12	U
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.42		0.12	U
	Chrysene	218-01-9	56	mg/kg	0.95		0.12	U
	Acenaphthylene	208-96-8	500	mg/kg	0.15	U	0.17	U
	Anthracene	120-12-7	500	mg/kg	0.27		0.12	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.39		0.17	U
	Phenanthrene	85-01-8	500	mg/kg	1.4		0.12	U
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.086	J	0.12	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.43		0.17	U
	Pyrene	129-00-0	500	mg/kg	2.2		0.12	U
	Dibenzofuran	132-64-9	350	mg/kg	0.19	U	0.21	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	1.8		0.25	U
	Carbazole	86-74-8	NS	mg/kg	0.19	U	0.21	U
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	12000		17000	
	Antimony, Total	7440-36-0	NS	mg/kg	4.6	U	5.1	U
	Arsenic, Total	7440-38-2	16	mg/kg	4.4		7.2	
	Barium, Total	7440-39-3	400	mg/kg	56		82	
	Beryllium, Total	7440-41-7	590	mg/kg	0.45	J	0.7	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	18000		3200	
	Chromium, Total	7440-47-3	1500	mg/kg	14		20	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	8.8		12	
	Copper, Total	7440-50-8	270	mg/kg	28		32	
	Iron, Total	7439-89-6	NS	mg/kg	34000	J	30000	J
	Lead, Total	7439-92-1	1000	mg/kg	2.2	J	4.2	J
	Magnesium, Total	7439-95-4	NS	mg/kg	5600		5600	
	Manganese, Total	7439-96-5	10000	mg/kg	1700		700	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.05	J	0.07	J
	Nickel, Total	7440-02-0	310	mg/kg	18		27	
	Potassium, Total	7440-09-7	NS	mg/kg	800		930	
	Selenium, Total	7782-49-2	1500	mg/kg	1.8	U	2	U
	Silver, Total	7440-22-4	1500	mg/kg	0.92	U	1	U
	Sodium, Total	7440-23-5	NS	mg/kg	90	J	130	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	14		19	
	Zinc, Total	7440-66-6	10000	mg/kg	54		67	
Volatile Organics by 8260/5035								
	Methylene chloride	75-09-2	500	mg/kg	0.24	J	0.0098	U
	Toluene	108-88-3	500	mg/kg	0.21	U	0.00058	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.28	U	0.002	U
	Acetone	67-64-1	500	mg/kg	0.59	J	0.013	
	2-Butanone	78-93-3	500	mg/kg	0.31	J	0.0098	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.096	J	0.00098	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.55	U	0.0039	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-6b
EXCAVATION AREA WEST OF AFFRON BUILDING END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-2-16 EW TRENCH #2		1-2-16 EW TRENCH #3	
	SAMPLING DATE				1/2/2016		1/2/2016	
	LAB SAMPLE ID				L1600071-03		L1600071-04	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		3.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	78.7		88	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.049	J	0.15	U
	Fluoranthene	206-44-0	500	mg/kg	1.2		0.24	
	Naphthalene	91-20-3	500	mg/kg	0.15	J	0.19	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.21	U	0.19	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.44		0.14	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.46		0.13	J
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.7		0.19	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.19		0.049	J
	Chrysene	218-01-9	56	mg/kg	0.57		0.14	
	Acenaphthylene	208-96-8	500	mg/kg	0.14	J	0.15	U
	Anthracene	120-12-7	500	mg/kg	0.14		0.11	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.31		0.077	J
	Phenanthrene	85-01-8	500	mg/kg	0.95		0.024	J
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.084	J	0.11	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.33		0.08	J
	Pyrene	129-00-0	500	mg/kg	1		0.22	
	Dibenzofuran	132-64-9	350	mg/kg	0.072	J	0.19	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.21	J	0.22	U
	Carbazole	86-74-8	NS	mg/kg	0.092	J	0.19	U
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	10000		11000	
	Antimony, Total	7440-36-0	NS	mg/kg	3.8	J	4.5	U
	Arsenic, Total	7440-38-2	16	mg/kg	29		4.6	
	Barium, Total	7440-39-3	400	mg/kg	110		28	
	Beryllium, Total	7440-41-7	590	mg/kg	0.55		0.36	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	7900		8100	
	Chromium, Total	7440-47-3	1500	mg/kg	25		15	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	11		7	
	Copper, Total	7440-50-8	270	mg/kg	1400		32	
	Iron, Total	7439-89-6	NS	mg/kg	42000	J	23000	J
	Lead, Total	7439-92-1	1000	mg/kg	310		14	
	Magnesium, Total	7439-95-4	NS	mg/kg	4300		4700	
	Manganese, Total	7439-96-5	10000	mg/kg	700		540	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.25	J	0.03	J
	Nickel, Total	7440-02-0	310	mg/kg	31		17	
	Potassium, Total	7440-09-7	NS	mg/kg	530		390	
	Selenium, Total	7782-49-2	1500	mg/kg	1.1	J	1.8	U
	Silver, Total	7440-22-4	1500	mg/kg	0.74	J	0.9	U
	Sodium, Total	7440-23-5	NS	mg/kg	350		58	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17		13	
	Zinc, Total	7440-66-6	10000	mg/kg	390		64	
Volatile Organics by 8260/5035								
	Methylene chloride	75-09-2	500	mg/kg	0.15	J	0.01	U
	Toluene	108-88-3	500	mg/kg	0.11	U	0.00028	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.051	J	0.002	U
	Acetone	67-64-1	500	mg/kg	0.27	J	0.0033	J
	2-Butanone	78-93-3	500	mg/kg	0.16	J	0.01	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.072	U	0.001	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.29	U	0.004	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-6b
EXCAVATION AREA WEST OF AFFRON BUILDING END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				**010416-AFFRON-BOTTOM #1**	
	SAMPLING DATE				**1/4/2016**	
	LAB SAMPLE ID				**L1600071-05**	
	SAMPLE TYPE				**End Point**	
	SAMPLE DEPTH (ft. bgs)				**4.0'**	
		CasNum	**NY-RESC**	**Units**	**Results**	**Qual**
General Chemistry						
	Solids, Total	NONE	NS	%	80.9	
Semivolatile Organics by GC/MS						
	Acenaphthene	83-32-9	500	mg/kg	0.16	U
	Fluoranthene	206-44-0	500	mg/kg	0.12	U
	Naphthalene	91-20-3	500	mg/kg	0.2	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.35	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	U
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.16	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.12	U
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.12	U
	Chrysene	218-01-9	56	mg/kg	0.12	U
	Acenaphthylene	208-96-8	500	mg/kg	0.16	U
	Anthracene	120-12-7	500	mg/kg	0.12	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.16	U
	Phenanthrene	85-01-8	500	mg/kg	0.9	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.12	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.16	U
	Pyrene	129-00-0	500	mg/kg	0.12	U
	Dibenzofuran	132-64-9	350	mg/kg	0.2	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.24	U
	Carbazole	86-74-8	NS	mg/kg	0.2	U
Total Metals						
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	10000	
	Antimony, Total	7440-36-0	NS	mg/kg	4.8	U
	Arsenic, Total	7440-38-2	16	mg/kg	6	
	Barium, Total	7440-39-3	400	mg/kg	44	
	Beryllium, Total	7440-41-7	590	mg/kg	0.44	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	6400	
	Chromium, Total	7440-47-3	1500	mg/kg	13	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	8.7	
	Copper, Total	7440-50-8	270	mg/kg	16	
	Iron, Total	7439-89-6	NS	mg/kg	21000	J
	Lead, Total	7439-92-1	1000	mg/kg	5	
	Magnesium, Total	7439-95-4	NS	mg/kg	4400	
	Manganese, Total	7439-96-5	10000	mg/kg	640	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.08	U
	Nickel, Total	7440-02-0	310	mg/kg	17	
	Potassium, Total	7440-09-7	NS	mg/kg	760	
	Selenium, Total	7782-49-2	1500	mg/kg	1.9	U
	Silver, Total	7440-22-4	1500	mg/kg	0.97	U
	Sodium, Total	7440-23-5	NS	mg/kg	190	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	14	
	Zinc, Total	7440-66-6	10000	mg/kg	52	
Volatile Organics by 8260/5035						
	Methylene chloride	75-09-2	500	mg/kg	2.2	J
	Toluene	108-88-3	500	mg/kg	2.4	U
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	3.2	U
	Acetone	67-64-1	500	mg/kg	4.1	J
	2-Butanone	78-93-3	500	mg/kg	4.4	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.48	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	3.2	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
(1) Standard is for total xylenes.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-7
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				15118-SW-1		15118-SW-2		15118-FL-1	
	SAMPLING DATE				11/18/2015		11/18/2015		11/18/2015	
	LAB SAMPLE ID				L1530372-01		L1530372-02		L1530372-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~5.5'		~6.0'		7.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	84.4		82.8		75.5	
Semivolatile Organics by GC/MS										
	Fluoranthene	206-44-0	500	mg/kg	0.044	J	0.094	J	0.13	U
	Naphthalene	91-20-3	500	mg/kg	0.2	U	7.8		0.22	U
	Anthracene	120-12-7	500	mg/kg	0.036	J	0.046	J	0.13	U
	Fluorene	86-73-7	500	mg/kg	0.13	J	0.15	J	0.22	U
	Phenanthrene	85-01-8	500	mg/kg	0.27		0.36		0.13	U
	Pyrene	129-00-0	500	mg/kg	0.044	J	0.087	J	0.13	U
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.45	U	0.13	J	0.5	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.24	U	5		0.26	U
Total Metals										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	11000		12000		17000	
	Arsenic, Total	7440-38-2	16	mg/kg	5.2	J	6.4	J	14	J
	Barium, Total	7440-39-3	400	mg/kg	60		63		130	
	Beryllium, Total	7440-41-7	590	mg/kg	0.5		0.49		0.88	
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.93	UJ	0.95	UJ	1	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	4800		8000		2600	
	Chromium, Total	7440-47-3	1500	mg/kg	14	J	15	J	34	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	9.5		10		16	
	Copper, Total	7440-50-8	270	mg/kg	23		25		34	
	Iron, Total	7439-89-6	NS	mg/kg	19000		22000		33000	
	Lead, Total	7439-92-1	1000	mg/kg	7.4		51		5.8	
	Magnesium, Total	7439-95-4	NS	mg/kg	4400		5300		6200	
	Manganese, Total	7439-96-5	10000	mg/kg	500	J	790	J	390	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.03	J	0.04	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	20		21		32	
	Potassium, Total	7440-09-7	NS	mg/kg	680		770		1800	
	Sodium, Total	7440-23-5	NS	mg/kg	78	J	64	J	140	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.9	UJ	1.9	UJ	2	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15	J	16	J	23	J
	Zinc, Total	7440-66-6	10000	mg/kg	55	J	62	J	90	J

TABLE 2.5.1-7
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				15118-SW-1		15118-SW-2		15118-FL-1	
	SAMPLING DATE				11/18/2015		11/18/2015		11/18/2015	
	LAB SAMPLE ID				L1530372-01		L1530372-02		L1530372-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~5.5'		~6.0'		7.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by 8260/5035										
	Carbon tetrachloride	56-23-5	22	mg/kg	0.14	UJ	0.28	UJ	0.0012	U
	Trichlorofluoromethane	75-69-4	NS	mg/kg	0.7	UJ	1.4	UJ	0.0058	U
	Benzene	71-43-2	44	mg/kg	0.072	J	0.72		0.00032	J
	Toluene	108-88-3	500	mg/kg	0.029	J	0.22	J	0.0006	J
	Ethylbenzene	100-41-4	390	mg/kg	0.1	J	63		0.0012	U
	Vinyl chloride	75-01-4	13	mg/kg	0.28	UJ	0.56	UJ	0.0023	U
	Chloroethane	75-00-3	NS	mg/kg	0.28	UJ	0.56	UJ	0.0023	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.28	U	0.56	U	0.0012	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.082	J	1.3		0.0014	J
	Acetone	67-64-1	500	mg/kg	1.4	U	0.47	J	0.017	
	Isopropylbenzene	98-82-8	NS	mg/kg	1.2		9.6		0.006	
	Cyclohexane	110-82-7	NS	mg/kg	1	J	13		0.013	J
	Freon-113	76-13-1	NS	mg/kg	2.8	UJ	5.6	UJ	0.023	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	1.3		21		0.0084	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-8
EAST END OF AFFRON BUILDING EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1516 AFFRON LD BOTTOM #2		1516 AFFRON LD WSW		1516 AFFRON LD ESW		1516 AFFRON LD SSW	
	SAMPLING DATE				1/5/2016		1/5/2016		1/5/2016		1/5/2016	
	LAB SAMPLE ID				L1600325-01		L1600325-02		L1600325-03		L1600325-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.0'		~3.5'		~3.5'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
	Solids, Total	NONE	NS	%	83.4		71.5		79.8		84.3	
Semivolatile Organics by GC/MS												
	Acenaphthene	83-32-9	500	mg/kg	0.16	U	4.6		0.44		0.15	U
	Fluoranthene	206-44-0	500	mg/kg	0.12	U	4		0.078	J	0.24	
	Naphthalene	91-20-3	500	mg/kg	0.19	U	3.7		0.26		1	
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	2.3	U	0.13	J	0.23	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	U	1.4		0.024	J	0.045	J
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.16	U	1.1	J	0.16	U	0.15	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.12	U	1.5		0.12	U	0.032	J
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.12	U	0.53	J	0.12	U	0.11	U
	Chrysene	218-01-9	56	mg/kg	0.12	U	1.5		0.033	J	0.094	J
	Acenaphthylene	208-96-8	500	mg/kg	0.16	U	2.3		0.2		0.15	U
	Anthracene	120-12-7	500	mg/kg	0.12	U	2.1		0.17		0.56	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.16	U	0.76	J	0.16	U	0.15	U
	Fluorene	86-73-7	500	mg/kg	0.19	U	10		1		2.2	
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	20		1.8		4.7	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.16	U	0.75	J	0.16	U	0.15	U
	Pyrene	129-00-0	500	mg/kg	0.12	U	4.1		0.17		1.2	
	Dibenzofuran	132-64-9	350	mg/kg	0.19	U	4.3		0.45		0.72	
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.23	U	4.6		0.19	J	1.4	
Total Metals												
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		9600		14000		8800	
	Antimony, Total	7440-36-0	NS	mg/kg	4.7	U	4	J	5	U	4.7	U
	Arsenic, Total	7440-38-2	16	mg/kg	6.1		32		7.4		3.3	
	Barium, Total	7440-39-3	400	mg/kg	56		300		74		30	
	Beryllium, Total	7440-41-7	590	mg/kg	0.53		0.46	J	0.6		0.3	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	1700		5400		2700		20000	
	Chromium, Total	7440-47-3	1500	mg/kg	16		37		18		11	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12		15		12		7.3	
	Copper, Total	7440-50-8	270	mg/kg	25	J	110	J	29	J	23	J
	Iron, Total	7439-89-6	NS	mg/kg	28000		49000		27000		19000	
	Lead, Total	7439-92-1	1000	mg/kg	7.2	J	5700	J	14	J	13	J
	Magnesium, Total	7439-95-4	NS	mg/kg	5400		3400		4600		4800	
	Manganese, Total	7439-96-5	10000	mg/kg	600		920		440		550	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.08	U	0.13	J	0.05	J	0.03	J
	Nickel, Total	7440-02-0	310	mg/kg	22		39		25		16	
	Potassium, Total	7440-09-7	NS	mg/kg	940		820		1200		420	
	Selenium, Total	7782-49-2	1500	mg/kg	1.9	U	1.4	J	2	U	1.9	U
	Sodium, Total	7440-23-5	NS	mg/kg	69	J	150	J	120	J	59	J
	Thallium, Total	7440-28-0		mg/kg	1.9	UJ	2.2	UJ	2	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	16		32		19		12	
	Zinc, Total	7440-66-6	10000	mg/kg	62		480		69		58	

TABLE 2.5.1-8
EAST END OF AFFRON BUILDING EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1516 AFFRON LD BOTTOM #2		1516 AFFRON LD WSW		1516 AFFRON LD ESW		1516 AFFRON LD SSW	
	SAMPLING DATE				1/5/2016		1/5/2016		1/5/2016		1/5/2016	
	LAB SAMPLE ID				L1600325-01		L1600325-02		L1600325-03		L1600325-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.0'		~3.5'		~3.5'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by 8260/5035												
	Benzene	71-43-2	44	mg/kg	0.024	J	0.077	J	0.33	U	0.57	U
	Toluene	108-88-3	500	mg/kg	0.013	U	0.12	U	0.49	U	0.86	U
	Ethylbenzene	100-41-4	390	mg/kg	0.016	J	0.15		0.33	U	0.57	U
	Bromomethane	74-83-9		mg/kg	0.12	UJ	0.29	UJ	0.66	UJ	1.1	UJ
	Vinyl chloride	75-01-4	13	mg/kg	0.12	UJ	0.29	UJ	0.66	UJ	1.1	UJ
	Chloroethane	75-00-3		mg/kg	0.12	UJ	0.29	UJ	0.66	UJ	1.1	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.026	J	0.27	J	0.66	U	1.1	U
	Acetone	67-64-1	500	mg/kg	0.62	U	0.3	J	3.3	U	5.7	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.062	U	0.67		0.85		0.46	J
	Cyclohexane	110-82-7	NS	mg/kg	1.2	U	0.48	J	0.34	J	2.2	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.068	J	7.6		7		9.3	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-9
AFFRON EAST PIPE EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1916 AFFRON PIPE TRENCH BOTTOM 1		1916 AFFRON PIPE TRENCH SW 1		1916 AFFRON PIPE TRENCH BOTTOM 2		1916 AFFRON PIPE TRENCH SW 2	
	SAMPLING DATE				1/9/2016		1/9/2016		1/9/2016		1/9/2016	
	LAB SAMPLE ID				L1600735-01		L1600735-02		L1600735-03		L1600735-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				5.0'		~3.0'		5.0'		~4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
	Solids, Total	NONE	NS	%	82.7		84.7		82.2		87.9	
Semivolatile Organics by GC/MS												
	3,3'-Dichlorobenzidine	91-94-1		mg/kg	0.2	UJ	0.19	UJ	0.2	UJ	0.18	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.12	U	0.043	J	0.023	J	0.18	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	U	0.022	J	0.12	U	0.11	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.16	U	0.15	U	0.16	U	0.09	J
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.12	U	0.12	U	0.12	U	0.14	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.12	U	0.12	U	0.12	U	0.04	J
	Chrysene	218-01-9	56	mg/kg	0.12	U	0.02	J	0.12	U	0.092	J
	Anthracene	120-12-7	500	mg/kg	0.12	U	0.12	U	0.12	U	0.043	J
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.16	U	0.15	U	0.16	U	0.058	J
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	0.029	J	0.063	J	0.092	J
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.16	U	0.15	U	0.16	U	0.062	J
	Pyrene	129-00-0	500	mg/kg	0.12	U	0.039	J	0.022	J	0.17	
Volatile Organics by 8260/5035												
	Toluene	108-88-3	500	mg/kg	0.078	U	0.00076	J	0.19	U	0.011	J
	Bromomethane	74-83-9		mg/kg	0.1	UJ	0.002	UJ	0.25	UJ	0.1	UJ
	Vinyl chloride	75-01-4	13	mg/kg	0.1	UJ	0.002	UJ	0.25	UJ	0.1	UJ
	Chloroethane	75-00-3		mg/kg	0.1	UJ	0.002	UJ	0.25	UJ	0.1	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.1	U	0.002	U	0.25	U	0.02	J
	Acetone	67-64-1	500	mg/kg	0.52	U	0.03		1.2	U	0.51	U
	2-Butanone	78-93-3	500	mg/kg	0.52	U	0.0056	J	1.2	U	0.51	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.12	J	0.00062	J	0.96		0.2	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
(1) Standard is for total xylenes.

TABLE 2.5.1-10
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-16-16 BOT #2		1-16-16 SW #2		1-16-16 SW #1		1-16-16 BOT #1		1-16-16 TRENCH BOT #1		1-18-16 BOT #1		1-18-16 SW #1	
	SAMPLING DATE				1/16/2016		1/16/2016		1/16/2016		1/16/2016		1/16/2016		1/18/2016		1/18/2016	
	LAB SAMPLE ID				L1601498-01		L1601498-02		L1601498-03		L1601498-04		L1601498-05		L1601498-06		L1601498-07	
	SAMPLE TYPE				End Point		End Point		End Point		End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				6.5'		~3.0'		~3.0'		6.5'		5.5'		5.5'		~3.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
	Solids, Total	NONE	NS	%	76.2		83.8		81.4		87		77.9		85.2		90.6	
Semivolatile Organics by GC/MS																		
	Acenaphthene	83-32-9	500	mg/kg	0.91		0.16	U	0.067	J	0.31		0.18		0.23		0.14	U
	Fluoranthene	206-44-0	500	mg/kg	0.4		0.12	U	0.086	J	0.093	J	0.13	U	0.12		0.088	J
	Naphthalene	91-20-3	500	mg/kg	1.8		0.2	U	0.2	U	0.71		0.21	U	4.5		0.18	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.12	J	0.2	U	0.098	J	0.19	U	0.21	U	0.13	J	0.18	U
	Butyl benzyl phthalate	85-68-7	NS	mg/kg	0.22	U	0.2	U	0.28		0.19	U	0.21	U	0.19	U	0.18	U
	Di-n-octylphthalate	117-84-0	NS	mg/kg	0.22	U	0.2	U	0.15	J	0.19	U	0.21	U	0.19	U	0.18	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	J	0.12	U	0.042	J	0.031	J	0.13	U	0.038	J	0.039	J
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.1	J	0.16	U	0.16	U	0.15	U	0.17	U	0.16	U	0.14	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.14		0.12	U	0.047	J	0.032	J	0.13	U	0.039	J	0.048	J
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.051	J	0.12	U	0.12	U	0.11	U	0.13	U	0.12	U	0.11	U
	Chrysene	218-01-9	56	mg/kg	0.15		0.12	U	0.042	J	0.04	J	0.13	U	0.037	J	0.034	J
	Anthracene	120-12-7	500	mg/kg	0.75		0.12	U	0.044	J	0.16		0.072	J	0.12		0.11	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.073	J	0.16	U	0.16	U	0.15	U	0.17	U	0.16	U	0.025	J
	Fluorene	86-73-7	500	mg/kg	2.4		0.2	U	0.16	J	0.73		0.36		0.46		0.18	U
	Phenanthrene	85-01-8	500	mg/kg	4.8		0.12	U	0.25		1.3		0.6		0.82		0.074	J
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.12	J	0.16	U	0.068	J	0.06	J	0.17	U	0.063	J	0.066	J
	Pyrene	129-00-0	500	mg/kg	0.9		0.12	U	0.098	J	0.2		0.064	J	0.13		0.078	J
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.65		0.44	U	0.46	U	0.18	J	0.48	U	0.44	U	0.42	U
	Dibenzofuran	132-64-9	350	mg/kg	0.96		0.2	U	0.059	J	0.3		0.18	J	0.17	J	0.18	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	20		0.087	J	0.38		5.9		5		8.5	E	0.22	U
Total Metals																		
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		9800		11000		11000		15000		12000		7900	
	Antimony, Total	7440-36-0	NS	mg/kg	5.2	UJ	4.6	UJ	4.8	UJ	4.6	UJ	5	UJ	4.6	UJ	4.4	UJ
	Arsenic, Total	7440-38-2	16	mg/kg	5.4		2.4		11		4.2		6.3		4.2		7.1	
	Barium, Total	7440-39-3	400	mg/kg	73		39		52		44		60		46		32	
	Beryllium, Total	7440-41-7	590	mg/kg	0.62		0.36	J	0.44	J	0.41	J	0.65		0.43	J	0.23	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	1	UJ	0.93	UJ	0.96	UJ	0.91	UJ	1	UJ	0.92	UJ	0.88	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	30000	J	18000	J	12000	J	12000	J	2100	J	4600	J	16000	J
	Chromium, Total	7440-47-3	1500	mg/kg	18		11		16		14		20		13		9	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	11		7.3		8.5		8.5		13		9.1		7.3	
	Copper, Total	7440-50-8	270	mg/kg	33		23		45		110		33		23		60	
	Iron, Total	7439-89-6	NS	mg/kg	32000		20000		22000		22000		31000		22000		21000	
	Lead, Total	7439-92-1	1000	mg/kg	3.8	J	3.6	J	84		29		4.7	J	5.8		14	
	Magnesium, Total	7439-95-4	NS	mg/kg	8200		5100		6700		5500		6500		5000		4600	
	Manganese, Total	7439-96-5	10000	mg/kg	900		500		540		640		300		400		450	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.04	J	0.03	J	0.08	J	0.06	J	0.04	J	0.04	J	0.03	J
	Nickel, Total	7440-02-0	310	mg/kg	24		16		19		18		27		19		12	
	Potassium, Total	7440-09-7	NS	mg/kg	1000		500		590		550		950		540		570	
	Selenium, Total	7782-49-2	1500	mg/kg	2.1	UJ	1.8	UJ	1.9	UJ	1.8	UJ	2	UJ	1.8	UJ	1.8	UJ
	Silver, Total	7440-22-4	1500	mg/kg	1	U	0.93	U	0.96	U	0.91	U	1	U	0.92	U	0.88	U
	Sodium, Total	7440-23-5	NS	mg/kg	140	J	71	J	140	J	110	J	89	J	44	J	180	
	Thallium, Total	7440-28-0	NS	mg/kg	2.1	UJ	1.8	UJ	1.9	UJ	1.8	UJ	2	UJ	1.8	UJ	1.8	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	18		12		21		14		19		14		25	
	Zinc, Total	7440-66-6	10000	mg/kg	64		44		94		69		69		48		55	
Volatile Organics by 8260/5035																		
	Benzene	71-43-2	44	mg/kg	0.26	U	0.056	U	0.12	U	0.24	U	0.16	U	5.3		0.00027	J
	Toluene	108-88-3	500	mg/kg	0.085	J	0.084	U	0.18	U	0.22	J	0.24	U	3.3	U	0.00034	J
	Ethylbenzene	100-41-4	390	mg/kg	0.21	J	0.056	U	0.12	U	0.24		0.16	U	61		0.00063	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.48	J	0.042	J	0.029	J	1.1		0.034	J	0.58	J	0.0018	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.27	J	0.02	J	0.23	U	0.52		0.32	U	4.4	U	0.0018	U
	Acetone	67-64-1	500	mg/kg	0.74	J	0.18	J	0.31	J	2.4	U	1.6	U	22	U	0.0025	J
	Carbon disulfide	75-15-0		mg/kg	2.6	U	0.56	U	1.2	U	2.4	U	1.6	U	22	U	0.0092	UJ
	Isopropylbenzene	98-82-8	NS	mg/kg	0.19	J	0.028	J	0.12	U	0.48		0.062	J	10		0.0002	J
	1,2,3-Trichlorobenzene	87-61-6	20 (PER)	mg/kg	1.3	U	0.28	U	0.59	U	0.12	J	0.79	U	11	U	0.0046	U
	Cyclohexane	110-82-7	NS	mg/kg	5.2	U	1.1	U	2.3	U	0.16	J	3.2	U	16	J	0.00034	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.22	J	0.029	J	0.085	J	1.1		0.073	J	23		0.00062	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"E" is a laboratory qualifier that denotes concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.

TABLE 2.5.1-10
MISC. EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-11
CENTRAL PIPE TRENCH END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-19-16 PIPETRENCH BOT 1		1-19-16 PIPETRENCH SW 1	
	SAMPLING DATE				1/19/2016		1/19/2016	
	LAB SAMPLE ID				L1601729-01		L1601729-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.0'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	81.9		79.6	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.16	U	0.17	U
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.2	UJ	0.21	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.12	U	0.052	J
	Hexachlorocyclopentadiene	77-47-4	10 (PER)	mg/kg	0.58	UJ	0.6	UJ
	Naphthalene	91-20-3	500	mg/kg	0.2	U	0.21	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.15	J	0.21	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	U	0.024	J
	Chrysene	218-01-9	56	mg/kg	0.12	U	0.024	J
	Anthracene	120-12-7	500	mg/kg	0.12	U	0.12	U
	Fluorene	86-73-7	500	mg/kg	0.2	U	0.21	U
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	0.044	J
	Pyrene	129-00-0	500	mg/kg	0.12	U	0.046	J
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.46	UJ	0.47	UJ
	Dibenzofuran	132-64-9	350	mg/kg	0.2	U	0.21	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.073	J	0.25	U
	Carbazole	86-74-8	NS	mg/kg	0.2	UJ	0.21	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		12000	
	Arsenic, Total	7440-38-2	16	mg/kg	4.9		4.5	
	Barium, Total	7440-39-3	400	mg/kg	55	J	67	J
	Beryllium, Total	7440-41-7	590	mg/kg	0.49	J	0.51	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	1500		2600	
	Chromium, Total	7440-47-3	1500	mg/kg	13	J	16	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	7.7	J	11	J
	Copper, Total	7440-50-8	270	mg/kg	21	J	26	J
	Iron, Total	7439-89-6	NS	mg/kg	22000	J	22000	
	Lead, Total	7439-92-1	1000	mg/kg	1.9	J	6	J
	Magnesium, Total	7439-95-4	NS	mg/kg	3500	J	4900	J
	Manganese, Total	7439-96-5	10000	mg/kg	500	J	650	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.04	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	13		24	
	Potassium, Total	7440-09-7	NS	mg/kg	460	J	630	J
	Sodium, Total	7440-23-5	NS	mg/kg	100	J	78	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.9	UJ	2	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17	J	16	J
	Zinc, Total	7440-66-6	10000	mg/kg	45	J	56	J
Volatile Organics by 8260/5035								
	Benzene	71-43-2	44	mg/kg	0.15		0.00091	U
	Toluene	108-88-3	500	mg/kg	0.024	J	0.0014	U
	Ethylbenzene	100-41-4	390	mg/kg	0.26		0.00091	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.11	U	0.00044	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.24		0.0018	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.035	J	0.0018	U
	Xylenes, Total	1330-20-7	500	mg/kg	-	-	0.0018	U
	Acetone	67-64-1	500	mg/kg	0.53	U	0.016	
	2-Butanone	78-93-3	500	mg/kg	0.53	U	0.0021	J
	n-Butylbenzene	104-51-8	500	mg/kg	-	-	0.00091	U
	sec-Butylbenzene	135-98-8	500	mg/kg	-	-	0.00091	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.076		0.00091	U
	n-Propylbenzene	103-65-1	500	mg/kg	-	-	0.00091	U
	1,2,4-Trimethylbenzene	95-63-6	190	mg/kg	-	-	0.0046	U
	Cyclohexane	110-82-7	NS	mg/kg	0.13	J	-	-
	p-Diethylbenzene	105-05-5	NS	mg/kg	-	-	0.0036	U
	1,2,4,5-Tetramethylbenzene	95-93-2	NS	mg/kg	-	-	0.0036	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.25		-	-

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-11
CENTRAL PIPE TRENCH END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-19-16 PIPETRENCH BOTTOM 2		1-19-16 PIPETRENCH SW 2	
	SAMPLING DATE				1/19/2016		1/19/2016	
	LAB SAMPLE ID				L1601729-03		L1601729-04	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.0'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	80.5		80	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.16	U	0.1	J
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.2	UJ	0.21	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.12	U	0.038	J
	Hexachlorocyclopentadiene	77-47-4	10 (PER)	mg/kg	0.58	UJ	0.59	UJ
	Naphthalene	91-20-3	500	mg/kg	0.2	U	0.21	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.2	U	0.21	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.12	U	0.12	U
	Chrysene	218-01-9	56	mg/kg	0.12	U	0.12	U
	Anthracene	120-12-7	500	mg/kg	0.12	U	0.047	J
	Fluorene	86-73-7	500	mg/kg	0.2	U	0.22	
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	0.34	
	Pyrene	129-00-0	500	mg/kg	0.12	U	0.052	J
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.47	UJ	0.47	UJ
	Dibenzofuran	132-64-9	350	mg/kg	0.2	U	0.21	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.24	U	0.11	J
	Carbazole	86-74-8	NS	mg/kg	0.2	UJ	0.21	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		10000	
	Arsenic, Total	7440-38-2	16	mg/kg	6.3		4.8	
	Barium, Total	7440-39-3	400	mg/kg	83	J	48	J
	Beryllium, Total	7440-41-7	590	mg/kg	0.62	J	0.39	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	15000		9900	
	Chromium, Total	7440-47-3	1500	mg/kg	16	J	13	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	10	J	9.2	J
	Copper, Total	7440-50-8	270	mg/kg	28	J	24	J
	Iron, Total	7439-89-6	NS	mg/kg	29000		20000	
	Lead, Total	7439-92-1	1000	mg/kg	1.9	J	7.2	J
	Magnesium, Total	7439-95-4	NS	mg/kg	6000	J	5300	J
	Manganese, Total	7439-96-5	10000	mg/kg	610	J	550	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.077	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	23		20	
	Potassium, Total	7440-09-7	NS	mg/kg	1000	J	560	J
	Sodium, Total	7440-23-5	NS	mg/kg	92	J	62	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	2	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	16	J	13	J
	Zinc, Total	7440-66-6	10000	mg/kg	62	J	52	J
Volatile Organics by 8260/5035								
	Benzene	71-43-2	44	mg/kg	0.054	U	0.12	U
	Toluene	108-88-3	500	mg/kg	0.08	U	0.17	U
	Ethylbenzene	100-41-4	390	mg/kg	0.054	U	0.12	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.11	U	0.23	U
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.11	U	0.029	J
	o-Xylene	95-47-6	500 (1)	mg/kg	0.11	U	0.23	U
	Xylenes, Total	1330-20-7	500	mg/kg	0.11	U	0.029	J
	Acetone	67-64-1	500	mg/kg	0.54	U	1.2	U
	2-Butanone	78-93-3	500	mg/kg	0.54	U	1.2	U
	n-Butylbenzene	104-51-8	500	mg/kg	0.022	J	0.26	
	sec-Butylbenzene	135-98-8	500	mg/kg	0.015	J	0.23	
	Isopropylbenzene	98-82-8	NS	mg/kg	0.054	U	0.037	J
	n-Propylbenzene	103-65-1	500	mg/kg	0.016	J	0.049	J
	1,2,4-Trimethylbenzene	95-63-6	190	mg/kg	0.27	U	0.029	J
	Cyclohexane	110-82-7	NS	mg/kg	-	-	-	-
	p-Diethylbenzene	105-05-5	NS	mg/kg	0.21	U	0.23	J
	1,2,4,5-Tetramethylbenzene	95-93-2	NS	mg/kg	0.084	J	1	
	Methyl cyclohexane	108-87-2	NS	mg/kg	-	-	-	-

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-11
CENTRAL PIPE TRENCH END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-20-16 PIPETRENCH SW 3		1-20-16 PIPETRENCH BOT 3	
	SAMPLING DATE				1/20/2016		1/20/2016	
	LAB SAMPLE ID				L1601729-05		L1601729-06	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~3.5'		4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	80.4		80.4	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.024	J	0.16	U
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.21	UJ	0.21	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.06	J	0.12	U
	Hexachlorocyclopentadiene	77-47-4	10 (PER)	mg/kg	0.59	UJ	0.59	UJ
	Naphthalene	91-20-3	500	mg/kg	0.21	U	0.21	U
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	5.2		0.21	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.028	J	0.12	U
	Chrysene	218-01-9	56	mg/kg	0.025	J	0.12	U
	Anthracene	120-12-7	500	mg/kg	0.12	U	0.12	U
	Fluorene	86-73-7	500	mg/kg	0.036	J	0.21	U
	Phenanthrene	85-01-8	500	mg/kg	0.071	J	0.12	U
	Pyrene	129-00-0	500	mg/kg	0.061	J	0.12	U
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.47	UJ	0.47	UJ
	Dibenzofuran	132-64-9	350	mg/kg	0.21	U	0.21	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.053	J	0.25	U
	Carbazole	86-74-8	NS	mg/kg	0.21	UJ	0.21	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		12000	
	Arsenic, Total	7440-38-2	16	mg/kg	7.8		4.7	
	Barium, Total	7440-39-3	400	mg/kg	76	J	53	J
	Beryllium, Total	7440-41-7	590	mg/kg	0.61	J	0.48	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	2500		17000	
	Chromium, Total	7440-47-3	1500	mg/kg	18	J	15	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12	J	9.5	J
	Copper, Total	7440-50-8	270	mg/kg	30	J	26	J
	Iron, Total	7439-89-6	NS	mg/kg	31000		25000	
	Lead, Total	7439-92-1	1000	mg/kg	3.3	J	4.6	J
	Magnesium, Total	7439-95-4	NS	mg/kg	5000	J	5800	J
	Manganese, Total	7439-96-5	10000	mg/kg	500	J	930	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.05	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	29		20	
	Potassium, Total	7440-09-7	NS	mg/kg	910	J	860	J
	Sodium, Total	7440-23-5	NS	mg/kg	77	J	80	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.9	UJ	2	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17	J	15	J
	Zinc, Total	7440-66-6	10000	mg/kg	60	J	54	J
Volatile Organics by 8260/5035								
	Benzene	71-43-2	44	mg/kg	0.062	U	1.5	U
	Toluene	108-88-3	500	mg/kg	0.013	J	2.3	U
	Ethylbenzene	100-41-4	390	mg/kg	0.062	U	1.5	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.12	U	3	U
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.022	J	3	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.12	U	3	U
	Xylenes, Total	1330-20-7	500	mg/kg	0.022	J	3	U
	Acetone	67-64-1	500	mg/kg	0.62	U	15	U
	2-Butanone	78-93-3	500	mg/kg	0.25	J	15	U
	n-Butylbenzene	104-51-8	500	mg/kg	0.062	U	1.5	U
	sec-Butylbenzene	135-98-8	500	mg/kg	0.018	J	0.57	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.062	U	1.5	U
	n-Propylbenzene	103-65-1	500	mg/kg	0.062	U	1.5	U
	1,2,4-Trimethylbenzene	95-63-6	190	mg/kg	0.31	U	7.6	U
	Cyclohexane	110-82-7	NS	mg/kg	-	-	-	-
	p-Diethylbenzene	105-05-5	NS	mg/kg	0.25	U	6.1	U
	1,2,4,5-Tetramethylbenzene	95-93-2	NS	mg/kg	0.083	J	1.6	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	-	-	-	-

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-11
CENTRAL PIPE TRENCH END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				1-20-16 PIPETRENCH SW 4		1-20-16 PIPETRENCH BOT 4	
	SAMPLING DATE				1/20/2016		1/20/2016	
	LAB SAMPLE ID				L1601729-07		L1601729-08	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~3.5'		4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	86.4		85.8	
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.33		0.12	J
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.19	UJ	0.19	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.087	J	0.029	J
	Hexachlorocyclopentadiene	77-47-4	10 (PER)	mg/kg	0.55	UJ	0.54	UJ
	Naphthalene	91-20-3	500	mg/kg	0.19	U	0.26	
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	0.19	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.067	J	0.11	U
	Chrysene	218-01-9	56	mg/kg	0.098	J	0.11	U
	Anthracene	120-12-7	500	mg/kg	0.22		0.063	J
	Fluorene	86-73-7	500	mg/kg	0.88		0.31	
	Phenanthrene	85-01-8	500	mg/kg	1.7		0.52	
	Pyrene	129-00-0	500	mg/kg	0.45		0.09	J
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.44	UJ	0.44	UJ
	Dibenzofuran	132-64-9	350	mg/kg	0.41		0.16	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.16	J	0.94	
	Carbazole	86-74-8	NS	mg/kg	0.19	UJ	0.19	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	11000		9700	
	Arsenic, Total	7440-38-2	16	mg/kg	5.1		1.8	
	Barium, Total	7440-39-3	400	mg/kg	58	J	40	J
	Beryllium, Total	7440-41-7	590	mg/kg	0.45	J	0.32	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	11000		22000	
	Chromium, Total	7440-47-3	1500	mg/kg	14	J	13	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	9	J	9	J
	Copper, Total	7440-50-8	270	mg/kg	22	J	23	J
	Iron, Total	7439-89-6	NS	mg/kg	21000		19000	
	Lead, Total	7439-92-1	1000	mg/kg	6.6	J	4.9	J
	Magnesium, Total	7439-95-4	NS	mg/kg	4500	J	6000	J
	Manganese, Total	7439-96-5	10000	mg/kg	590	J	1100	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.06	J	0.03	J
	Nickel, Total	7440-02-0	310	mg/kg	20		19	
	Potassium, Total	7440-09-7	NS	mg/kg	870	J	580	J
	Sodium, Total	7440-23-5	NS	mg/kg	86	J	51	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.8	UJ	1.8	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15	J	12	J
	Zinc, Total	7440-66-6	10000	mg/kg	50	J	48	J
Volatile Organics by 8260/5035								
	Benzene	71-43-2	44	mg/kg	0.11	U	0.55	U
	Toluene	108-88-3	500	mg/kg	0.16	U	0.83	U
	Ethylbenzene	100-41-4	390	mg/kg	0.11	U	0.55	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.21	U	1.1	U
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.026	J	1.1	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.21	U	1.1	U
	Xylenes, Total	1330-20-7	500	mg/kg	0.026	J	1.1	U
	Acetone	67-64-1	500	mg/kg	1.1	U	5.5	U
	2-Butanone	78-93-3	500	mg/kg	1.1	U	5.5	U
	n-Butylbenzene	104-51-8	500	mg/kg	0.38		0.87	
	sec-Butylbenzene	135-98-8	500	mg/kg	0.27		0.64	
	Isopropylbenzene	98-82-8	NS	mg/kg	0.12		0.25	J
	n-Propylbenzene	103-65-1	500	mg/kg	0.28		0.61	
	1,2,4-Trimethylbenzene	95-63-6	190	mg/kg	0.53	U	2.8	U
	Cyclohexane	110-82-7	NS	mg/kg	-	-	-	-
	p-Diethylbenzene	105-05-5	NS	mg/kg	0.3	J	0.68	J
	1,2,4,5-Tetramethylbenzene	95-93-2	NS	mg/kg	1.3		2.9	
	Methyl cyclohexane	108-87-2	NS	mg/kg	-	-	-	-

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-12
SOUTH EAST SWALE AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				SE SWALE AREA BOTTOM		SE SWALE AREA NW SIDEWALL		SE SWALE AREA SE SIDEWALL	
	SAMPLING DATE				1/25/2016		1/25/2016		1/25/2016	
	LAB SAMPLE ID				L1602107-01		L1602107-02		L1602107-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.5'		~3.5'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	84.7		86		83.1	
Semivolatile Organics by GC/MS										
	Fluoranthene	206-44-0	500	mg/kg	0.068	J	0.022	J	0.024	J
	Naphthalene	91-20-3	500	mg/kg	0.19	U	0.19	U	1.2	
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.039	J	0.11	U	0.12	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.054	J	0.11	U	0.12	U
	Chrysene	218-01-9	56	mg/kg	0.038	J	0.11	U	0.12	U
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.029	J	0.15	U	0.16	U
	Fluorene	86-73-7	500	mg/kg	0.19	U	0.19	U	0.019	J
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	0.11	U	0.039	J
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.073	J	0.056	J	0.054	J
	Pyrene	129-00-0	500	mg/kg	0.069	J	0.023	J	0.022	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.23	U	0.23	U	0.93	
Total Metals										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	8100		9000		10000	
	Arsenic, Total	7440-38-2	16	mg/kg	5.2		5.3		6.4	
	Barium, Total	7440-39-3	400	mg/kg	50		57		72	
	Beryllium, Total	7440-41-7	590	mg/kg	0.33	J	0.34	J	0.44	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	8700		9200		12000	
	Chromium, Total	7440-47-3	1500	mg/kg	11		11		13	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	6.5		7.3		9.7	
	Copper, Total	7440-50-8	270	mg/kg	18		17		17	
	Iron, Total	7439-89-6	NS	mg/kg	15000		17000		18000	
	Lead, Total	7439-92-1	1000	mg/kg	7		6.1		12	
	Magnesium, Total	7439-95-4	NS	mg/kg	3900		3900		4800	
	Manganese, Total	7439-96-5	10000	mg/kg	310		560		400	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.03	J	0.03	J	0.02	J
	Nickel, Total	7440-02-0	310	mg/kg	15		15		20	
	Potassium, Total	7440-09-7	NS	mg/kg	680		650		1300	
	Sodium, Total	7440-23-5	NS	mg/kg	160	J	94	J	220	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	13		17		17	
	Zinc, Total	7440-66-6	10000	mg/kg	44		46		50	
Volatile Organics by 8260/5035										
	Benzene	71-43-2	44	mg/kg	0.021	J	0.034	J	0.037	J
	Toluene	108-88-3	500	mg/kg	0.023	J	0.02	J	0.11	J
	Ethylbenzene	100-41-4	390	mg/kg	0.038	J	0.022	J	11	

TABLE 2.5.1-12
SOUTH EAST SWALE AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				SE SWALE AREA BOTTOM		SE SWALE AREA NW SIDEWALL		SE SWALE AREA SE SIDEWALL	
	SAMPLING DATE				1/25/2016		1/25/2016		1/25/2016	
	LAB SAMPLE ID				L1602107-01		L1602107-02		L1602107-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.5'		~3.5'		~3.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.073	J	0.063	J	0.4	J
	o-Xylene	95-47-6	500 (1)	mg/kg	0.013	J	0.097	U	0.056	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.023	J	0.064		2.3	
	Cyclohexane	110-82-7	NS	mg/kg	0.98	U	0.032	J	6	
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.01	J	0.062	J	8.3	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-13
TRANSFORMER EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				TRAN EP - SW#1		TRAN EP - BOT#1		TRAN EP - BOT#2		TRAN EP - SW#2	
	SAMPLING DATE				2/9/2016		2/9/2016		2/9/2016		2/9/2016	
	LAB SAMPLE ID				L1603505-01		L1603505-02		L1603505-03		L1603505-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~0.2'		1.0'		1.0'		~0.2'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
	Solids, Total	NONE	NS	%	90.4		92.8		81.4		83.5	
Polychlorinated Biphenyls by GC												
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0354	U	0.0342	U	0.04	U	0.0388	U
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.013	J	0.0342	U	0.0179	J	0.196	J
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.013	J	0.0342	U	0.0179	J	0.196	J

	LOCATION				TRAN EP - BOT#3		TRAN EP - SW#3		TRAN EP - SW#4		TRAN EP - BOT#4	
	SAMPLING DATE				2/9/2016		2/9/2016		2/9/2016		2/9/2016	
	LAB SAMPLE ID				L1603505-05		L1603505-06		L1603505-07		L1603505-08	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				1.0'		~0.2'		~0.2'		1.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
	Solids, Total	NONE	NS	%	76		75.3		77.8		71.9	
Polychlorinated Biphenyls by GC												
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0413	U	0.0437	U	0.122	J	0.0459	U
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.119	J	0.188	J	0.27	J	0.138	J
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.119	J	0.188	J	0.392	J	0.138	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"P" is a laboratory qualifier that denotes the RPD between the results for the two columns exceeds the method-specified criteria.
"I" is a laboratory qualifier that denotes the lower value for the two columns has been reported due to obvious interference.
"NS" denotes no standard per 6 NYCRR Part 375.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.

TABLE 2.5.1-14
INITIAL DETENTION POND EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				2-9-16 SWALE BOT#1		2-10-16 SWALE BOT#2	
	SAMPLING DATE				2/9/2016		2/10/2016	
	LAB SAMPLE ID				L1603519-01		L1603519-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.0'		4.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	83.8		82.4	
Semivolatile Organics by GC/MS								
	Fluorene	86-73-7	500	mg/kg	0.19	U	0.023	J
	Phenanthrene	85-01-8	500	mg/kg	0.12	U	0.037	J
	Benzaldehyde	100-52-7		mg/kg	0.25	UJ	0.26	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	14000		15000	
	Arsenic, Total	7440-38-2	16	mg/kg	8.8		14	
	Barium, Total	7440-39-3	400	mg/kg	62		93	
	Beryllium, Total	7440-41-7	590	mg/kg	0.51		0.59	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	13000		6100	
	Chromium, Total	7440-47-3	1500	mg/kg	16		17	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	11		12	
	Copper, Total	7440-50-8	270	mg/kg	28		31	
	Iron, Total	7439-89-6	NS	mg/kg	27000		32000	
	Magnesium, Total	7439-95-4	NS	mg/kg	6500	J	5400	J
	Manganese, Total	7439-96-5	10000	mg/kg	1400	J	700	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.05	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	22		24	
	Potassium, Total	7440-09-7	NS	mg/kg	870		1000	
	Sodium, Total	7440-23-5	NS	mg/kg	65	J	86	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15		18	
	Zinc, Total	7440-66-6	10000	mg/kg	60		66	
Volatile Organics by 8260/5035								
	Trichlorofluoromethane	75-69-4		mg/kg	0.27	UJ	0.29	UJ
	Benzene	71-43-2	44	mg/kg	0.011	J	0.0088	J
	Ethylbenzene	100-41-4	390	mg/kg	0.008	J	0.057	U
	Bromomethane	74-83-9		mg/kg	0.11	UJ	0.11	UJ
	Vinyl chloride	75-01-4	13	mg/kg	0.11	UJ	0.11	UJ
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.018	J	0.012	J
	2-Hexanone	591-78-6		mg/kg	0.54	UJ	0.57	UJ
	Isopropylbenzene	98-82-8	NS	mg/kg	0.019	J	0.031	J
	Cyclohexane	110-82-7	NS	mg/kg	0.063	J	0.58	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.13	J	0.58	

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.
These samples do represent soil left on site, but were relocated under surface on site as part of site preparation.

TABLE 2.5.1-15a
UST STAGING AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				UST030116DA01		UST030116DA02		UST030116DA03		UST030116DA04	
	SAMPLING DATE				3/1/2016		3/1/2016		3/1/2016		3/1/2016	
	LAB SAMPLE ID				L1605721-01		L1605721-02		L1605721-03		L1605721-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				1.5'		1.5'		1.5'		1.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Gasoline Range Organics												
	Gasoline Range Organics	NONE	NS	mg/kg	2.5	U	0.99	J	0.84	J	0.58	J
General Chemistry												
	Solids, Total	NONE	NS	%	87.5		89.4	J	91		91.4	
Petroleum Hydrocarbon Quantitation												
	TPH	NONE	NS	mg/kg	55.9	J	164		152	J	154	J
Polychlorinated Biphenyls by GC												
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0161	J	0.0738		1.8		1.19	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0141	J	0.0257	J	0.325	J	0.185	J
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.0302	J	0.0995	J	2.13	J	1.38	J
Semivolatile Organics by GC/MS												
	Acenaphthene	83-32-9	500	mg/kg	0.32		0.33		0.54		0.15	
	Fluoranthene	206-44-0	500	mg/kg	4.9		2.7		4.3		1.5	
	Naphthalene	91-20-3	500	mg/kg	0.23		0.39		0.31		0.11	J
	Bis(2-Ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	0.082	J	0.14	J	0.093	J
	Dimethyl phthalate	131-11-3	NS	mg/kg	0.19	U	0.36		0.18	U	0.18	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	2		1.2		1.8		0.71	
	Benzo(a)pyrene	50-32-8	1	mg/kg	1.7		1		1.6		0.59	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	2.3		1.4		2.2		0.77	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.96		0.51		0.75		0.31	
	Chrysene	218-01-9	56	mg/kg	2		1.2		1.7		0.67	
	Acenaphthylene	208-96-8	500	mg/kg	0.11	J	0.14	U	0.033	J	0.034	J
	Anthracene	120-12-7	500	mg/kg	0.8		0.62		0.95		0.3	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	1		0.59		0.91		0.34	
	Fluorene	86-73-7	500	mg/kg	0.31		0.34		0.46		0.13	J
	Phenanthrene	85-01-8	500	mg/kg	3.6		2.4		3.6		1.2	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.28		0.15		0.22		0.098	J
	Indeno(1,2,3-cd)Pyrene	193-39-5	5.6	mg/kg	1.1		0.64		1		0.38	
	Pyrene	129-00-0	500	mg/kg	4.1		2.2		3.4		1.3	
	Biphenyl	92-52-4	60 (PER)	mg/kg	0.43	U	0.044	J	0.41	U	0.41	U
	Dibenzofuran	132-64-9	350	mg/kg	0.22		0.18		0.24		0.073	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.11	J	0.26		0.14	J	0.083	J
	Acetophenone	98-86-2	NS	mg/kg	0.19	U	0.022	J	0.18	U	0.18	U
	Carbazole	86-74-8	NS	mg/kg	0.43		0.27		0.5		0.14	J
Total Metals												
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	12000		12000		11000		10000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	4.5	UJ	0.77	J	4.3	UJ	4.2	UJ
	Arsenic, Total	7440-38-2	16	mg/kg	7.5		7.2		17		17	
	Barium, Total	7440-39-3	400	mg/kg	93		90		71		75	
	Beryllium, Total	7440-41-7	590	mg/kg	0.59		0.61		0.51		0.51	
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.9	UJ	0.84	UJ	0.86	UJ	0.84	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	16000		17000		9700		10000	
	Chromium, Total	7440-47-3	1500	mg/kg	19	J	18	J	16	J	17	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	10	J	11	J	8.6	J	8.6	J
	Copper, Total	7440-50-8	270	mg/kg	37		36		30		31	
	Iron, Total	7439-89-6	NS	mg/kg	26000	J	26000	J	23000	J	22000	J
	Lead, Total	7439-92-1	1000	mg/kg	290	J	120	J	71	J	74	J
	Magnesium, Total	7439-95-4	NS	mg/kg	6000	J	6400	J	5400	J	5000	J

TABLE 2.5.1-15a
UST STAGING AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION					UST030116DA01		UST030116DA02		UST030116DA03		UST030116DA04	
	SAMPLING DATE					3/1/2016		3/1/2016		3/1/2016		3/1/2016	
	LAB SAMPLE ID					L1605721-01		L1605721-02		L1605721-03		L1605721-04	
	SAMPLE TYPE					End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)					1.5'		1.5'		1.5'		1.5'	
		CasNum	NY-RESC		Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
	Manganese, Total	7439-96-5	10000		mg/kg	630	J	640	J	550	J	700	J
	Mercury, Total	7439-97-6	2.8		mg/kg	0.28	J	0.12	J	0.1	J	0.13	J
	Nickel, Total	7440-02-0	310		mg/kg	22	J	23	J	20	J	19	J
	Potassium, Total	7440-09-7	NS		mg/kg	930		1100		820		820	
	Selenium, Total	7782-49-2	1500		mg/kg	0.58	J	0.62	J	0.38	J	0.32	J
	Sodium, Total	7440-23-5	NS		mg/kg	85	J	110	J	120	J	170	
	Vanadium, Total	7440-62-2	39 (PER)		mg/kg	18		19		18		18	
	Zinc, Total	7440-66-6	10000		mg/kg	160	J	120	J	100	J	100	J
Volatile Organics by 8260/5035													
	Trichlorofluoromethane	75-69-4			mg/kg	0.0044	UJ	0.0052	UJ	0.0045	UJ	0.0047	UJ
	Toluene	108-88-3	500		mg/kg	0.00037	J	0.0016	U	0.0014	U	0.0014	U
	Chloroethane	75-00-3			mg/kg	0.0018	UJ	0.0021	UJ	0.0018	UJ	0.0019	UJ
	Acetone	67-64-1	500		mg/kg	0.016		0.0051	J	0.009	U	0.0094	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
"P" is a laboratory qualifier that denotes the RPD between the results for the two columns exceeds the method-specified criteria.
"I" is a laboratory qualifier that denotes the lower value for the two columns has been reported due to obvious interference.

TABLE 2.5.1-15b
UST STAGING AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				UST030416NC03		UST030416NC04	
	SAMPLING DATE				3/4/2016		3/4/2016	
	LAB SAMPLE ID				L1606225-01		L1606225-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				2.0'		2.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
Gasoline Range Organics								
	Gasoline Range Organics	NONE	NS	mg/kg	4.4		0.86	J
General Chemistry								
	Solids, Total	NONE	NS	%	89.9		91.2	
Petroleum Hydrocarbon Quantitation								
	TPH	NONE	NS	mg/kg	1090		151	
Polychlorinated Biphenyls by GC								
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.17		2.15	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.113		0.441	J
	PCBs, Total	1336-36-3	10 (Subsurface)	mg/kg	0.283		2.59	J
Semivolatile Organics by GC/MS								
	Acenaphthene	83-32-9	500	mg/kg	0.14		0.058	J
	Fluoranthene	206-44-0	500	mg/kg	0.055	J	0.77	
	Bis(2-chloroisopropyl)ether	108-60-1	NS	mg/kg	0.22	UJ	0.22	UJ
	Naphthalene	91-20-3	500	mg/kg	0.18	U	0.066	J
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.096	J	0.071	J
	Di-n-butylphthalate	84-74-2	0.014 (PER)	mg/kg	0.18	U	0.077	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.11	U	0.35	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.14	U	0.33	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.11	U	0.43	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.11	U	0.18	
	Chrysene	218-01-9	56	mg/kg	0.11	U	0.35	
	Anthracene	120-12-7	500	mg/kg	0.12		0.11	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.14	U	0.23	
	Fluorene	86-73-7	500	mg/kg	0.38		0.057	J
	Phenanthrene	85-01-8	500	mg/kg	0.74		0.48	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.11	U	0.058	J
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.14	U	0.24	
	Pyrene	129-00-0	500	mg/kg	0.2		0.67	
	Dibenzofuran	132-64-9	350	mg/kg	0.18	U	0.032	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.17	J	0.082	J
	Carbazole	86-74-8	NS	mg/kg	0.18	U	0.058	J
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	8000		11000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	1.5	J	0.75	J
	Arsenic, Total	7440-38-2	16	mg/kg	13		23	
	Barium, Total	7440-39-3	400	mg/kg	52		74	
	Beryllium, Total	7440-41-7	590	mg/kg	0.32	J	0.98	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	24000		6400	
	Chromium, Total	7440-47-3	1500	mg/kg	12		16	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	6.6		11	
	Copper, Total	7440-50-8	270	mg/kg	24		51	
	Iron, Total	7439-89-6	NS	mg/kg	22000		24000	
	Lead, Total	7439-92-1	1000	mg/kg	64		120	
	Magnesium, Total	7439-95-4	NS	mg/kg	4200		4300	
	Manganese, Total	7439-96-5	10000	mg/kg	950		490	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.15	J	0.14	J
	Nickel, Total	7440-02-0	310	mg/kg	16		24	
	Potassium, Total	7440-09-7	NS	mg/kg	600		700	
	Selenium, Total	7782-49-2	1500	mg/kg	1.1	J	0.82	J
	Sodium, Total	7440-23-5	NS	mg/kg	150	J	130	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.7	U	0.41	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15		18	
	Zinc, Total	7440-66-6	10000	mg/kg	110	J	280	J
Volatile Organics by 8260/5035								
	Trichlorofluoromethane	75-69-4	NS	mg/kg	0.26	UJ	0.0045	U
	Benzene	71-43-2	44	mg/kg	0.013	J	0.0009	U
	Toluene	108-88-3	500	mg/kg	0.085		0.002	
	Ethylbenzene	100-41-4	390	mg/kg	0.014	J	0.0009	U
	Bromomethane	74-83-9	NS	mg/kg	0.1	UJ	0.0018	U
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.1	U	0.00014	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.04	J	0.0018	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.0099	J	0.0018	U
	Dichlorodifluoromethane	75-71-8	NS	mg/kg	0.52	UJ	0.009	U
	Acetone	67-64-1	500	mg/kg	0.52	U	0.0017	J
	4-Methyl-2-pentanone	108-10-1	NS	mg/kg	0.52	UJ	0.009	U
	2-Hexanone	591-78-6	NS	mg/kg	0.52	UJ	0.009	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.012	J	0.0009	U
	Cyclohexane	110-82-7	NS	mg/kg	0.042	J	0.018	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.11	J	0.0002	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
"P" is a laboratory qualifier that denotes the RPD between the results for the two columns exceeds the method-specified criteria.
"I" is a laboratory qualifier that denotes the lower value for the two columns has been reported due to obvious interference.
(1) Standard is for total xylenes.

TABLE 2.5.1-16
CAR ENTRANCE EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				030816 MANHOLE LOCATION		030916 SWALE BOTTOM	
	SAMPLING DATE				3/8/2016		3/9/2016	
	LAB SAMPLE ID				L1606744-01		L1606744-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				7.0'		5.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	80.3		84.8	
Semivolatile Organics by GC/MS								
	2,4-Dinitrophenol	51-28-5	20 (PER)	mg/kg	0.98	UJ	0.92	UJ
	4,6-Dinitro-o-cresol	534-52-1	NS	mg/kg	0.53	UJ	0.5	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	13000		10000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	4.9	UJ	4.7	UJ
	Arsenic, Total	7440-38-2	16	mg/kg	5.3	J	5.4	J
	Barium, Total	7440-39-3	400	mg/kg	71		42	
	Beryllium, Total	7440-41-7	590	mg/kg	0.52	J	0.4	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.98	UJ	0.94	UJ
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	3300		19000	
	Chromium, Total	7440-47-3	1500	mg/kg	16	J	13	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12	J	9.8	J
	Copper, Total	7440-50-8	270	mg/kg	28		24	J
	Iron, Total	7439-89-6	NS	mg/kg	26000		24000	
	Lead, Total	7439-92-1	1000	mg/kg	5.7	J	3.5	J
	Magnesium, Total	7439-95-4	NS	mg/kg	4500		5500	
	Manganese, Total	7439-96-5	10000	mg/kg	710		820	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.03	J	0.02	J
	Nickel, Total	7440-02-0	310	mg/kg	24	J	20	J
	Potassium, Total	7440-09-7	NS	mg/kg	750		750	
	Selenium, Total	7782-49-2	1500	mg/kg	0.94	J	0.73	J
	Sodium, Total	7440-23-5	NS	mg/kg	110	J	61	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	2	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	17	J	13	J
	Zinc, Total	7440-66-6	10000	mg/kg	66	J	56	J
Volatile Organics by 8260/5035								
	Toluene	108-88-3	500	mg/kg	0.1	U	0.0002	J
	Acetone	67-64-1	500	mg/kg	0.099	J	0.0093	
	2-Butanone	78-93-3	500	mg/kg	0.7	U	0.001	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-17a
TRUCK TURN END POINT SAMPLE
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION					07072016DA01	
	SAMPLING DATE					7/7/2016	
	LAB SAMPLE ID					L1621161-01	
	SAMPLE TYPE					End Point	
	SAMPLE DEPTH (ft. bgs)					2.0'	
		CasNum	NY-RESC		Units	Results	Qual
General Chemistry							
	Solids, Total	NONE	NS		%	90.3	
Polychlorinated Biphenyls by GC							
	Aroclor 1254	11097-69-1	See Total PCBs		mg/kg	0.087	
	Aroclor 1260	11096-82-5	See Total PCBs		mg/kg	0.0305	J
	PCBs, Total	1336-36-3	1 (Surface)	10 (Subsurface)	mg/kg	0.118	J
Semivolatile Organics by GC/MS							
	Acenaphthene	83-32-9	500		mg/kg	0.037	J
	Fluoranthene	206-44-0	500		mg/kg	0.65	
	Naphthalene	91-20-3	500		mg/kg	0.56	
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)		mg/kg	0.12	J
	Dimethyl phthalate	131-11-3	NS		mg/kg	9.5	E
	Benzo(a)anthracene	56-55-3	5.6		mg/kg	0.3	
	Benzo(a)pyrene	50-32-8	1		mg/kg	0.26	
	Benzo(b)fluoranthene	205-99-2	5.6		mg/kg	0.36	
	Benzo(k)fluoranthene	207-08-9	56		mg/kg	0.13	
	Chrysene	218-01-9	56		mg/kg	0.31	
	Acenaphthylene	208-96-8	500		mg/kg	0.036	J
	Anthracene	120-12-7	500		mg/kg	0.097	J
	Benzo(ghi)perylene	191-24-2	500		mg/kg	0.16	
	Fluorene	86-73-7	500		mg/kg	0.045	J
	Phenanthrene	85-01-8	500		mg/kg	0.36	
	Dibenzo(a,h)anthracene	53-70-3	0.56		mg/kg	0.044	J
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6		mg/kg	0.19	
	Pyrene	129-00-0	500		mg/kg	0.58	
	Dibenzofuran	132-64-9	350		mg/kg	0.027	J
	2-Methylnaphthalene	91-57-6	NS		mg/kg	0.6	
	Acetophenone	98-86-2	NS		mg/kg	0.12	J
	Carbazole	86-74-8	NS		mg/kg	0.046	J
	Benzaldehyde	100-52-7	NS		mg/kg	1.2	J
	Caprolactam	105-60-2	NS		mg/kg	0.22	
Total Metals							
	Aluminum, Total	7429-90-5	10,000 (PER)		mg/kg	8100	
	Antimony, Total	7440-36-0			mg/kg	4.4	UJ
	Arsenic, Total	7440-38-2	16		mg/kg	13	J
	Barium, Total	7440-39-3	400		mg/kg	39	J
	Beryllium, Total	7440-41-7	590		mg/kg	0.33	J
	Cadmium, Total	7440-43-9	9.3		mg/kg	0.88	UJ
	Calcium, Total	7440-70-2	10,000 (PER)		mg/kg	10000	
	Chromium, Total	7440-47-3	1500		mg/kg	11	J
	Cobalt, Total	7440-48-4	20 (PER)		mg/kg	6.7	J
	Copper, Total	7440-50-8	270		mg/kg	23	J
	Iron, Total	7439-89-6	NS		mg/kg	18000	
	Lead, Total	7439-92-1	1000		mg/kg	23	J
	Magnesium, Total	7439-95-4	NS		mg/kg	5800	
	Manganese, Total	7439-96-5	10000		mg/kg	380	
	Mercury, Total	7439-97-6	2.8		mg/kg	0.1	J
	Nickel, Total	7440-02-0	310		mg/kg	15	J
	Potassium, Total	7440-09-7	NS		mg/kg	510	J
	Selenium, Total	7782-49-2	1500		mg/kg	1.8	UJ
	Silver, Total	7440-22-4	1500		mg/kg	0.88	UJ
	Sodium, Total	7440-23-5	NS		mg/kg	98	J
	Thallium, Total	7440-28-0			mg/kg	1.8	UJ
	Vanadium, Total	7440-62-2	39 (PER)		mg/kg	13	J
	Zinc, Total	7440-66-6	10000		mg/kg	56	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"E" is a laboratory qualifier that denotes concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-17b
TRUCK TURN END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				071416DA01		071416DA02		071416DA03		071416DA04		071516DA01	
	SAMPLING DATE				7/14/2016		7/14/2016		7/14/2016		7/14/2016		7/15/2016	
	LAB SAMPLE ID				L1622079-01		L1622079-02		L1622079-03		L1622079-04		L1622079-05	
	SAMPLE TYPE				End Point		End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~1.5'		~1.5'		~1.5'		~1.5'		~1.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry														
	Solids, Total	NONE	NS	%	95.7		96.6		91.9		93.6		90	
Organochlorine Pesticides by GC														
	Dieldrin	60-57-1	1.4	mg/kg	0.00102	U	0.00102	U	0.00103	U	0.00102	U	0.00378	P
	4,4'-DDE	72-55-9	62	mg/kg	0.00163	U	0.00163	U	0.00165	U	0.00163	U	0.00145	J
Polychlorinated Biphenyls by GC														
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.291		0.476		0.0667		0.0311	J	0.0804	
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.172	J	0.204	J	0.0479	J	0.035	J	0.0419	J
	PCBs, Total	1336-36-3	1 (Surface) | 10 (Subsurface)	mg/kg	0.463	J	0.68	J	0.115	J	0.0461	J	0.122	J
Semivolatile Organics by GC/MS														
	Acenaphthene	83-32-9	500	mg/kg	0.55	U	0.1	J	0.67		0.14	U	0.53	
	Fluoranthene	206-44-0	500	mg/kg	0.43		1		7.8		0.058	J	6.4	
	Naphthalene	91-20-3	500	mg/kg	0.68	U	0.11	J	0.56		0.18	U	0.41	
	Di-n-butylphthalate	84-74-2	0.014 (PER)	mg/kg	0.68	U	0.17	U	0.29	J	0.18	U	0.097	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.24	J	0.48		3.9		0.029	J	2.8	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.17	J	0.44		3		0.14	U	2	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.24	J	0.57		4.2		0.032	J	2.8	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.41	U	0.21		1.4		0.1	U	0.92	
	Chrysene	218-01-9	56	mg/kg	0.22	J	0.5		3.8		0.031	J	2.8	
	Acenaphthylene	208-96-8	500	mg/kg	0.55	U	0.14	U	0.15	J	0.14	U	0.12	J
	Anthracene	120-12-7	500	mg/kg	0.41	U	0.19		1.4		0.1	U	1	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.13	J	0.29		2.1		0.14	U	1.5	
	Fluorene	86-73-7	500	mg/kg	0.68	U	0.094	J	0.6		0.18	U	0.5	
	Phenanthrene	85-01-8	500	mg/kg	0.31	J	0.85		6.4		0.046	J	5	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.41	U	0.068	J	0.64		0.1	U	0.37	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.15	J	0.29		2.2		0.14	U	1.6	
	Pyrene	129-00-0	500	mg/kg	0.38	J	0.88		6.5		0.051	J	5.5	
	Biphenyl	92-52-4	60 (PER)	mg/kg	1.6	U	0.39	U	0.82	U	0.4	U	0.054	J
	Dibenzofuran	132-64-9	350	mg/kg	0.68	U	0.064	J	0.42		0.18	U	0.32	
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.1	J	0.068	J	0.24	J	0.21	U	0.24	
	Carbazole	86-74-8	NS	mg/kg	0.68	U	0.1	J	0.82		0.18	U	0.62	
	Caprolactam	105-60-2	NS	mg/kg	0.68	U	0.45	J	0.49	J	0.18	U	0.2	J
Total Metals														
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	9100		11000		8800		10000		11000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	1.7	J	1.3	J	1.1	J	0.77	J	1	J
	Arsenic, Total	7440-38-2	16	mg/kg	12		14		14		8.4		13	
	Barium, Total	7440-39-3	400	mg/kg	57		56		51		28		78	
	Beryllium, Total	7440-41-7	590	mg/kg	0.46		0.43		0.34	J	0.37	J	0.41	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.85		0.86		0.78	J	0.56	J	0.76	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	24000		20000		46000		6800		14000	
	Chromium, Total	7440-47-3	1500	mg/kg	17		14		14		12		15	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	7.9		8.6		7.8		7.9		9.3	
	Copper, Total	7440-50-8	270	mg/kg	51		29		26		25		28	
	Iron, Total	7439-89-6	NS	mg/kg	24000		23000		20000		21000		23000	
	Lead, Total	7439-92-1	1000	mg/kg	150		53		94		14		89	
	Magnesium, Total	7439-95-4	NS	mg/kg	10000		10000		19000		6200		5500	
	Manganese, Total	7439-96-5	10000	mg/kg	530		570		480		560		670	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.18	J	0.11	J	0.16	J	0.03	J	0.16	J
	Nickel, Total	7440-02-0	310	mg/kg	23		18		16		16		19	
	Potassium, Total	7440-09-7	NS	mg/kg	540		550		450		430		610	
	Sodium, Total	7440-23-5	NS	mg/kg	130	J	130	J	100	J	130	J	100	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.6	UJ	1.6	UJ	1.7	UJ	1.6	UJ	1.8	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	22		18		15		14		16	
	Zinc, Total	7440-66-6	10000	mg/kg	180		95		100		60		100	
Volatile Organics by 8260/5035														
	Trichlorofluoromethane	75-69-4	NS	mg/kg	0.0037	UJ	0.0047	UJ	0.0046	UJ	0.0039	UJ	0.0047	UJ
	Toluene	108-88-3	500	mg/kg	0.0011	UJ	0.0014	U	0.0014	U	0.0012	U	0.00021	J
	Dichlorodifluoromethane	75-71-8	NS	mg/kg	0.0075	U	0.0094	UJ	0.0092	UJ	0.0078	UJ	0.0094	UJ
	Acetone	67-64-1	500	mg/kg	0.0075	U	0.0094	U	0.0092	U	0.0078	U	0.0066	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-18
LOADING DOCK AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				072216DA01		072216DA02		072216DA03	
	SAMPLING DATE				7/22/2016		7/22/2016		7/22/2016	
	LAB SAMPLE ID				L1622982-01		L1622982-02		L1622982-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		1.0'		1.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	90.1		94.1		91.4	
Organochlorine Pesticides by GC										
	Dieldrin	60-57-1	1.4	mg/kg	0.0049	J	0.00073	J	0.00108	U
	4,4'-DDE	72-55-9	62	mg/kg	0.111	J	0.000901	J	0.00173	U
	4,4'-DDD	72-54-8	92	mg/kg	0.00159	J	0.00129	J	0.00173	U
	4,4'-DDT	50-29-3	47	mg/kg	0.0645	J	0.0031	U	0.00324	U
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0366	U	0.0354	U	0.00543	J
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0366	U	0.0354	U	0.00688	J
	Aroclor 1268	11100-14-4	See Total PCBs	mg/kg	0.0274	J	0.0354	U	0.0345	U
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.0274	J	0.0354	U	0.0123	J
Semivolatile Organics by GC/MS										
	Acenaphthene	83-32-9	500	mg/kg	0.036	J	0.14	U	0.14	U
	Fluoranthene	206-44-0	500	mg/kg	0.78		0.049	J	0.065	J
	Hexachlorocyclopentadiene	77-47-4	NS	mg/kg	0.52	UJ	0.5	UJ	0.51	UJ
	Naphthalene	91-20-3	500	mg/kg	0.06	J	0.17	U	0.18	U
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.27		0.032	U	0.04	U
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.25	U	0.14	U	0.14	U
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.14	U	0.1	U	0.11	U
	Chrysene	218-01-9	56	mg/kg	0.38		0.034	U	0.039	U
	Acenaphthylene	208-96-8	500	mg/kg	0.04	J	0.14	U	0.14	U
	Anthracene	120-12-7	500	mg/kg	0.059	J	0.1	U	0.11	U
	Fluorene	86-73-7	500	mg/kg	0.029	J	0.17	U	0.18	U
	Phenanthrene	85-01-8	500	mg/kg	0.67		0.022	J	0.033	J
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.046	U	0.1	U	0.11	U
	Pyrene	129-00-0	500	mg/kg	0.66		0.048	U	0.064	U
	Dibenzofuran	132-64-9	350	mg/kg	0.039	J	0.17	U	0.18	U
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.027	J	0.21	U	0.22	U
	4-Nitrophenol	100-02-7	20 (PER)	mg/kg	0.25	UJ	0.24	UJ	0.25	UJ
	Carbazole	86-74-8	NS	mg/kg	0.084	J	0.17	U	0.18	U
Total Metals										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	9000		9800		7300	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	1.6	J	0.74	J	4.3	U
	Arsenic, Total	7440-38-2	16	mg/kg	13		8.2		5.3	
	Barium, Total	7440-39-3	400	mg/kg	100		48		47	
	Beryllium, Total	7440-41-7	590	mg/kg	0.45		0.38	J	0.24	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.74	J	0.35	J	0.06	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	11000		8900		5600	
	Chromium, Total	7440-47-3	1500	mg/kg	16		13		11	

TABLE 2.5.1-18
LOADING DOCK AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				072216DA01		072216DA02		072216DA03	
	SAMPLING DATE				7/22/2016		7/22/2016		7/22/2016	
	LAB SAMPLE ID				L1622982-01		L1622982-02		L1622982-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				3.0'		1.0'		1.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	12		8		5.3	
	Copper, Total	7440-50-8	270	mg/kg	83		26		17	
	Iron, Total	7439-89-6	NS	mg/kg	30000		24000		14000	
	Lead, Total	7439-92-1	1000	mg/kg	75		28		14	
	Magnesium, Total	7439-95-4	NS	mg/kg	6900		4800		4700	
	Manganese, Total	7439-96-5	10000	mg/kg	590		1000		340	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.38	J	0.03	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	56		19		12	
	Potassium, Total	7440-09-7	NS	mg/kg	650		450		1000	
	Sodium, Total	7440-23-5	NS	mg/kg	170		230		370	
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.7	UJ	1.6	UJ	1.7	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	16		15		14	
	Zinc, Total	7440-66-6	10000	mg/kg	140		62		36	
Volatile Organics by 8260/5035										
	Acetone	67-64-1	500	mg/kg	0.0086	J	0.0077		0.017	
	Methyl Acetate	79-20-9	NS	mg/kg	0.018	U	0.011	U	0.0003	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
"P" is a laboratory qualifier that denotes the RPD between the results for the two columns exceeds the method-specified criteria.

TABLE 2.5.1-19a
NORTH WEST EXCAVATION AREA END POINT SAMPLE
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				072516DA01	
	SAMPLING DATE				7/25/2016	
	LAB SAMPLE ID				L1623090-01	
	SAMPLE TYPE				End Point	
	SAMPLE DEPTH (ft. bgs)				~1.0'	
		CasNum	NY-RESC	Units	Results	Qual
General Chemistry						
	Solids, Total	NONE	NS	%	96.8	
Semivolatile Organics by GC/MS						
	Acenaphthene	83-32-9	500	mg/kg	0.12	J
	2,6-Dinitrotoluene	606-20-2		mg/kg	0.17	UJ
	Fluoranthene	206-44-0	500	mg/kg	2.8	
	Hexachlorocyclopentadiene	77-47-4	NS	mg/kg	0.48	UJ
	Naphthalene	91-20-3	500	mg/kg	0.092	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	1.8	
	Benzo(a)pyrene	50-32-8	1	mg/kg	2.5	
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	3.2	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	1.3	
	Chrysene	218-01-9	56	mg/kg	2.2	
	Acenaphthylene	208-96-8	500	mg/kg	1.8	
	Anthracene	120-12-7	500	mg/kg	0.75	
	Benzo(ghi)perylene	191-24-2	500	mg/kg	1.8	
	Fluorene	86-73-7	500	mg/kg	0.13	J
	Phenanthrene	85-01-8	500	mg/kg	0.63	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.43	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	2.1	
	Pyrene	129-00-0	500	mg/kg	2.6	
	Dibenzofuran	132-64-9	350	mg/kg	0.041	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.042	J
	2-Nitrophenol	88-75-5	7 (PER)	mg/kg	0.36	UJ
	2,4-Dinitrophenol	51-28-5	20 (PER)	mg/kg	0.81	UJ
	4,6-Dinitro-o-cresol	534-52-1	NS	mg/kg	0.44	UJ
	Carbazole	86-74-8	NS	mg/kg	0.08	J
Total Metals						
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	7800	
	Arsenic, Total	7440-38-2	16	mg/kg	4.8	J
	Barium, Total	7440-39-3	400	mg/kg	29	
	Beryllium, Total	7440-41-7	590	mg/kg	0.19	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	13000	
	Chromium, Total	7440-47-3	1500	mg/kg	10	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	6.5	
	Copper, Total	7440-50-8	270	mg/kg	29	
	Iron, Total	7439-89-6	NS	mg/kg	20000	
	Lead, Total	7439-92-1	1000	mg/kg	49	
	Magnesium, Total	7439-95-4	NS	mg/kg	6500	
	Manganese, Total	7439-96-5	10000	mg/kg	450	
	Nickel, Total	7440-02-0	310	mg/kg	15	
	Potassium, Total	7440-09-7	NS	mg/kg	580	
	Sodium, Total	7440-23-5	NS	mg/kg	500	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	12	
	Zinc, Total	7440-66-6	10000	mg/kg	70	
Volatile Organics by 8260/5035						
	Bromomethane	74-83-9	NS	mg/kg	0.002	UJ
	Chloroethane	75-00-3	NS	mg/kg	0.002	UJ
	2-Butanone	78-93-3	500	mg/kg	0.0011	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

C.T. MALE ASSOCIATES

TABLE 2.5.1-19b
NORTH WEST EXCAVATION AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				080316DA01		080416DA01	
	SAMPLING DATE				8/3/2016		8/4/2016	
	LAB SAMPLE ID				L1624442-01		L1624442-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~0.2'		~1.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	95.1		95.3	
Polychlorinated Biphenyls by GC								
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0108	J	0.0189	J
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0105	J	0.0192	J
	PCBs, Total	1336-36-3	1 (Surface) | 10 (Subsurface)	mg/kg	0.0213	J	0.0381	J
Semivolatile Organics by GC/MS								
	Hexachlorocyclopentadiene	77-47-4	NS	mg/kg	2.5	UJ	1.9	UJ
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.11	J	0.54	U
	Pyrene	129-00-0	500	mg/kg	0.52	U	0.082	J
	Benzaldehyde	100-52-7	NS	mg/kg	1.1	UJ	0.9	UJ
	Caprolactam	105-60-2	NS	mg/kg	0.86	UJ	0.68	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	7000		5200	
	Arsenic, Total	7440-38-2	16	mg/kg	4.9	J	5	J
	Barium, Total	7440-39-3	400	mg/kg	23		23	
	Beryllium, Total	7440-41-7	590	mg/kg	0.23	J	0.17	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	47000		120000	
	Chromium, Total	7440-47-3	1500	mg/kg	9.8		7.9	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	5.8		4.6	
	Copper, Total	7440-50-8	270	mg/kg	20	J	25	J
	Iron, Total	7439-89-6	NS	mg/kg	15000		13000	
	Lead, Total	7439-92-1	1000	mg/kg	28		40	
	Magnesium, Total	7439-95-4	NS	mg/kg	26000		53000	
	Manganese, Total	7439-96-5	10000	mg/kg	560	J	300	J
	Mercury, Total	7439-97-6	2.8	mg/kg	0.03	J	0.03	J
	Nickel, Total	7440-02-0	310	mg/kg	13		11	
	Potassium, Total	7440-09-7	NS	mg/kg	460		470	
	Sodium, Total	7440-23-5	NS	mg/kg	150	J	630	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	16		13	
	Zinc, Total	7440-66-6	10000	mg/kg	46	J	48	J
Volatile Organics by 8260/5035								
	Ethylbenzene	100-41-4	390	mg/kg	0.00088	U	0.00021	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.0018	U	0.00027	J
	Acetone	67-64-1	500	mg/kg	0.0074	J	0.0011	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.00088	U	0.00015	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.0035	U	0.003	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-20a
FENCE POST END POINT SAMPLE
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				SOUTH FENCE POST 12.8.16	
	SAMPLING DATE				8/12/2016	
	LAB SAMPLE ID				L1625397-01/L1626872-01	
	SAMPLE TYPE				End Point	
	SAMPLE DEPTH (ft. bgs)				4.5'	
		CasNum	NY-RESC	Units	Results	Qual
General Chemistry						
	Solids, Total	NONE	NS	%	90.1	
Polychlorinated Biphenyls by GC						
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.00656	J
	PCBs, Total	1336-36-3	1 (Surface) | 10 (Subsurface)	mg/kg	0.00656	J
Semivolatile Organics by GC/MS						
	Acenaphthene	83-32-9	500	mg/kg	0.034	J
	Fluoranthene	206-44-0	500	mg/kg	0.038	J
	Hexachlorocyclopentadiene	77-47-4	NS	mg/kg	0.52	UJ
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.035	J
	Fluorene	86-73-7	500	mg/kg	0.071	J
	Phenanthrene	85-01-8	500	mg/kg	0.13	
	Pyrene	129-00-0	500	mg/kg	0.036	J
	Phenol	108-95-2	500	mg/kg	0.31	
	Benzaldehyde	100-52-7	NS	mg/kg	0.24	UJ
Total Metals						
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	8000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	4.2	UJ
	Arsenic, Total	7440-38-2	16	mg/kg	7	
	Barium, Total	7440-39-3	400	mg/kg	36	J
	Beryllium, Total	7440-41-7	590	mg/kg	0.2	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	11000	
	Chromium, Total	7440-47-3	1500	mg/kg	11	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	7.6	J
	Copper, Total	7440-50-8	270	mg/kg	22	
	Iron, Total	7439-89-6	NS	mg/kg	16000	
	Lead, Total	7439-92-1	1000	mg/kg	17	
	Magnesium, Total	7439-95-4	NS	mg/kg	4400	
	Manganese, Total	7439-96-5	10000	mg/kg	440	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.06	J
	Nickel, Total	7440-02-0	310	mg/kg	15	
	Potassium, Total	7440-09-7	NS	mg/kg	610	
	Sodium, Total	7440-23-5	NS	mg/kg	72	J
	Thallium, Total	7440-28-0	5 (PER)	mg/kg	1.7	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15	
	Zinc, Total	7440-66-6	10000	mg/kg	44	
Volatile Organics by 8260/5035						
	Toluene	108-88-3	500	mg/kg	0.011	J
	Ethylbenzene	100-41-4	390	mg/kg	0.008	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.017	J
	Acetone	67-64-1	500	mg/kg	0.14	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.009	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.048	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
(1) Standard for p/m-Xylene is for total xylenes.
"PER" denotes protection of ecological resources SCO per CP-51.
"NS" denotes no standard per 6 NYCRR Part 375.

TABLE 2.5.1-20b
FENCE POST END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				POST25-8-17-16		POST27-8-17-16		POST29-8-17-16	
	SAMPLING DATE				8/17/2016		8/17/2016		8/17/2016	
	LAB SAMPLE ID				L1625846-01/L1626926-01		L1625846-02/L1626926-02		L1625846-03/L1626926-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				4.5'		4.5'		4.5'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	84.9		83.6		85.8	
Organochlorine Pesticides by GC										
	Lindane	58-89-9	9.2	mg/kg	0.00702	J	0.000794	U	0.000748	U
	4,4'-DDD	72-54-8	92	mg/kg	0.00186	U	0.00191	U	0.00134	J
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0387	U	0.0387	U	0.0171	J
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.00612	J	0.00707	J	0.0114	J
	PCBs, Total	1336-36-3	1 (Surface) | 10 (Subsurface)	mg/kg	0.00612	J	0.00707	J	0.0285	J
Semivolatile Organics by GC/MS										
	Acenaphthene	83-32-9	500	mg/kg	0.26		0.16	U	0.14	J
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.19	UJ	0.19	UJ	0.19	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.13		0.12	U	0.044	J
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.19	U	0.19	U	0.07	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.069	J	0.12	U	0.023	J
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.092	J	0.16	U	0.15	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.088	J	0.12	U	0.11	U
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.031	J	0.12	U	0.11	U
	Chrysene	218-01-9	56	mg/kg	0.094	J	0.12	U	0.028	J
	Anthracene	120-12-7	500	mg/kg	0.09	J	0.12	U	0.078	J
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.1	J	0.16	U	0.15	U
	Phenanthrene	85-01-8	500	mg/kg	0.67		0.12	U	0.36	
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.063	J	0.16	U	0.15	U
	Pyrene	129-00-0	500	mg/kg	0.22		0.12	U	0.075	J
Total Metals										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	9600		12000		8300	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	1.3	J	1.2	J	0.83	J
	Arsenic, Total	7440-38-2	16	mg/kg	4.6		9.3		7.4	
	Barium, Total	7440-39-3	400	mg/kg	42		63		39	
	Beryllium, Total	7440-41-7	590	mg/kg	0.41	J	0.52		0.34	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.83	J	0.88	J	0.58	J
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	12000		7800		10000	
	Chromium, Total	7440-47-3	1500	mg/kg	13		15		12	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	9.2		10		7.6	
	Copper, Total	7440-50-8	270	mg/kg	24		37		23	
	Iron, Total	7439-89-6	NS	mg/kg	23000		23000		17000	
	Lead, Total	7439-92-1	1000	mg/kg	21		26		24	
	Magnesium, Total	7439-95-4	NS	mg/kg	5000		5200		4400	
	Manganese, Total	7439-96-5	10000	mg/kg	1100		650		490	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.02	J	0.07	J	0.06	J
	Nickel, Total	7440-02-0	310	mg/kg	19		20		15	
	Potassium, Total	7440-09-7	NS	mg/kg	770		1100		700	
	Sodium, Total	7440-23-5	NS	mg/kg	140	J	290		190	
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	16		19		14	
	Zinc, Total	7440-66-6	10000	mg/kg	60		79		65	
Volatile Organics by 8260/5035										
	Benzene	71-43-2	44	mg/kg	0.072		0.056	U	0.0094	J
	Toluene	108-88-3	500	mg/kg	0.072	J	0.084	U	0.08	U
	Ethylbenzene	100-41-4	390	mg/kg	0.07		0.056	U	0.053	U
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.2		0.11	U	0.11	U
	Acetone	67-64-1	500	mg/kg	0.26	J	0.21	J	0.53	UJ
	2-Butanone	78-93-3	500	mg/kg	0.61	UJ	0.56	UJ	0.53	UJ
	Isopropylbenzene	98-82-8	NS	mg/kg	0.11		0.056	U	1.1	
	Methyl cyclohexane	108-87-2	NS	mg/kg	2.5		0.044	J	21	E

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.
"E" is a laboratory qualifier that denotes concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

C.T. MALE ASSOCIATES

TABLE 2.5.1-21a
FINAL DETENTION POND AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				090716 DP-EP-1		090716 DP-EP-2	
	SAMPLING DATE				9/7/2016		9/7/2016	
	LAB SAMPLE ID				L1628101-01		L1628101-02	
	SAMPLE TYPE				End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				7'		7'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual
General Chemistry								
	Solids, Total	NONE	NS	%	84.9		82.7	
Semivolatile Organics by GC/MS								
	Biphenyl	92-52-4		mg/kg	0.44	UJ	0.45	UJ
	4-Chloroaniline	106-47-8		mg/kg	0.19	UJ	0.2	UJ
	2-Nitrophenol	88-75-5		mg/kg	0.41	UJ	0.43	UJ
	2,4-Dinitrophenol	51-28-5		mg/kg	0.92	UJ	0.95	UJ
	4,6-Dinitro-o-cresol	534-52-1		mg/kg	0.5	UJ	0.52	UJ
	Carbazole	86-74-8		mg/kg	0.19	UJ	0.2	UJ
Total Metals								
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	10000		14000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	2.6	J	1.7	J
	Arsenic, Total	7440-38-2	16	mg/kg	5.4		4.2	
	Barium, Total	7440-39-3	400	mg/kg	50		70	
	Beryllium, Total	7440-41-7	590	mg/kg	0.46		0.56	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	25000		12000	
	Chromium, Total	7440-47-3	1500	mg/kg	14		16	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	10		11	
	Copper, Total	7440-50-8	270	mg/kg	27		29	
	Iron, Total	7439-89-6	NS	mg/kg	24000		29000	
	Lead, Total	7439-92-1	1000	mg/kg	11		13	
	Magnesium, Total	7439-95-4	NS	mg/kg	6300	J	6200	J
	Manganese, Total	7439-96-5	10000	mg/kg	1000		660	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.08	U	0.05	J
	Nickel, Total	7440-02-0	310	mg/kg	20		23	
	Potassium, Total	7440-09-7	NS	mg/kg	680		830	
	Sodium, Total	7440-23-5	NS	mg/kg	55	J	66	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15		16	
	Zinc, Total	7440-66-6	10000	mg/kg	59		67	
Volatile Organics by 8260/5035								
	Trichlorofluoromethane	75-69-4		mg/kg	0.31	UJ	0.0043	UJ
	1,2-Dichloroethane	107-06-2	30	mg/kg	0.042	J	0.00086	UJ
	1,1,1-Trichloroethane	71-55-6	500	mg/kg	0.061	UJ	0.00086	UJ
	Benzene	71-43-2	44	mg/kg	0.85		0.00086	U
	Toluene	108-88-3	500	mg/kg	0.98		0.0013	U
	Ethylbenzene	100-41-4	390	mg/kg	0.18		0.00086	U
	Bromomethane	74-83-9		mg/kg	0.12	UJ	0.0017	UJ
	Chloroethane	75-00-3		mg/kg	0.12	J	0.0017	UJ
	Methyl tert butyl ether	1634-04-4	500	mg/kg	0.12	U	0.00046	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.14		0.0017	U
	o-Xylene	95-47-6	500 (1)	mg/kg	0.039	J	0.0017	U
	Dichlorodifluoromethane	75-71-8		mg/kg	0.61	UJ	0.0086	UJ
	Acetone	67-64-1	500	mg/kg	0.61	U	0.0034	J
	Isopropylbenzene	98-82-8	NS	mg/kg	0.033	J	0.00086	U
	Methyl Acetate	79-20-9	NS	mg/kg	0.28	J	0.017	U
	Cyclohexane	110-82-7	NS	mg/kg	0.024	J	0.00067	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.034	J	0.0034	U

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.

TABLE 2.5.1-21b
FINAL DETENTION POND AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				090816DP-NWSW 1		090816DP-NESW 2		090816DP-EP3	
	SAMPLING DATE				9/8/2016		9/8/2016		9/8/2016	
	LAB SAMPLE ID				L1628224-01		L1628224-02		L1628224-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~6.5'		4.5'		7.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
	Solids, Total	NONE	NS	%	90.2		96.6		86	
Organochlorine Pesticides by GC										
	Dieldrin	60-57-1	1.4	mg/kg	0.00119		0.000999	U	0.00111	U
Polychlorinated Biphenyls by GC										
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.04	J	0.019	J	0.0378	U
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0348	U	0.0122	J	0.0378	U
	PCBs, Total	1336-36-3	1 (Surface) 10 (Subsurface)	mg/kg	0.04	J	0.0312	J	0.0378	U
Semivolatile Organics by GC/MS										
	Acenaphthene	83-32-9	500	mg/kg	0.22		0.13	U	0.15	U
	Fluoranthene	206-44-0	500	mg/kg	0.04	J	0.062	J	0.031	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.11	U	0.036	J	0.12	U
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.11	U	0.042	J	0.12	U
	Chrysene	218-01-9	56	mg/kg	0.11	U	0.035	J	0.12	U
	Anthracene	120-12-7	500	mg/kg	0.064	J	0.1	U	0.12	U
	Fluorene	86-73-7	500	mg/kg	0.4		0.17	U	0.19	U
	Phenanthrene	85-01-8	500	mg/kg	0.63		0.056	J	0.034	J
	Pyrene	129-00-0	500	mg/kg	0.072	J	0.055	J	0.027	J
	Dibenzofuran	132-64-9	350	mg/kg	0.17	J	0.17	U	0.19	U
Total Metals										
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	10000		7200		11000	
	Antimony, Total	7440-36-0	12 (PER)	mg/kg	1	J	0.64	J	1.2	J
	Arsenic, Total	7440-38-2	16	mg/kg	5.3		3.3		5.6	
	Barium, Total	7440-39-3	400	mg/kg	53		20		56	
	Beryllium, Total	7440-41-7	590	mg/kg	0.44		0.28	J	0.49	
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	5200		16000		12000	
	Chromium, Total	7440-47-3	1500	mg/kg	13		8.8		14	
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	8.6		6.6		10	
	Copper, Total	7440-50-8	270	mg/kg	21		17		24	
	Iron, Total	7439-89-6	NS	mg/kg	20000		16000		24000	
	Lead, Total	7439-92-1	1000	mg/kg	14		12		13	
	Magnesium, Total	7439-95-4	NS	mg/kg	4000	J	5700	J	5200	J
	Manganese, Total	7439-96-5	10000	mg/kg	490		500		820	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.05	J	0.03	J	0.04	J
	Nickel, Total	7440-02-0	310	mg/kg	18		14		21	
	Potassium, Total	7440-09-7	NS	mg/kg	590		290		670	
	Sodium, Total	7440-23-5	NS	mg/kg	73	J	36	J	60	J
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	15		9.7		16	
	Zinc, Total	7440-66-6	10000	mg/kg	52		46		58	
Volatile Organics by 8260/5035										
	Benzene	71-43-2	44	mg/kg	0.015	J	0.00091	U	0.018	J
	Toluene	108-88-3	500	mg/kg	0.047	J	0.0014	U	0.039	J
	Ethylbenzene	100-41-4	390	mg/kg	0.024	J	0.00091	U	0.023	J

TABLE 2.5.1-21b
FINAL DETENTION POND AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				090816DP-NWSW 1		090816DP-NESW 2		090816DP-EP3	
	SAMPLING DATE				9/8/2016		9/8/2016		9/8/2016	
	LAB SAMPLE ID				L1628224-01		L1628224-02		L1628224-03	
	SAMPLE TYPE				End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~6.5'		4.5'		7.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual
	Chloromethane	74-87-3	NS	mg/kg	0.6	UJ	0.0045	U	0.019	J
	Bromomethane	74-83-9	NS	mg/kg	0.24	U	0.0018	U	0.033	J
	p/m-Xylene	179601-23-1	500 (1)	mg/kg	0.06	J	0.0018	U	0.11	
	Dichlorodifluoromethane	75-71-8	NS	mg/kg	1.2	UJ	0.0091	UJ	0.52	UJ
	Carbon disulfide	75-15-0	NS	mg/kg	1.2	U	0.0091	UJ	0.52	U
	Isopropylbenzene	98-82-8	NS	mg/kg	0.057	J	0.00091	U	0.074	
	Methyl Acetate	79-20-9	NS	mg/kg	0.16	J	0.018	U	1.2	
	Cyclohexane	110-82-7	NS	mg/kg	0.042	J	0.018	U	1	U
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.057	J	0.0036	U	0.14	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.
(1) Standard is for total xylenes.
"P" is a laboratory qualifier that denotes the RPD between the results for the two columns exceeds the method-specified criteria.

TABLE 2.5.1-21c
FINAL DETENTION POND AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

	LOCATION				091216DP-SWSW 3		091216DP-SESW 4		091216DP-EP4		091216DP-EP5	
	SAMPLING DATE				9/12/2016		9/12/2016		9/12/2016		9/12/2016	
	LAB SAMPLE ID				L1628598-01		L1628598-02		L1628598-03		L1628598-04	
	SAMPLE TYPE				End Point		End Point		End Point		End Point	
	SAMPLE DEPTH (ft. bgs)				~5.0'		~5.0'		7.0'		7.0'	
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
	Solids, Total	NONE	NS	%	86.4		82.2		82		83.3	
Polychlorinated Biphenyls by GC												
	Aroclor 1254	11097-69-1	See Total PCBs	mg/kg	0.0596		0.0294	J	0.039	U	0.038	U
	Aroclor 1260	11096-82-5	See Total PCBs	mg/kg	0.0158	J	0.0109	J	0.039	U	0.038	U
	PCBs, Total	1336-36-3	1 (Surface) | 10 (Subsurface)	mg/kg	0.0754	J	0.0403	J	0.039	U	0.038	U
Semivolatile Organics by GC/MS												
	Acenaphthene	83-32-9	500	mg/kg	0.029	J	0.14	J	0.16	U	0.041	J
	3,3'-Dichlorobenzidine	91-94-1	NS	mg/kg	0.19	UJ	0.2	UJ	0.2	UJ	0.2	UJ
	Fluoranthene	206-44-0	500	mg/kg	0.3		1.4		0.12	U	0.35	
	Naphthalene	91-20-3	500	mg/kg	0.033	J	0.038	J	0.2	U	0.026	J
	Bis(2-ethylhexyl)phthalate	117-81-7	239 (PER)	mg/kg	0.079	J	0.1	J	0.076	J	0.077	J
	Benzo(a)anthracene	56-55-3	5.6	mg/kg	0.14		0.56		0.12	U	0.14	
	Benzo(a)pyrene	50-32-8	1	mg/kg	0.14	J	0.47		0.16	U	0.11	J
	Benzo(b)fluoranthene	205-99-2	5.6	mg/kg	0.19		0.6		0.12	U	0.13	
	Benzo(k)fluoranthene	207-08-9	56	mg/kg	0.065	J	0.17		0.12	U	0.05	J
	Chrysene	218-01-9	56	mg/kg	0.14		0.51		0.12	U	0.13	
	Anthracene	120-12-7	500	mg/kg	0.043	J	0.36		0.12	U	0.084	J
	Benzo(ghi)perylene	191-24-2	500	mg/kg	0.097	J	0.3		0.16	U	0.057	J
	Fluorene	86-73-7	500	mg/kg	0.019	J	0.14	J	0.2	U	0.038	J
	Phenanthrene	85-01-8	500	mg/kg	0.22		1.4		0.12	U	0.35	
	Dibenzo(a,h)anthracene	53-70-3	0.56	mg/kg	0.024	J	0.063	J	0.12	U	0.12	U
	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	mg/kg	0.13	J	0.31		0.059	J	0.1	J
	Pyrene	129-00-0	500	mg/kg	0.26		1.2		0.02	J	0.27	
	Dibenzofuran	132-64-9	350	mg/kg	0.018	J	0.081	J	0.2	U	0.029	J
	2-Methylnaphthalene	91-57-6	NS	mg/kg	0.23	U	0.032	J	0.24	U	0.24	U
	Carbazole	86-74-8	NS	mg/kg	0.03	J	0.12	J	0.2	U	0.032	J
Total Metals												
	Aluminum, Total	7429-90-5	10,000 (PER)	mg/kg	7200		8500		6500		7400	
	Arsenic, Total	7440-38-2	16	mg/kg	12		13		7		4	
	Barium, Total	7440-39-3	400	mg/kg	350		69		62		57	
	Beryllium, Total	7440-41-7	590	mg/kg	0.11	J	0.22	J	0.11	J	0.15	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.89	U	0.07	J	0.96	U	0.95	U
	Calcium, Total	7440-70-2	10,000 (PER)	mg/kg	78000		12000		10000		11000	
	Chromium, Total	7440-47-3	1500	mg/kg	7.3	J	11	J	8.1	J	10	J
	Cobalt, Total	7440-48-4	20 (PER)	mg/kg	5.3		7		5.4		7.2	
	Copper, Total	7440-50-8	270	mg/kg	31		21		14		18	
	Iron, Total	7439-89-6	NS	mg/kg	11000		16000		12000		16000	
	Lead, Total	7439-92-1	1000	mg/kg	18	J	33	J	10	J	28	J
	Magnesium, Total	7439-95-4	NS	mg/kg	24000		5100		2900		4600	
	Manganese, Total	7439-96-5	10000	mg/kg	1700		630		370		660	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.08	J	0.05	J	0.03	J	0.35	J
	Nickel, Total	7440-02-0	310	mg/kg	11		15		12		16	
	Potassium, Total	7440-09-7	NS	mg/kg	1100	J	1100	J	840	J	610	J
	Sodium, Total	7440-23-5	NS	mg/kg	560		370		230		63	J
	Thallium, Total	7440-28-0	NS	mg/kg	1.8	UJ	1.8	UJ	1.9	UJ	1.9	UJ
	Vanadium, Total	7440-62-2	39 (PER)	mg/kg	19		21		14		13	
	Zinc, Total	7440-66-6	10000	mg/kg	35	J	55	J	38	J	53	J
Volatile Organics by 8260/5035												
	Acetone	67-64-1	500	mg/kg	0.0095	U	0.0089	U	0.022	J	0.012	
	2-Butanone	78-93-3	500	mg/kg	0.0095	U	0.0089	U	0.0021	J	0.0034	J
	Methyl cyclohexane	108-87-2	NS	mg/kg	0.0038	U	0.0036	U	0.00096	J	0.0014	J

Notes:
Gray highlighting denotes exceedance of 6 NYCRR Part 375 restricted commercial use soil cleanup objectives.
"J" is a laboratory qualifier that denotes value is estimated.
"U" is a laboratory qualifier that denotes not detected above the limit of laboratory detection.
"NS" denotes no standard per 6 NYCRR Part 375.
"PER" denotes protection of ecological resources SCO per CP-51.

TABLE 2.5.1-21c
FINAL DETENTION POND AREA END POINT SAMPLES
USAI LIGHTING SITE
NEW WINDSOR, NY
(VALIDATED DATA)

(1) Standard is for total xylenes.

N
W E
S

0 200 400 FT

1 inch = 200 feet

Legend

- Lands of Littman Industries Inc & LOC Realty Corp
- Orange County Tax Parcels

Project Number: 14.4337
Data Source: NYSGIS Clearinghouse, BING
Projection: State Plane NAD83 NYE (Feet)
Date: June 25, 2014
File: USAI_Figure1_11x17.mxd
GIS: C Secor

Map Note: The locations and features depicted on this map are approximate and do not represent an actual field survey.

Figure 1: Site Location Map

Town of New Windsor **Orange County, New York**

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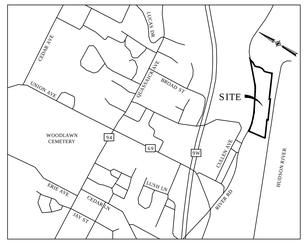
FOUNDED IN 1910



SITE LOCATION MAP
(NOT TO SCALE)

MAP NOTES:

1. Boundary information shown hereon was compiled from an actual field survey conducted during the month of July, 2015.
2. North orientation is Grid North based on the New York State Plane Coordinate System, *East Zone*, NAD83 as obtained from GPS observations.
3. This survey was prepared without the benefit of an up to date abstract of title or title report and is therefore subject to any easements, covenants, restrictions or any statement of fact that such documents may disclose.
4. Deed Book 5123 Page 165 states; "Together with any right title and interest which the party of the first part (I.D.C. Soils Reclamation, Inc.) has or may have to cross the right of way of The New York Central & Hudson River Railroad Co. where such right of way crosses the lands above described." It is the opinion of the undersigned that the grantor (I.D.C. Soils Reclamation, Inc.) conveyed any crossing rights, if any legally existed, and other rights to the grantee (LOC Realty Corp.). The location of these rights are not indicated within the verbiage of this deed description. The full extent of these rights would be subject to legal interpretation.

MAP REFERENCE:

1. "USAI New Windsor Survey of Property Prepared For Littman Industries Inc." Town of New Windsor, County of Orange, State of New York, dated March 15, 2012, prepared by TEC Land Surveying.

DEED DESCRIPTION

PARCEL A1 & A2 DEED BOOK 5123 PAGE 165

ALL that certain plot, piece or parcel of land. with buildings and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange, and State of New York, bounded and described as follows:

PARCEL EAST OF RIVER ROAD AND WEST OF RAILROAD

BEGINNING at a rebar set on the easterly side of River Road, said point also being the Southwesterly comer of lands reputedly of Lightron of Cornwall and the northwesterly corner of a parcel conveyed from Lightron to Affron (L. 1770 page 924), thence from said point of beginning and along said Lands of Lightron S 61° 57' 00" E. 164.97 feet to a spike set over a pipe found buried under pavement, thence S 28° 03'00" W 10.00 feet to a spike set in an iron pipe found buried under pavement, thence still along said lands of Lightron S 61° 57' 00" E 133.73 feet to a rebar set, thence along the westerly side of the New York Central Railway S 23° 41' 30" W 20.06 feet to a bent pipe found, and S 23° 25'47" W 396.66 feet to an iron pipe set at the edge of a small stream, thence crossing, recrossing and along said stream and lands repatedly of Canada Oil Corporation N 49° 19' 17" W 394.74 feet to an iron pipe set, thence along the easterly side of River Road, recrossing said stream, N 41° 21' 55" E 194.56 feet, thence still along said road N 31° 46' 00" E 120.00 feet to an old pipe found buried under pavement, thence N 28° 52' 00" E 30.00 feet to the point of beginning.

RIVER PARCEL

BEGINNING at a point in the easterly line of the New York Central Railroad Company where the same is intersected buy the northerly line of Canada Oil Corporation, said point being S 49° 19' 17" E 103.72,feet from the most southerly corner of the parcel described immediately above, thence from said point of beginning and along said New York Central Railroad Company Lands N 23° 19' 43" E 419.47 feet, thence S 61° 57' 00" E 385.00 feet, thence S 38° 37' 18" W 484.87 feet passing through an existing marine Oil Tenninnl Facility, thence along said lands of Canada Oil Corporation N 49° 19' 17" W 268.00 feet to the point of beginning.

TOGETHER WITH all strips and gores between the above described premises and the premises adjoining on the north.

DEED DESCRIPTION

PARCEL B1 & B2 DEED BOOK 2635 PAGE 142

ALL that parcel or parcels of land situate in the Town of New Windsor, County of Orange, and State of New York bounded and described as follows:

PARCEL NO. 1

BEGINNING at a point, said point being the intersection of the northerly line of lands now or formerly AFFRON TANK TERMINALS, Liber 1770 cp 924 with the easterly line of River Road and running thence along said easterly line of River Road the following:

North 28° 00' 00" East, 96.00 feet, North 18° 42' 00" East, 475.00 feet, and North 23° 44' 00" East, 82.03 feet;

thence along lads now or formerly EXXON CORPORATION, Liber 1251 cp 509 South 82 59' 30" East 333.70 feet;

thence along lands now or formerly CONSOLIDATED RAIL COR., the following:

South 22° 48' 30" West, 304.94 feet, South 67° 11' 30" East, 25.00 feet, and South 22° 48' 30" West, 471.91 feet;

thence along lands now or formerly AFFRON TANK TERMINALS, Liber 1770 cp 924 the following:

North 62° 50' 00" West, 158.80 feet,
North 27° 10' 00" East, 10.00 feet, and
North 62° 50' 00" west, 164.07 feet to the point of BEGINNING.

PARCEL NO. 2

BEGINNING at a point, said point being South 62° 50' 00" East, 74.21 feet from the intersection of the southerly line of lands now or formerly LIGHTRON OF CORNWALL, INC., (previously described 5.28 Acre Parcel #1) with the westerly line of lands now or formerly CONSOLIDATED RAIL CORP., running thence along the easterly line of lands now or formerly CONSOLIDATED RAIL CORP., North 22° 48' 30" East, 800.60 feet;

thence along lands now or formerly EXXON CORPORATION, Liber 1251 cp 509 South 67° 11' 30" East, 345.00 feet more or less to the Channel Bank of the Hudson River;

thence along the Channel Bank of the Hudson River South 22° 52' 40" West, 826.22 feet more or less;

thence along lands nor or formerly AFFRON TANK TERMINALS, Liber 1170 cp 924, North 62°,50' 00" West, 345.00 feet more or less to the point of BEGINNING.

DEED DESCRIPTION

PARCEL C DEED BOOK 4065 PAGE 85

BEGINNING at a point being the Southwest corner of lands of Sun Company, Inc. (R&M) to be conveyed to Littman Industries, Inc. as shown on map entitled "Lot Line Change Between Littman Industries, Inc. & Sun Company, Inc. (R&M)" prepared by Gabriel E. Senor, P.E., L.S., dated November 29, 1993 and revised January 10, 1994 and filed on May 26, 1994 in the Orange County Clerk's Office, Division of Land Records as File Map #84-94, said corner also known as the Southwest corner of Tax Lot 94; Section 9, Block 1; now or formerly owned by Sun Company, Inc. (R&M) as shown on the official tax maps of the Town of New Windsor; thence proceed Northeasterly along the Easterly line of River Road (Route 9W) the following courses and distances; North 28° 09' 52" East, 39.38 feet; thence proceed North 02° 30' 19" East, 565.07 feet to a point on the centerline of a dirt drive; thence proceed Southeasterly along said centerline of dirt drive the following courses and distances; South 25° 49' 02" East, 38.64 feet; thence proceed South 14° 55' 15" East, 92.37 feet; thence proceed on a curve to the left having a radius of 30.00 feet and a length of 25.16 feet; thence proceed South 62° 58' 45" East, 78.83 feet; thence proceed on a curve to the right having a radius of 162.72 feet and a length of 147.83 feet; thence proceed on a reverse curve to the left having a radius of 30.00 feet and length of 26.19 fee!; thence proceed South 60° 56' 37" East, 177.86 feet to a point on the Westerly boundary line of lands owned by Consolidated Rail Corporation; thence proceed Southwesterly along said boundary line, South 21 ° 53' 30" West, 252.97 feet to a point on the Northerly boundary line of lands now or formerly owned by Littman Industries, Inc.; thence proceed Northwesterly along said boundary line, North 83° 54' 30" West, 333.25 feet to the point or place of BEGINNING.

ENVIRONMENTAL EASEMENT DESCRIPTION

PARCEL A1 LOC REALTY CORP.

All that certain tract, piece or parcel of land situate in the Town of New Windsor, County of Orange, State of New York, lying Easterly of River Road, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the division line between the lands now or formerly of LOC Realty Corp. as described in Book 5123 of Deeds at Page 165 on the Northeast and the lands now or formerly of IDC Soils Remediation Inc. as described in Book 4102 of Deeds at Page 297 on the Southwest with the Southeasterly highway boundary of River Road and runs thence from the said point of beginning along said Southeasterly highway boundary North 26 deg. 54 min. 58 sec. East 194.56 feet to its point of intersection with the Easterly highway boundary of River Road; thence along said Easterly highway boundary the following two (2) courses: 1) North 17 deg. 19 min. 03 sec. East 120.00 feet to a point; and 2) North 14 deg. 25 min. 03 sec. East 30.00 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the South and the lands now or formerly of Littman Industries Inc. as described in Book 2635 of Deeds at Page 142 and Book 4065 of Deeds at Page 85 on the North; thence along said division line South 76 deg. 23 min. 57 sec. East 164.97 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the West and the said lands now or formerly of Littman Industries Inc. on the East; thence along said division line South 13 deg. 36 min. 03 sec. West 10.00 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the South and the said lands now or formerly of Littman Industries Inc. on the North; thence along said division line South 76 deg. 23 min. 57 sec. East 133.73 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the West and the said lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line the following two (2) courses: 1) South 09 deg. 14 min. 33 sec. West 20.06 feet to a point; and 2) South 08 deg. 58 min. 50 sec. West 396.66 feet to its point of intersection with the above first mentioned division line; thence along said above first mentioned division line North 63 deg. 46 min. 14 sec. West 394.74 feet to the point or place of beginning and containing 2.9 acres of land, more or less.

ENVIRONMENTAL EASEMENT DESCRIPTION

PARCEL B1 & C LITTMAN INDUSTRIES INC.

All that certain tract, piece or parcel of land situate in the Town of New Windsor, County of Orange, State of New York, lying Easterly of River Road, and being more particularly bounded and described as follows:

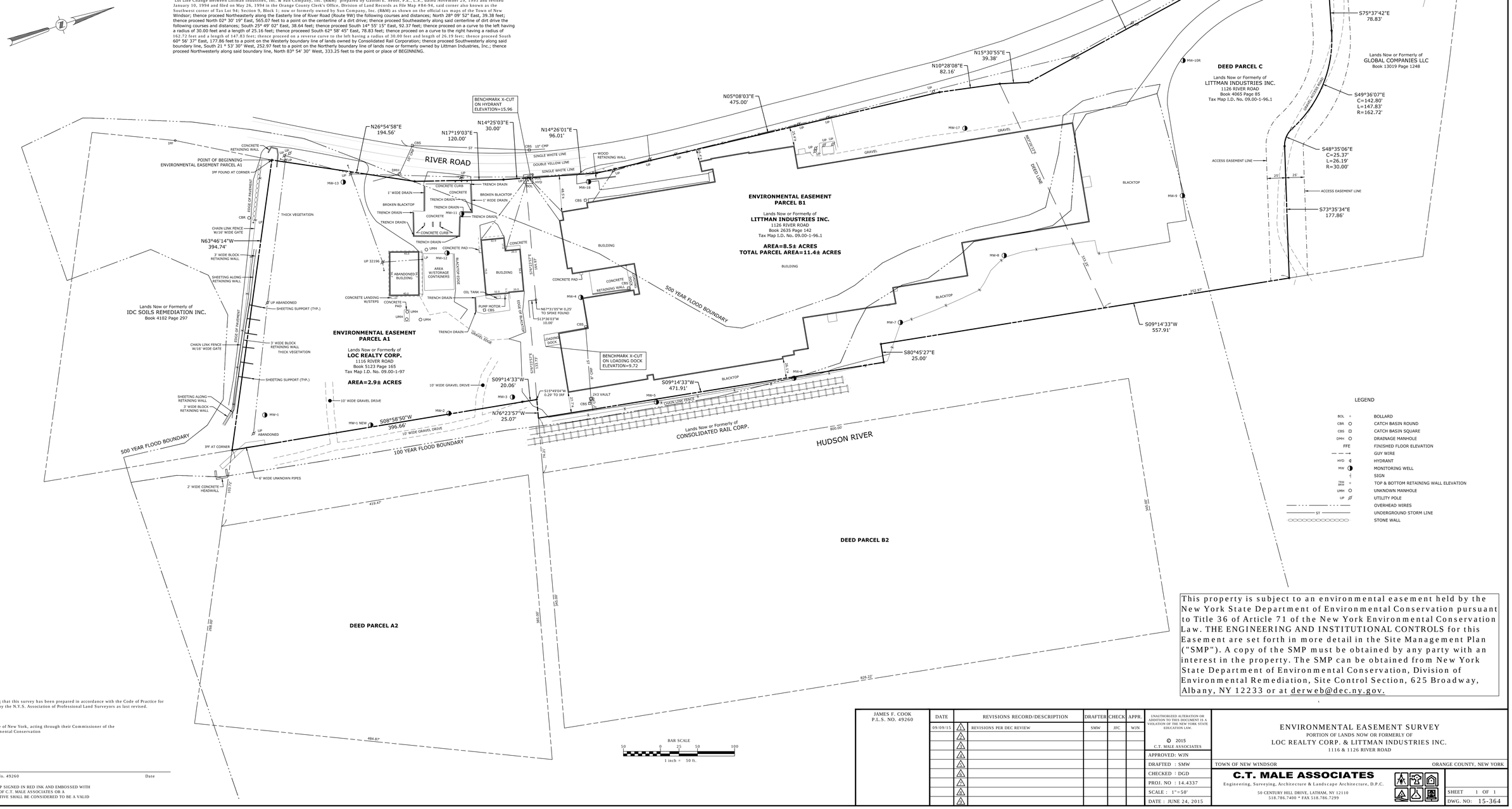
BEGINNING at the point of intersection of the division line between the lands now or formerly of Littman Industries Inc. as described in Book 4065 of Deeds at Page 85 and Book 2635 of Deeds at Page 142 on the Southwest and the lands now or formerly of Global Companies LLC as described in Book 13019 of Deeds at Page 1248 on the Northeast with the Easterly highway boundary of River Road and runs thence from the said point of beginning along said division line the following three (3) courses: 1) South 38 deg. 27 min. 59 sec. East 38.64 feet to a point; 2) South 27 deg. 34 min. 12 sec. East 92.37 feet to a point of curvature; and 3) in a Southeasterly direction along a curve to the left having a radius of 30.00 feet, an arc length of 25.16 feet and a chord bearing of South 51 deg. 35 min. 46 sec. East 24.43 feet to a point of tangency at the point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Global Companies LLC on the North; thence along said division line South 75 deg. 37 min. 42 sec. East 78.83 feet to a point of curvature on the division line between the said lands now or formerly of Littman Industries Inc. on the Southwest and the said lands now or formerly of Global Companies LLC on the Northeast; thence along said division line the following two (2) courses: 1) in a Southeasterly direction along a curve to the right having a radius of 162.72 feet, an arc length of 147.83 feet and a chord bearing of South 49 deg. 36 min. 07 sec. East 142.80 feet to a point of reverse curvature; and 2) in a Southeasterly direction along a curve to the left having a radius of 30.00 feet, an arc length of 26.19 feet and a chord bearing of South 48 deg. 35 min. 06 sec. East 25.37 feet to a point of tangency at the point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Global Companies LLC on the North; thence along said division line South 73 deg. 35 min. 34 sec. East 177.86 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the West and the lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line South 09 deg. 14 min. 33 sec. West 557.91 to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Consolidated Rail Corp. on the North; thence along said division line South 80 deg. 45 min. 27 sec. East 25.00 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the West and the said lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line South 09 deg. 14 min. 33 sec. West 471.91 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the North and the said lands now or formerly of Consolidated Rail Corp. on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 25.07 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the North and the lands now or formerly of LOC Realty Inc. as described in Book 5123 of Deeds at Page 165 on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 133.73 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the East and the said lands now or formerly of LOC Realty Corp. on the West; thence along said division line North 13 deg. 36 min. 03 sec. East 10.00 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the North and the said lands now or formerly of LOC Realty Corp. on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 164.97 feet to its point of intersection with the Easterly highway boundary of River Road; thence continuing along said Easterly highway boundary of River Road the following five (5) courses: 1) North 14 deg. 26 min. 01 sec. East 96.01 feet to a point; 2) North 05 deg. 08 min. 03 sec. East 475.00 feet to a point; 3) North 10 deg. 28 min. 08 sec. East 82.16 feet to a point; 4) North 15 deg. 30 min. 55 sec. East 39.38 feet to a point; and 5) North 10 deg. 08 min. 38 sec. West 565.07 feet to the point or place of beginning and containing 8.5 acres of land, more or less.

ENVIRONMENTAL EASEMENT AREA ACCESS

The DEC or their agent may access the environmental easement area as shown hereon through any existing street access or building ingress/egress access point.

ENGINEERING / INSTITUTIONAL CONTROLS

- All Engineering Controls must be maintained as specified in the Site Management Plan (SMP).
- All Engineering Controls on the property must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater Monitoring and other environmental or public health monitoring must be performed as defined in the SMP.
- Groundwater Use Restriction - The use of Groundwater underlying the property is prohibited without treatment rendering safe for intended use.
- Vapor Intrusion - The potential for vapor intrusion must be evaluated for any buildings developed on the Site; and any potential impacts that are identified must be monitored or mitigated.
- Vegetable Gardens - and farming on the property are prohibited.
- Soil Cover - Any breach of the natural site cover, including for the purposes of construction or utilities work, must be replaced or repaired according to the Site Management Plan (SMP). Site soil excavated and removed from the property must be managed, characterized, and properly disposed of in accordance with the NYSDEC regulations and directives. Guidelines for management of subsurface soils/fill and long-term maintenance of the natural site cover is provided in the SMP.
- Land Use - The use and development of the site is limited to Commercial and Industrial uses only as defined in 6 NYCRR Part 375-1.8(g)(2) (iii) & (iv).



BAR SCALE
50 0 25 50 100
1 inch = 50 ft.

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law. THE ENGINEERING AND INSTITUTIONAL CONTROLS for this Easement are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

I certify to the following that this survey has been prepared in accordance with the Code of Practice for Land Surveys adopted by the N.Y.S. Association of Professional Land Surveyors as last revised.

BDL, LLC
The people of The State of New York, acting through their Commissioner of the Department of Environmental Conservation

James F. Cook PLS No. 49260 Date

"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY".

CAD DWG. FILE NAME: C:\Users\dd\Desktop\Esi-New Windsor.dwg

Esi-New Windsor.dwg

JAMES F. COOK
P.L.S. NO. 49260

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
09/09/15	1	REVISIONS PER DEC REVIEW	SMW	JFC	WJN
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

APPROVED: WJN
DRAFTED : SMW
CHECKED : DGD
PROJ. NO : 14.4337
SCALE : 1"=50'
DATE : JUNE 24, 2015

ENVIRONMENTAL EASEMENT SURVEY
PORTION OF LANDS NOW OR FORMERLY OF
LOC REALTY CORP. & LITTMAN INDUSTRIES INC.
1116 & 1126 RIVER ROAD

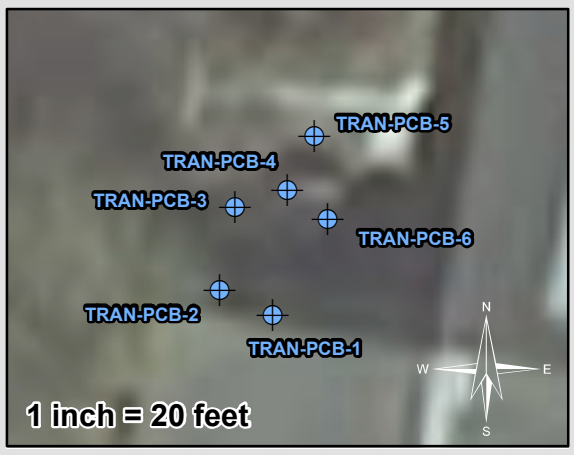
TOWN OF NEW WINDSOR ORANGE COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 15-364

MW-16
SS-10
SS-11
SS-9
SS-21
SS-7
SS-6
MW-10R
SS-5
SS-8
SS-20
SS-4
MW-10
MW-9
SS-12
SS-19
SED-2 / SW-2
SED-1 / SW-1
MW-17
MW-8
SS-18
See Inset Map for Surface Soil Samples near Transformer Area
MW-7
MW-6
Lands Under Water (Not part of BCP)
MW-18
MW-5
MW-4
SILVER SPRING RD
MW-11
MW-12
SS-17
MW-3
SS-15
MW-13
RIVER RD
MW-15
MW-2
SS-14
SS-16
SS-13
SS-3
MW-1
SS-2
SS-1
MW (no id)
HUDSON
RIVER

Transformer Area West of Main Building



N W E S

0 150 300 FT

1 inch = 150 feet

Legend

- Sediment / Surface Water Sample
- Surface Soil Sample
- Monitoring Well
- Lands of Littman Industries Inc & LOC Realty Corp
- Orange County Tax Parcels

Figure 3: PDI Sampling Locations

Town of New Windsor — **Orange County, New York**

Project Number: 14.4337
Data Source: NYSGIS Clearinghouse, BING
Projection: State Plane NAD83 NYE (Feet)
Date: October 03, 2016
File: Figure3_PDISamplingLocations11x17.mxd
GIS: C Secor

Map Note: The locations and features depicted on this map are approximate and do not represent an actual field survey.

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(518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM
FOUNDED IN 1910

0 40 80 FT

1 inch = 40 feet

Endpoint Soil Sample

Project Site

Project Number: 14.4337
Data Source: NYSGIS Clearinghouse, BING
Projection: State Plane NAD83 NYE (Feet)
Date: October 4th, 2016
File: Figure4_EndpointSamplingLocations11x17.mxd
GIS: C Secor

Map Note: The locations and features depicted on this map are approximate and do not represent an actual field survey.

Figure 4: Endpoint Soil Sampling Locations

Town of New Windsor **Orange County, New York**

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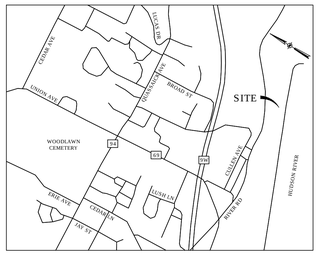
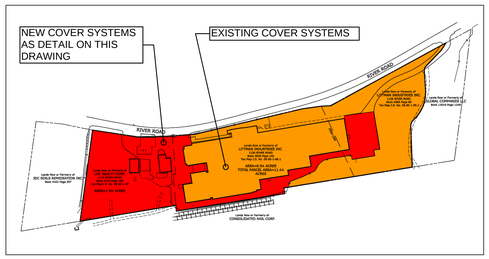
(518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM
FOUNDED IN 1910



SITE LOCATION MAP
(NOT TO SCALE)



OVERALL SITE & ADJOINER MAP
(NOT TO SCALE)

MAP REFERENCE:

1. PARTIAL SITE PLAN, USAI, LLC, LOC REALTY CORP. & LITTMAN INDUSTRIES INC., 1116 & 1126 RIVER ROAD, PREPARED BY C.T. MALE ASSOCIATES, DATED JULY 24, 2015, LAST REVISION MAY 20, 2016.
2. THE LOCATIONS AND FEATURES DEPICTED ON THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY OF AS-BUILT CONDITIONS.

SURFACE COVER SYSTEM CONSISTING OF A MINIMUM 12 INCHES OF IMPORTED SOIL AND/OR STONE ATOP A DEMARCATION MATERIAL

SURFACE COVER SYSTEM CONSISTING OF A MINIMUM 10 INCHES OF ASPHALT/CONCRETE AND IMPORTED SUBBASE (ITEM 4) ATOP A DEMARCATION MATERIAL

EXISTING SURFACE COVER SYSTEM

LEGEND

BOL	BOLLARD
	CATCH BASIN ROUND
	CATCH BASIN SQUARE
	DRAINAGE MANHOLE
	FINISHED FLOOR ELEVATION
	GUY WIRE
HYD	HYDRANT
IPF	IRON PIPE FOUND
	MONITORING WELL
	SIGN
	TOP & BOTTOM RETAINING WALL ELEVATION
UNK	UNKNOWN MANHOLE
UP	UTILITY POLE
	GUARD RAIL
	OVERHEAD WIRES
ST	UNDERGROUND STORM LINE

SIGHT DISTANCE
APPROXIMATELY 320' (REQ'D 445')
GREATER THAN 400' (REQ'D 385')

SIGHT DISTANCE
APPROXIMATELY 475' (REQ'D 445')
GREATER THAN 400' (REQ'D 385')

RIVER ROAD

PER DISCUSSION WITH NYSDOT, REMOVE VEGETATION TO INCREASE SIGHT DISTANCE

CONCRETE CURB 1 DET1

TRUCK ENTRANCE

STOP BAR 2 DET1

STOP SIGN 8 DET1

PROPOSED FREE STANDING SIGN "TRUCK ENTRANCE" 8 DET1

PROPOSED FREESTANDING SIGN "PARKING ENTRANCE" 8 DET1

PARKING LOT ENTRANCE

RELOCATED END ASSEMBLY 1 DET2

EXTEND GUIDERAIL 1 DET2

PROPOSED TREE LINE

GATE ROLLER POST

6' HIGH CHAIN LINK FENCE 4 DET2

TOPSOIL, SEED, AND MULCH

PROPOSED USAI SIGN, TO BE CONSISTENT WITH TOWN ZONING REQUIREMENTS

SLIDE GATE

ASPHALT WING CURB 6 DET1

KNOX BOX

TIMBER GUIDERAIL 2 DET2

CROSSWALK 3 DET1

RESTRIPE EXISTING DIAGONAL PARKING SPACES

ELECTRIC CAR CHARGING STATION, DESIGNED BY OTHERS

CONCRETE SIDEWALK 9 DET1

HANDICAP PARKING SIGN, TYPICAL OF (4) 8 DET1

FIRE LANE, NO PARKING SIGN (2)

NO PARKING SIGN, TYPICAL OF (2) 8 DET1

STANDARD DUTY ASPHALT 7 DET1

PROPOSED PARKING LOT WITH 98 PARKING SPACES

HEAVY DUTY ASPHALT 7 DET1

PROPOSED BUILDING ADDITION

SECONDARY LOADING DOCKS

PRIMARY LOADING DOCKS

THIS AREA WILL BE RESTRIPED FOR PARALLEL PARKING

SOIL PLACEMENT AREA

TOPSOIL, SEED, AND MULCH

ACCESS ROAD STRUCTURAL SOIL

STORMWATER TO OVERFLOW TO EXISTING STONE SWALE

FOREBAY

DETENTION BASIN

STONE BERM

PERMANENT POOL

EXISTING STONE-LINED OUTFALL CHANNEL

SOIL PLACEMENT AREA

500 YEAR FLOOD BOUNDARY

100 YEAR FLOOD BOUNDARY

HUDSON RIVER

10' WIDE GRAVEL DRIVE

BUILDING

WOOD RETAINING WALL

CHAIN LINK FENCE W/16' WIDE GATE

3' WIDE BLOCK RETAINING WALL

SHEETING ALONG RETAINING WALL

EDGE OF PAVEMENT

THICK VEGETATION

TOP ANGLE IRON

CONCRETE RETAINING WALL

1PF AT CORNER

2' WIDE CONCRETE HEADWALL

6' WIDE UNKNOWN PIPES

CONDUIT PIPE

GATE POST

2X3 VAULT

CBS TF=5.85 8" INV. OUT=4.45

CBS TF=6.02

CBS TF=6.11 8" INV. OUT=3.51

CB

N63°46'14"W 394.74'

N26°54'58"E 194.56'

N17°19'03"E 120.00'

N14°25'03"E 30.00'

N14°26'01"E 96.01'

N05°08'03"E 475.00'

S09°14'33"W 20.06'

S09°14'33"W 471.91'

S08°58'50"W 396.66'

N76°23'57"W 25.07'

S13°49'04"W 0.29' TO IRF

N67°31'05"W 0.25' TO SPIKE FOUND

S13°36'03"W 10.00'

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

JEFFREY A. MARX, P.E. 082100

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			

DESIGNED: J.MARX
DRAFTED : J.MARX
CHECKED : J.MCIVER
PROJ. NO : 14.4337
SCALE : 1" = 20'
DATE : OCT. 28, 2016

FIGURE 5
SURFACE COVER SYSTEMS

USAI LIGHTING FACILITY
SITE MANAGEMENT PLAN

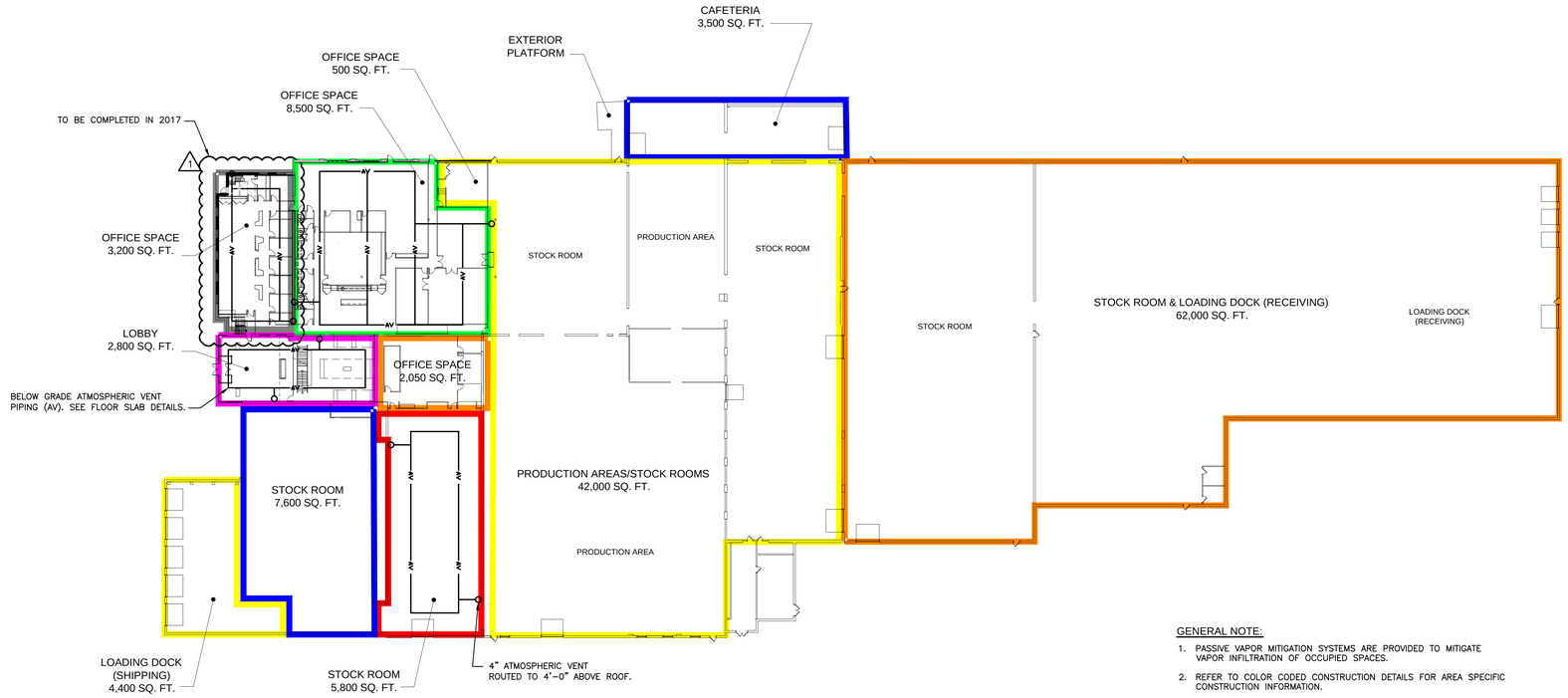
TOWN OF NEW WINDSOR — ORANGE COUNTY, NY

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 16-589

CAD DWG. FILE NAME: K:\Projects\14.4337\Final Engineering Report\Drawings\Fig 5 - Surface Cover Sys.dwg

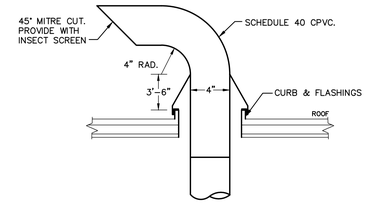
CAD DWG. FILE NAME: Fig 5 - Surface Cover Sys.dwg



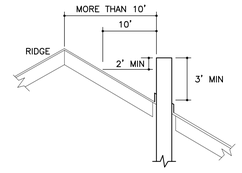
1 OVERALL AREA PLAN
SCALE: 1/32"=1'-0"

GENERAL NOTE:

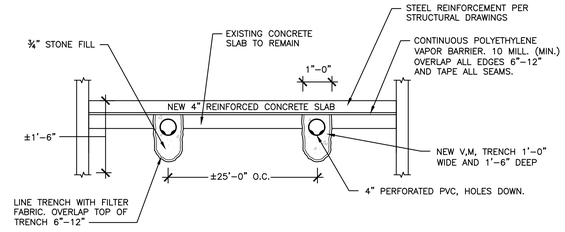
1. PASSIVE VAPOR MITIGATION SYSTEMS ARE PROVIDED TO MITIGATE VAPOR INFILTRATION OF OCCUPIED SPACES.
2. REFER TO COLOR CODED CONSTRUCTION DETAILS FOR AREA SPECIFIC CONSTRUCTION INFORMATION.
3. WHEN CONCRETE IS FULLY CURED (TYPICALLY 30 DAYS) CONTRACTOR SHALL SEAL ALL SHRINKAGE CRACKS FORMED BETWEEN NEW CONCRETE WORK AND EXISTING WALLS, FORMS, ETC. WITH NON-SHRINK MASONRY GROUT OR CAULK.
4. AT THE COMPLETION OF ALL PASSIVE VAPOR MITIGATION MEASURES, AIR SAMPLES SHALL BE COLLECTED IN ACCORDANCE WITH THE NYSDEC APPROVED SITE MANAGEMENT PLAN TO DETERMINE WHETHER ADDITIONAL SECONDARY MITIGATION WORK IS NECESSARY. SECONDARY MITIGATION COULD CONSIST OF AN ACTIVE POSITIVE PRESSURE HVAC SUPPLY SYSTEM AND/OR AN ACTIVE NEGATIVE PRESSURE UNDER SLAB SYSTEM FOR AREAS WITH UNDER SLAB VAPOR MITIGATION PIPING.
5. REPRESENTATIVES FROM C.T. MALE ASSOCIATES WERE ONSITE TO CORROBORATE THAT MITIGATION MEASURES WERE INSTALLED IN CONFORMANCE WITH THE SITE/BLD. MITIGATION PLANS.



2 ATMOSPHERIC VENT TERMINATION DETAIL
N.T.S.

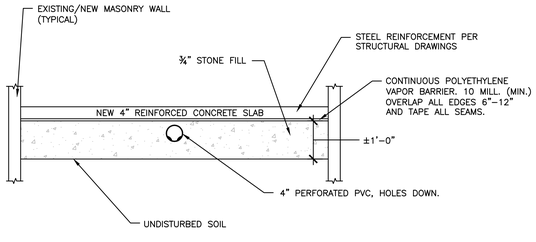


ATMOSPHERIC VENT TERMINATION HEIGHT
3 ADJUSTMENT DETAIL FOR SLOPED ROOF AREAS
N.T.S.



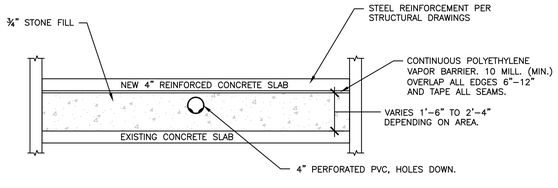
4 CONCRETE FLOOR SLAB DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN GRAY)



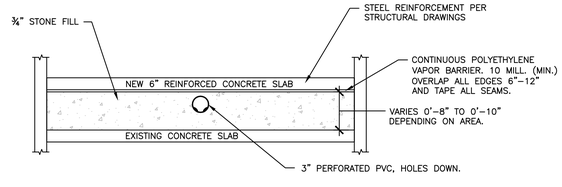
5 CONCRETE FLOOR SLAB DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN PINK)



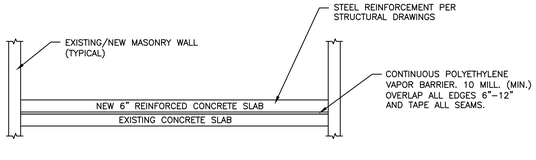
6 BUILT-UP CONCRETE FLOOR SLAB DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN GREEN)



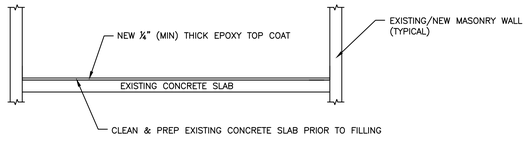
7 BUILT-UP CONCRETE FLOOR SLAB DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN RED)



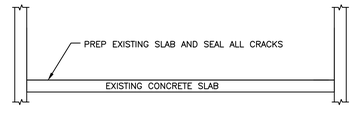
8 BUILT-OVER FLOOR SLAB DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN YELLOW)



9 CONCRETE FLOOR EPOXY SEALING DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN BLUE)



10 CONCRETE FLOOR SLAB SEALING DETAIL
N.T.S.

(TYPICAL OF AREA OUTLINED IN ORANGE)

No.	REVISION/SUBMISSION	DATE
	RECORD DRAWING	12/9/16

fpm design llc
9 Van Voorhis Drive, Fishkill, New York 12524
t. 914.299.4733
www.fpmdesignllc.com

Mechanical/Electrical/Plumbing Engineer
FELLENZER ENGINEERING LLP
15-173B
www.fellp.com
181 Church Street, Suite 100
Poughkeepsie, NY 12601
t 845-454-9704 fx 845-454-9705
22 Mulberry St., Suite 2A,
Middletown, NY 10940
t 845-343-1481 fx 845-343-4986

Structural Engineer
M.A. DAY Engineering, PC
Consulting Engineers
3 Van Wyck Ln.
Suite 2
Wappingers Falls, New York
(845)-223-3202

Liscum McCormack VanVoorhis LLP
ARCHITECTURE
PLANNING INTERIORS
181 CHURCH STREET
POUGHKEEPSIE, NEW YORK 12601
PHONE 845-452-2268 FAX 845-452-3752

PROJECT
USAI LIGHTING
RIVER ROAD
NEW WINDSOR, N.Y.

DRAWING
BUILDING VAPOR MITIGATION
INTRUSION MEASURES

DANIEL STEINBERG, P.E.
STATE OF NEW YORK
DANIEL J. STEINBERG
076893
LICENSED PROFESSIONAL ENGINEER
NY PROFESSIONAL ENGINEER

DRAWN BY	PROJECT No.
CJC	15-173B
CHECKED BY	DATE
DJS	11-23-16

DRAWING No.
VM-1

FILE NO. 07073-1

APPENDIX A

ENVIRONMENTAL EASEMENT

ORANGE COUNTY – STATE OF NEW YORK

ANN G. RABBITT, COUNTY CLERK
255 MAIN STREET
GOSHEN, NEW YORK 10924

COUNTY CLERK'S RECORDING PAGE

THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH

BOOK/PAGE: 14106 / 1657
INSTRUMENT #: 20160059895

Receipt#: 2193343
Clerk: LM
Rec Date: 09/12/2016 11:38:44 AM
Doc Grp: D
Descrip: RT WY
Num Pgs: 11
Rec'd Frm: JACOBOWITZ AND GUBITS, LLP

Party1: LITTMAN INDUSTRIES INC
Party2: PEOPLE OF STATE OF NY
Town: NEW WINDSOR (TN)
9-1-96.1

Recording:

Recording Fee	75.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Sub Total:	100.00

Transfer Tax

Transfer Tax - State	0.00
Sub Total:	0.00
Total:	100.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****
Transfer Tax #: 1353
Transfer Tax
Consideration: 0.00

Total: 0.00

Payment Type:
Check ___
Cash ___
Charge ___
No Fee ___

Comment: _____

Ann G. Rabbitt
Orange County Clerk

Record and Return To:

ELECTRONICALLY RECORDED BY SIMPLIFILE

Section: 9
Block: 1
Lot: 96.1

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 12th day of January, 2016 between Owner(s) Littman Industries, Inc., having an office at 1126 River Road, New Windsor, NY 12553, County of Orange, State of New York and Tenant(s) BDL, LLC, having an office at 1126 River Road, New Windsor, NY 12553, County of Orange, State of New York (collectively the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 1126 River Road in the Town of New Windsor, County of Orange and State of New York, known and designated on the tax map of the County Clerk of Orange as tax map parcel numbers: Section 09.00 Block 1 Lot 96.1, being a portion of the property conveyed to Grantor by deeds dated November 12, 1986 and June 20, 1994 and recorded in the Orange County Clerk's Office in Liber and Page 2635/142 and 4065/85, respectively. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 8.5 +/- acres, and is hereinafter more fully described in the Land Title Survey dated June 24, 2015 and last revised October 23, 2015 prepared by James F. Cook, P.L.S. of C.T. Male Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C336087-12-14, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) 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 identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C336087
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and

communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Littman Industries, Inc.:

By: Elfriede Littman

Print Name: Elfriede Littman

Title: Secretary Date: 1/4/16

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 4th day of January, in the year 20 16, before me, the undersigned, personally appeared Elfriede Littman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

JOHN C. CAPPELLO
Notary Public, State of New York
No. 02CA6075555
Qualified in Orange County
Commission Expires ~~June 10~~ July 13, 20 19

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

BDL, LLC:

By: _____

Print Name: David Littman

Title: Member Date: 1/4/16

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 4th day of January, in the year 2016, before me, the undersigned, personally appeared David Littman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

JOHN C. CAPPELLO
Notary Public, State of New York
No. 02CA6075555
Qualified in Orange County
Commission Expires ~~June 10~~ July 13, 2019

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 12th day of January, in the year 2016, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

Record & Return To:
Jacobowitz & Gubits, LLP
158 Orange Avenue
Walden, NY 12586

SCHEDULE "A" PROPERTY DESCRIPTION

DESCRIPTION
ENVIRONMENTAL EASEMENT
PARCEL B1
LANDS NOW OR FORMERLY OF LITTMAN INDUSTRIES INC.
TOWN OF NEW WINDSOR, COUNTY OF ORANGE, STATE OF NEW YORK
AREA = 8.5± ACRES OF LAND

All that certain tract, piece or parcel of land situate in the Town of New Windsor, County of Orange, State of New York, lying Easterly of River Road, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the division line between the lands now or formerly of Littman Industries Inc. as described in Book 4065 of Deeds at Page 85 and Book 2635 of Deeds at Page 142 on the Southwest and the lands now or formerly of Global Companies LLC as described in Book 13019 of Deeds at Page 1248 on the Northeast with the Easterly highway boundary of River Road and runs thence from the said point of beginning along said division line the following three (3) courses: 1) South 38 deg. 27 min. 59 sec. East 38.64 feet to a point; 2) South 27 deg. 34 min. 12 sec. East 92.37 feet to a point of curvature; and 3) in a Southeasterly direction along a curve to the left having a radius of 30.00 feet, an arc length of 25.16 feet and a chord bearing of South 51 deg. 35 min. 46 sec. East 24.43 feet to a point of tangency at the point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Global Companies LLC on the North; thence along said division line South 75 deg. 37 min. 42 sec. East 78.83 feet to a point of curvature on the division line between the said lands now or formerly of Littman Industries Inc. on the Southwest and the said lands now or formerly of Global Companies LLC on the Northeast; thence along said division line the following two (2) courses: 1) in a Southeasterly direction along a curve to the right having a radius of 162.72 feet, an arc length of 147.83 feet and a chord bearing of South 49 deg. 36 min. 07 sec. East 142.80 feet to a point of reverse curvature; and 2) in a Southeasterly direction along a curve to the left having a radius of 30.00 feet, an arc length of 26.19 feet and a chord bearing of South 48 deg. 35 min. 06 sec. East 25.37 feet to a point of tangency at the point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Global Companies LLC on the North; thence along said division line South 73 deg. 35 min. 34 sec. East 177.86 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the West and the lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line South 09 deg. 14 min. 33 sec. West 557.91 to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the South and the said lands now or formerly of Consolidated Rail Corp. on the North; thence along said division line South 80 deg. 45 min. 27 sec. East 25.00 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the West and the said lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line South 09 deg. 14 min. 33 sec. West 471.91 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the North and the said lands now or formerly of Consolidated Rail Corp. on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 25.07 feet to its point of intersection with the division line between the said lands now

or formerly of Littman Industries Inc. on the North and the lands now or formerly of LOC Realty Inc. as described in Book 5123 of Deeds at Page 165 on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 133.73 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the East and the said lands now or formerly of LOC Realty Corp. on the West; thence along said division line North 13 deg. 36 min. 03 sec. East 10.00 feet to its point of intersection with the division line between the said lands now or formerly of Littman Industries Inc. on the North and the said lands now or formerly of LOC Realty Corp. on the South; thence along said division line North 76 deg. 23 min. 57 sec. West 164.97 feet to its point of intersection with the Easterly highway boundary of River Road; thence continuing along said Easterly highway boundary of River Road the following five (5) courses: 1) North 14 deg. 26 min. 01 sec. East 96.01 feet to a point; 2) North 05 deg. 08 min. 03 sec. East 475.00 feet to a point; 3) North 10 deg. 28 min. 08 sec. East 82.16 feet to a point; 4) North 15 deg. 30 min. 55 sec. East 39.38 feet to a point; and 5) North 10 deg. 08 min. 38 sec. West 565.07 feet to the point or place of beginning and containing 8.5 acres of land, more or less.

ORANGE COUNTY – STATE OF NEW YORK

ANN G. RABBITT, COUNTY CLERK
255 MAIN STREET
GOSHEN, NEW YORK 10924

COUNTY CLERK'S RECORDING PAGE

THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH

BOOK/PAGE: 14106 / 1620
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Receipt#: 2193331
Clerk: LM
Rec Date: 09/12/2016 11:32:33 AM
Doc Grp: D
Descrip: RT WY
Num Pgs: 11
Rec'd Frm: JACOBOWITZ AND GUBITS, LLP

Party1: LOC REALTY CORP
Party2: PEOPLE OF STATE OF NY
Town: NEW WINDSOR (TN)
9-1-97

Recording:

Recording Fee	75.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Sub Total:	100.00

Transfer Tax

Transfer Tax - State	0.00
Sub Total:	0.00
Total:	100.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****
Transfer Tax #: 1352
Transfer Tax
Consideration: 0.00

Total: 0.00

Payment Type:
Check ___
Cash ___
Charge ___
No Fee ___

Comment: _____

Ann G. Rabbitt
Orange County Clerk

Record and Return To:

ELECTRONICALLY RECORDED BY SIMPLIFILE

Section: 9
Block: 1
Lot: 97

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 12th day of January, 2016 between Owner(s) LOC Realty Corp., having an office at 1126 River Road, New Windsor, NY 12553, County of Orange, State of New York and Tenant(s) BDL, LLC, having an office at 1126 River Road, New Windsor, NY 12553, County of Orange, State of New York (collectively the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 1116 River Road in the Town of New Windsor, County of Orange and State of New York, known and designated on the tax map of the County Clerk of Orange as tax map parcel numbers: Section 09.00 Block 1 Lot 97, being a portion of the property conveyed to Grantor by deed dated August 4, 1999 and recorded in the Orange County Clerk's Office in Liber and Page 5123/165. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 2.9 +/- acres, and is hereinafter more fully described in the Land Title Survey dated June 24, 2015 and last revised October 23, 2015 prepared by James F. Cook, P.L.S. of C.T. Male Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the

protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C336087-12-14, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) 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 identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation

pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C336087
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and

communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

LOC Realty, Corp.:

By: Elfriede Littman

Print Name: Elfriede Littman

Title: Secretary Date: 1/4/16

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 4th day of January, in the year 2016, before me, the undersigned, personally appeared Elfriede Littman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

JOHN C. CAPPELLO
Notary Public, State of New York
No. 02CA6075555
Qualified in Orange County
Commission Expires ~~June 10~~, 20 19
July 13

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

BDL, LLC:

By: _____

Print Name: David Littman

Title: Member Date: 1/4/16

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 4th day of January, in the year 20 16, before me, the undersigned, personally appeared David Littman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

JOHN C. CAPPELLO
Notary Public, State of New York
No. 02CA6075555
Qualified in Orange County
Commission Expires ~~June 10~~ July 13, 20 19

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 12th day of January, in the year 2016 before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

Record & Return to:
Jacobowitz & Gubits, LLP
158 Orange Avenue
Walden, NY 12586

SCHEDULE "A" PROPERTY DESCRIPTION

DESCRIPTION
ENVIRONMENTAL EASEMENT
PARCEL A1
TOWN OF NEW WINDSOR, COUNTY OF ORANGE, STATE OF NEW YORK
AREA = 2.9± ACRES OF LAND

All that certain tract, piece or parcel of land situate in the Town of New Windsor, County of Orange, State of New York, lying Easterly of River Road, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the division line between the lands now or formerly of LOC Realty Corp. as described in Book 5123 of Deeds at Page 165 on the Northeast and the lands now or formerly of IDC Soils Remediation Inc. as described in Book 4102 of Deeds at Page 297 on the Southwest with the Southeasterly highway boundary of River Road and runs thence from the said point of beginning along said Southeasterly highway boundary North 26 deg. 54 min. 58 sec. East 194.56 feet to its point of intersection with the Easterly highway boundary of River Road; thence along said Easterly highway boundary the following two (2) courses: 1) North 17 deg. 19 min. 03 sec. East 120.00 feet to a point; and 2) North 14 deg. 25 min. 03 sec. East 30.00 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the South and the lands now or formerly of Littman Industries Inc. as described in Book 2635 of Deeds at Page 142 and Book 4065 of Deeds at Page 85 on the North; thence along said division line South 76 deg. 23 min. 57 sec. East 164.97 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the West and the said lands now or formerly of Littman Industries Inc. on the East; thence along said division line South 13 deg. 36 min. 03 sec. West 10.00 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the South and the said lands now or formerly of Littman Industries Inc. on the North; thence along said division line South 76 deg. 23 min. 57 sec. East 133.73 feet to its point of intersection with the division line between the said lands now or formerly of LOC Realty Corp. on the West and the lands now or formerly of Consolidated Rail Corp. on the East; thence along said division line the following two (2) courses: 1) South 09 deg. 14 min. 33 sec. West 20.06 feet to a point; and 2) South 08 deg. 58 min. 50 sec. West 396.66 feet to its point of intersection with the above first mentioned division line; thence along said above first mentioned division line North 63 deg. 46 min. 14 sec. West 394.74 feet to the point or place of beginning and containing 2.9 acres of land, more or less.

APPENDIX B
EXCAVATION WORK PLAN (EWP)

B-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the NYSDEC. Table B-1.1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Table 1.3-2 of the SMP.

Table B-1.1: Notifications*

NYSDEC Project Manager: Matthew Hubicki	Telephone: 518.402. 9662 Email: matthew.hubicki@dec.ny.gov
NYSDEC Acting Regional Director: Kelly Turturro	Telephone: 845-256-3039 Email: kelly.tuturro@dec.ny.gov
NYSDEC Regional Engineer Samsudeen (Sam) Arakhan	Telephone: 845-256-3155 Email: samsudeen.arakhan@dec.ny.gov
Central Office NYSDEC Site Control	derweb@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;

- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

B-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photo-ionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section B-6 and B-7, respectively, of this Appendix.

B-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence unless other erosion controls are in-place to prevent a release of sediment during a storm event. Hay bales or other acceptable erosion and sediment control devices/methods will be used as needed near catch basins, surface waters and other discharge points in accordance with applicable stormwater regulations.

Stockpiles of existing soils (not cover materials) when not handled for more than seven days will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

B-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will not need to oversee invasive work performed above the Site's demarcation layer. A qualified environmental professional or person under their supervision will oversee all invasive work below the Site's demarcation layer and the excavation and load-out of associated excavated material. The owner of the property/ remedial party and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash or other sediment removing devices/methods will be operated on-site, as appropriate to satisfy the requirements of the General Permit, when applicable. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking. The Owner or their designated qualified environmental professional will be responsible for ensuring that all outbound trucks do not track site soils off-site. Truck wash waters (and sediments) will be collected and disposed of off-site in an appropriate manner.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

B-5 MATERIALS TRANSPORT OFF-SITE

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are to be considered prior to major site renovation or further development. Appropriate truck routes take into account: (a) limiting transport

through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

B-6 MATERIALS DISPOSAL OFF-SITE

Soil/fill excavated and removed from the site (Soil/fill excavated and removed from the site (excluding imported, clean fill) will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. If disposal of material from this Site is proposed for unregulated off-site disposal, a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site (other than imported, clean surface cover soils above the demarcation layer) will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

B-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in NYSDEC DER-10 and 6 NYCRR Part 375. The qualified environmental professional will document that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Criteria for soil reuse are as follows:

- Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.
- Soils above the demarcation fabric that are documented clean imported soils may be re-used anywhere on-Site or off-site without restriction.
- Soils below the demarcation fabric must be returned to a position below the demarcation fabric either in the same location or other location on-Site under demarcation fabric and analytical testing will not be required. If not returned in this manner, soils shall be properly handled, transported and disposed off-site in accordance with applicable regulations. Prior to being exported from the Site, excess soils from beneath the demarcation fabric must be characterized in accordance with the permit requirements of the selected disposal facility permitted and approved by the appropriate regulatory agency(s) to accept the material.

- Grossly contaminated soils must be treated as a regulated material (i.e., characterized, transported, and disposed off-Site at a permitted disposal facility).

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

B-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, and decontamination waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids from groundwater sampling will be recharged back to the land surface or subsurface of the site given the relatively low concentrations of petroleum constituents (based on previous groundwater analysis). If sampling of groundwater identifies free-phase petroleum, the purge water shall be containerized and managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) may be performed under a SPDES permit.

B-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the decision document. The existing cover system is comprised of a minimum of 12 of imported clean soil (south end), existing soil (north end), asphalt pavement, concrete covered sidewalks and/or

concrete building, etc. The demarcation layer, consisting of an orange or black geotextile fabric or snow fencing material will be replaced to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

B-10 BACKFILL FROM OFF-SITE SOURCES

Materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

The source of the imported backfill will need to be documented. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

Imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Appendix 5 of NYSDEC DER-10. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Imported backfill shall be documented clean by analytical testing. Imported backfill will be analyzed according to the following schedule:

<table>
<tr><td colspan="4">Recommended Number of Soil Samples for Soil Imported to the Site</td></tr>
<tr><td>Contaminant</td><td>Volatile Organic Compounds</td><td colspan="2">Semi-volatile Organic Compounds, Inorganics & PCBs/Pesticides</td></tr>
<tr><td>Imported Backfill Quantity in Cubic Yards</td><td>Discrete Samples</td><td>Composite Samples</td><td>Discrete Samples/Composites</td></tr>
<tr><td>0 – 50</td><td>1</td><td>1</td><td rowspan="8">3-5 Discrete samples from different locations in the fill being provided will compromise a composite sample for analysis</td></tr>
<tr><td>51 – 100</td><td>2</td><td>1</td></tr>
<tr><td>101 – 200</td><td>3</td><td>1</td></tr>
<tr><td>201 – 300</td><td>4</td><td>1</td></tr>
<tr><td>301 – 400</td><td>4</td><td>2</td></tr>
<tr><td>401 – 500</td><td>5</td><td>2</td></tr>
<tr><td>501 – 800</td><td>6</td><td>2</td></tr>
<tr><td>801 – 1,000</td><td>7</td><td>2</td></tr>
<tr><td>> 1,000</td><td colspan="3">Add an additional two volatile organic compound discrete samples and one composite sample for each additional 1,000 cubic yards or consult with NYSDEC</td></tr>
</table>

B-11 STORMWATER POLLUTION PREVENTION

Prior to implementing any Site disturbance greater than one acre, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the regulations for erosion and sediment controls and water quantity/quality controls. This will provide guidance to the contractor doing the construction activities. With the preparation of the SWPPP comes a requirement for submitting a Notice of Intent (NOI) to the NYSDEC

upon completion of the SWPPP to document the project exists and gain permit coverage. The NOI will be completed with direction and input from the Site owner and/or remedial party. There is also a requirement to submit a Municipal Separate Sewer System (MS4) SWPPP Acceptance Form to the Town of New Windsor. This form is used by a regulated, traditional land use control MS4 to indicate acceptance of a SWPPP it has reviewed. In addition to the SWPPP, Erosion and Sediment Control (ESC) plans will be designed and prepared as applicable for implementing the construction activity in accordance with the current stormwater regulations.

When the larger than one acre of disturbance construction project is complete and has met the requirements of the construction permit, a Notice of Termination (NOT) form shall be completed and submitted to the Department.

For implementing construction activities with disturbance with less than one acre, erosion and sediment controls (i.e., silt fencing, hay bales, etc.) will be installed around the down gradient perimeter of the work areas and around temporary stockpiles of excavated soil and imported backfill. Erosion and sediment controls will be observed once a week and corrective actions shall begin within one business day of contractor notification of deficiencies. Deficiencies include removal of accumulated sediments against silt fence, undercutting or erosion of the silt fence, and uncontrolled discharge off-site of turbid water. Corrective action shall be completed within a reasonable time frame. Results of inspections will be recorded in a logbook and maintained at the Site at the construction trailer or at the Owner's office and available for review by NYSDEC.

B-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until NYSDEC is notified and properly trained personnel and sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

B-13 COMMUNITY AIR MONITORING PLAN

The NYSDEC shall be notified before any Site disturbance is to occur. If soils below the demarcation layer are expected to be disturbed, the NYSDEC may require a Community Air Monitoring Plan (CAMP) to be prepared and submitted to the NYSDEC for approval prior to any planned Site disturbance. If required, the CAMP will be followed for any ground intrusive work in general accordance with the New York State Department of Health Generic CAMP dated May 2010, which is included as Appendix D of this SMP.

Monitoring for particulate dust, when handling soils below the demarcation layer, will be conducted based on generally prevailing wind conditions. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and downwind monitoring stations. There are no sensitive receptors such as a school, day care or residential area adjacent to the Site, so fixed monitoring stations at the site perimeters are not required.

All readings must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Action levels listed in the CAMP that are exceeded will be reported to NYSDEC and NYSDOH Project Managers.

B-14 ODOR CONTROL PLAN

Nuisance odors were not encountered during the implementation of the remedy and during the disturbance of existing Site soils. Therefore, an odor control plan is not needed for future excavation at the Site. If nuisance odors are observed during future Site excavation work, actions should be implemented to mitigate off-site impacts from odors.

If needed, this odor control plan should be capable of controlling emissions of nuisance odors off-site and on-Site. Specific odor control methods to be used on a routine basis could include (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils.. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) implement monitoring for odors in surrounding neighborhoods.

If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Professional Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by

sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

B-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-Site work below the demarcation layer will include, at a minimum, the items listed below:

- Dust suppression will be achieved though the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

APPENDIX C

LABORATORY ANALYTICAL REPORTS ON CD

APPENDIX D

SITE MANAGEMENT FORMS

Summary of Green Remediation Metrics for Site Management

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: _____

Current Reporting Period
Reporting Period From: _____ To: _____

Contact Information
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (e.g. geothermal, solar thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		

Reused on-site		

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service		
Waste Removal/Hauling		

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site		
Of that total amount, provide quantity:		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted storm water usage		

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed		
Land restored		

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Other:

CERTIFICATION BY CONTRACTOR
I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including that last day of the period covered by this application. _____ **Date** **Contractor**

APPENDIX E

RESPONSIBILITIES of

OWNER and REMEDIAL PARTY

Responsibilities

This page may be used when site management responsibilities are to be carried out by multiple parties. For example, it can be used when a Remedial Party does not own the site property, and, therefore, must share site management and/or reporting obligations with a site owner, or when the State is operating a remedial system or otherwise carrying out site management.

The responsibilities for implementing the Site Management Plan ("SMP") for the [Insert Site Name] site (the "site"), number [Insert Site Number], are divided between the site owner(s) and a Remedial Party, as defined below. The owner(s) is/are currently listed as: [Insert site owners' names, contacts and addresses] (the "owner").

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is: [Insert RP's name, contact and address].

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

Site Owner's Responsibilities:

1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.

2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in a(n) [Select one-Environmental Easement, Deed Restriction, Environmental Notice]

remain in place and continue to be complied with. The owner shall provide a written certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

3) In the event the site is delisted, the owner remains bound by the [Select one-Environmental Easement, Deed Restriction, Environmental Notice] and shall submit, upon request by the NYSDEC, a written certification that the [Select one-Environmental Easement, Deed Restriction, Environmental] is still in place and has been complied with.

4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.

5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section [xxx]-Notifications.

6) In the event some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in [Section xxx]- Notifications and (ii) coordinate the performance of necessary corrective actions with the RP.

7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property/ies. 6 NYCRR Part contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 2.4 of the SMP. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

8) If an owner has a written agreement to perform work for the RP, a description of the activities may be inserted here. (The corresponding agreement should also be included in the SMP.) The owner will [insert activities here: maintain fences, conduct mowing, etc] on behalf of the RP. The RP remains ultimately responsible for maintaining the engineering controls.

9) If the site remedy requires the installation, operation, and/or maintenance of an on-site vapor intrusion mitigation system insert the following: Until such time as the NYSDEC deems the vapor mitigation system unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.

10) If the site remedy requires the installation, operation, and/or maintenance of a drinking water treatment system, insert the following: Until such time as the NYSDEC deems the drinking water treatment system unnecessary, the owner shall operate the drinking water treatment system, pay for the utilities and report any maintenance issues to the RP and the NYSDEC.

11) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP, or owner, to the tenants on the property. The owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

Remedial Party Responsibilities

1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.

2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.

3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.

4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).

5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html .

6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section [xxx]- Notifications] of the SMP.

7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Section [X] or Appendix[X] (Operation , Monitoring and Maintenance Manual) of the SMP.

8) The RP is responsible for the proper monitoring and maintenance of any installed drinking water treatment system associated with the site, as required in Section [X] or Appendix [X](Operation , Monitoring and Maintenance Manual).

9) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.

10) Any change in use, change in ownership, change in site classification (*e.g*., delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the Department to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

APPENDIX F
SUBSURFACE EXPLORATION LOGS

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-1
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1		Brown fine SAND and SILT, Some Gravel, trace brick	2 attempts
				±1.5'	
2			3.0	Gray fine SAND and GRAVEL, Some Silt, little medium	Petroleum odor at ±2' bgs
		2		to coarse sand	
					Wet at ±3.5' bgs
4				±4'	
				Boring Terminated at ±4' bgs	
6					
8					
10					
12					
14					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-2
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 **OF** 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1		Brown fine SAND and SILT, Some Gravel, little brick	
2			3.0	grades to gray and brown, trace clay at ±2' bgs	Very moist at ±2' bgs
		2			
				grades to gray at ±3' bgs	Wet at ±3.5' bgs
4				grades to black at ±3.5' bgs ±4'	Petroleum odor at ±3.5' bgs
				Boring Terminated at ±4' bgs	
6					
8					
10					
12					
14					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-16
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.5	Dark Brown fine SAND and SILT, trace organics ±1'	
		2		Pulverized Rock (GRAVEL and COBBLE) ±3'	
4		3		Brown and Gray mottling, fine SAND and SILT, trace clay, trace fine gravel, trace rootlets	
		4	2.4	±8'	Wet at ±8' bgs
8		5		Brown and Gray mottling, SILT and CLAY, trace sand parting ±10'	
		6	2.2	Gray fine SAND and GRAVEL, little silt and clay, trace medium to coarse sand ±12'	
12		7	1.0	Brown and Gray fine SAND and SILT, trace clay ±13.5'	
16				Boring Terminated at ±4' bgs (Refusal)	
20					
24					
28					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720 DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-10R
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1 2	2.5	Brown fine SAND, SILT, and PULVARISED ROCK ±5'	Multiple offsets in area to start boring due to bedrock Offset to other side of road per J. McIver
				Boring Terminated at ±5' bgs (Refusal - Bedrock)	
8					
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720 DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-10RA
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1		Brown fine SAND and SILT, trace organics ±1'	
4		2	3.0	Brown and Gray fine SAND and SILT, little clay, trace fine to medium gravel ±4.5'	
		3	2.5	Brown SILT, Some fine Sand, little clay ±6'	Very moist to wet at ±6' bgs
		4		Greenish Gray to Dark Gray SILT, Some fine Sand, little clay, trace organics, trace brick ±7'	
8				Boring Terminated at ±7' bgs (Refusal - Possible Bedrock)	
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720 DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-17
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	1.0	Dark Brown fine SAND and SILT, trace organics ±0.5' Brown fine SAND and SILT, little gravel	
4				±4'	Wet at ± 4' bgs
		2	1.0	Brown and Gray fine to medium SAND and GRAVEL, little silt, little weathered rock ±6'	
8				Boring Terminated at ±6' bgs (Refusal - Possible Bedrock)	
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720 DT
METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-18
ELEV.: **DATUM:**
START DATE: 6/25/15 **FINISH DATE:** 6/25/15
SHEET 1 OF 1

PROJECT: USAI CTM PROJECT NO.: 14.4337

LOCATION: New Windsor, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	3.0	Asphalt and sub-base ±1'	Refusal at 2', 3', 3', 2', 3.5' bgs
		2		Brown fine SAND, Some fine Gravel, trace brick	
4				±4'	
		3	2.5	Brown and Gray fine SAND and SILT, little clay, trace fine to coarse gravel	Very moist at ±5' bgs
		4			
8				±8'	Wet at ±8' bgs
		5	4.0	Brown and Gray fine SAND and SILT, GRAVEL, little to trace fine to coarse sand	
		6			
12				±12'	
				Boring Terminated at ±12' bgs (Refusal - Possible Bedrock)	
16					
20					
24					
28					

DRILLING CONTRACTOR: NYEG GEOPROBE TYPE: 7720 DT

METHOD OF SAMPLING: 4' Macro-Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-1

0'

TOPSOIL (±10")

FILL: Dark Brown and Black fine SAND, little silt & gravel, frequent brick, rubbish & wood (strong petroleum odor)

- water weep ±2.0'

5' (Moist to Wet) ±5.0'

Gray SILT & CLAY

- water ±5.5'

(Moist) ±6.0'

Gray fine to coarse SAND & GRAVEL (Saturated)

End of Test Pit @ 7.8'

10'

15'

TOTAL DEPTH: 7.8'

WATER AT: 5.5', weep ±2'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-2

0'

TOPSOIL (±10")

FILL: Brown fine SAND, little silt & gravel
- geotextile ±1.8'

FILL: Brown fine SAND, Some Silt & Gravel, occasional bricks

- grades frequent brick ±3.1' - 4.3'

- grades occasional seams of silt & clay ±4.0'

5'

End of Test Pit @ 5.2'

10'

15'

TOTAL DEPTH: 5.2'

WATER AT: ±3.8' after 4 hours

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-3

0'

TOPSOIL (±2")

FILL: Brown fine SAND, little gravel, silt & misc. rubbish, frequent brick, occasional wood (Moist)

- grades occasional seams of silt & clay ±3.5'

- grades occasional porcelain ±4.0'

5' (Moist)

Brown fine SAND, little to Some Silt, little gravel & clay (Moist to Wet)
- weep ±5.6'

(Moist to Wet)

End of Test Pit @ 7.8'

10'

15'

TOTAL DEPTH: 7.8'

WATER AT: weep ±5.6'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-4

0'

Cushion SAND (±6")

Processed Crushed STONE (±12 - 14")

FILL: Brown fine SAND, little silt & gravel, frequent brick (strong petroleum sheen & odor) (Moist)

- weep ±4.2'
- becomes (wet) ±4.5'

5'

(Moist to Wet)

End of Test Pit @ 8.2'

10'

15'

TOTAL DEPTH: 8.2'

WATER AT: ±4.2' after 3 hours

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-6

0'

Cushion SAND (±10")

- Geotextile ±10"

FILL: Brown fine SAND, little to Some Silt, little gravel, frequent brick (Moist)

- becomes (Moist to Wet) ±3.0'

- becomes (Wet) ±4.5'

5'

- water ±5.0'

- becomes Gray SILT & CLAY, little fine to coarse sand & gravel, trace organics (Moist to Wet) ±6.0'

- grades occasional brick & wood ±8.0'

(Moist to Wet)

End of Test Pit @ 8.1'

10'

15'

0' 5' 10' 15'

TOTAL DEPTH: 8.2'

WATER AT: ±4.2' after 3 hours

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

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Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-7

0'

TOPSOIL (±10")

FILL: Brown fine SAND, little silt, trace gravel (Moist)

- becomes Black SILT & CLAY, little fine sand ±2.5
- old concrete footing with steel column & base plate ±3.0'
- water ±4.0'
- becomes (Wet) ±4.0'

5'

- becomes Gray SILT & CLAY, little fine sand & gravel (Moist) ±5.2'

- grades frequent wood ±7.0'

(Moist to Wet)

End of Test Pit @ 7.9'

10'

15'

TOTAL DEPTH: 7.9'

WATER AT: ±4.0'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

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Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-8

0'

TOPSOIL (±10")

FILL: Brown fine SAND, little silt, trace gravel & cobbles, occasional brick (slight petroleum odor)

- seam of Gray SILT & CLAY ±2.3' - 2.8'
- becomes Gray SILT & fine SAND (Moist) ±2.8'

- weep ±4.0'

5'

- occasional brick ±7.0'

End of Test Pit @ 8.0'

10'

15'

TOTAL DEPTH: 8.0'

WATER AT: weep ±4.0'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

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Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-9

0'

Broken ASPHALT (±4")

SUBBASE (±8")

FILL: Gray fine SAND, little to Some Gravel, little silt, occasional brick (Wet)
- water ±1.5'
- (4) 1-1/4" service lines ±2.67'

(Moist - Wet) ±3.1'

Gray SILT, Some Clay, little fine to coarse sand & gravel

5'

(Moist to Wet)

End of Test Pit @ 7.0'

10'

15'

TOTAL DEPTH: 7.0'

WATER AT: ±1.5'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 Century Hill Drive
Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-10

0'

TOPSOIL (±8")

FILL: Brown fine SAND, Some Silt, little gravel, occasional wood & brick (Moist)

- grades trace brick ±3.0'
- becomes Gray SILT & CLAY, little fine to coarse sand & gravel (Moist to Wet)
- weep ±3.0'

5'

- grades occasional brick ±6.0'

- water ±8.0'
- becomes (Saturated) ±8.0'

(Moist to Saturated)

10'

End of Test Pit @ 8.2'

15'

TOTAL DEPTH: 8.2'

WATER AT: 8.0', weep ±3.0'

SIZE OF TEST PIT: -

NOTES:

TEST PIT LOG

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Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
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Latham, NY 12110
(518) 786-7400 • FAX (581) 786-7299

PROJECT NAME:	Proposed Parking Lot Improvements	CONTRACTOR	Profex Construction Services
PROJECT NUMBER:	14.4337	EQUIPMENT:	CAT 314 LC track-mounted excavator
LOGGED BY:	T. Morgan	DATE:	6/24/2015

TEST PIT NO. TP-11

0'

Broken ASPHALT (±2")
SUBBASE (±6")
FILL: Brown fine to coarse SAND, Some Gravel, frequent metal & brick (Saturated)
- becomes (Wet) ±2.0'
- weep ±2.0'

(Wet to Saturated) ±3.5'

Gray SILT & CLAY

(Wet) ±4.5'

5'

Brown fine SAND, Some Silt

(Wet) ±6.2'

Brown SILT, Some Clay, little fine sand & gravel

(Wet)

End of Test Pit @ 8.2'

10'

15'

TOTAL DEPTH: 8.2'

WATER AT: weep ±2.0'

SIZE OF TEST PIT: -

NOTES:

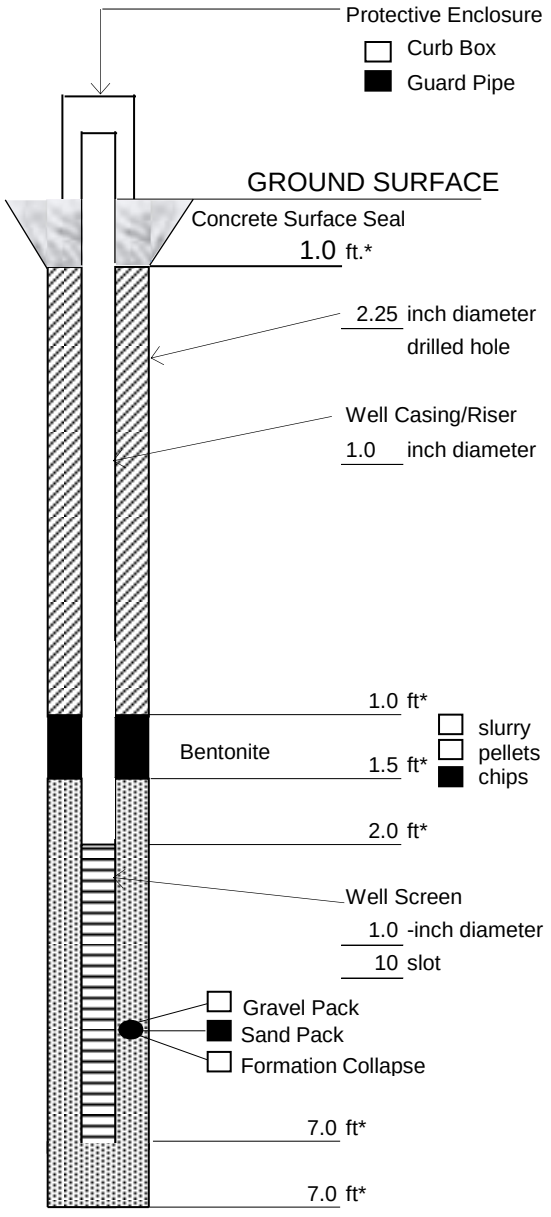
APPENDIX G

MONITORING WELL CONSTRUCTION LOGS

C.T. MALE ASSOCIATES

Well No. MW-10R

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: USAI

Project Number: 14.4337

Well No.: MW-10R Boring No.: MW-10RA

Town/City: New Windsor

County: Orange State: NY

Installation Date(s): 6/25/2015

Drilling Contractor: NYEG

Drilling Method: direct push

C.T. Male Observer: Jonathan Dippert

Materials Used:

1/2	Bags of Sand	(50 lb. bags)
	Sand Size: 00	Brand: US Silica
1/4	Bags of Bentonite	(50 lb. bags)
	Brand: PDS Bentonite Plug	
5	ft. of Schedule 40 PVC	well screen
4 1/2	ft. of Schedule 40 PVC	well riser
1 1/2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Sakrete	

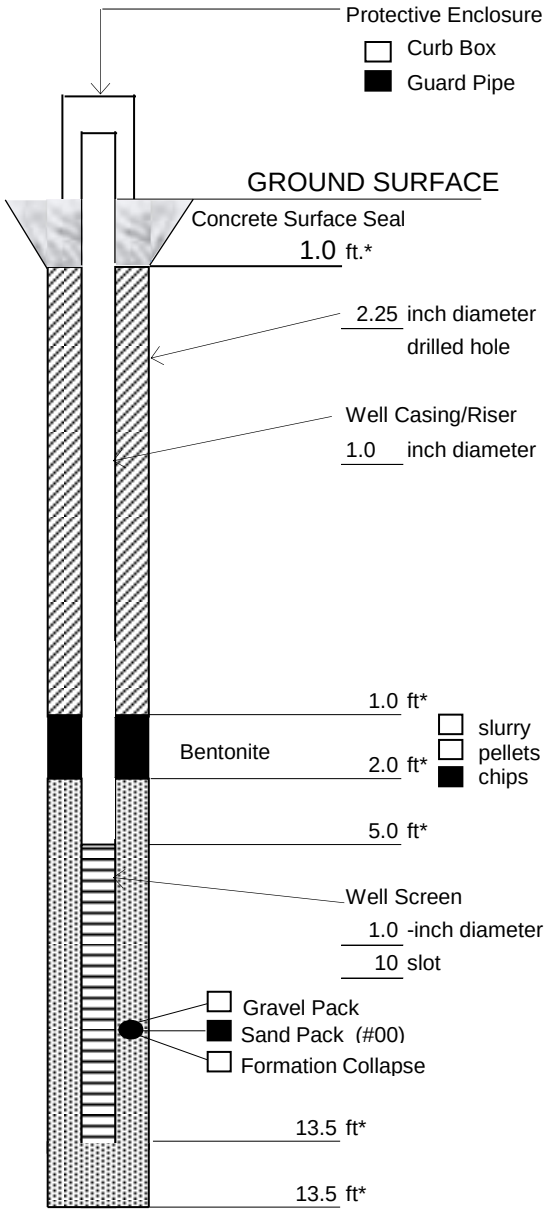
Notes:

1 Guard Pipe (4')

C.T. MALE ASSOCIATES

Well No. MW-16

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: USAI

Project Number: 14.4337

Well No.: MW-16 Boring No.: MW-16

Town/City: New Windsor

County: Orange State: NY

Installation Date(s): 6/25/2015

Drilling Contractor: NYEG

Drilling Method: direct push

C.T. Male Observer: Jonathan Dippert

Materials Used:

1/2	Bags of Sand	(50 lb. bags)
	Sand Size: 00	Brand: US Silica
1/3	Bags of Bentonite	(50 lb. bags)
	Brand: PDS Bentonite Plug	
8 1/2	ft. of Schedule 40 PVC	well screen
7 1/2	ft. of Schedule 40 PVC	well riser
1 1/2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Sakrete	

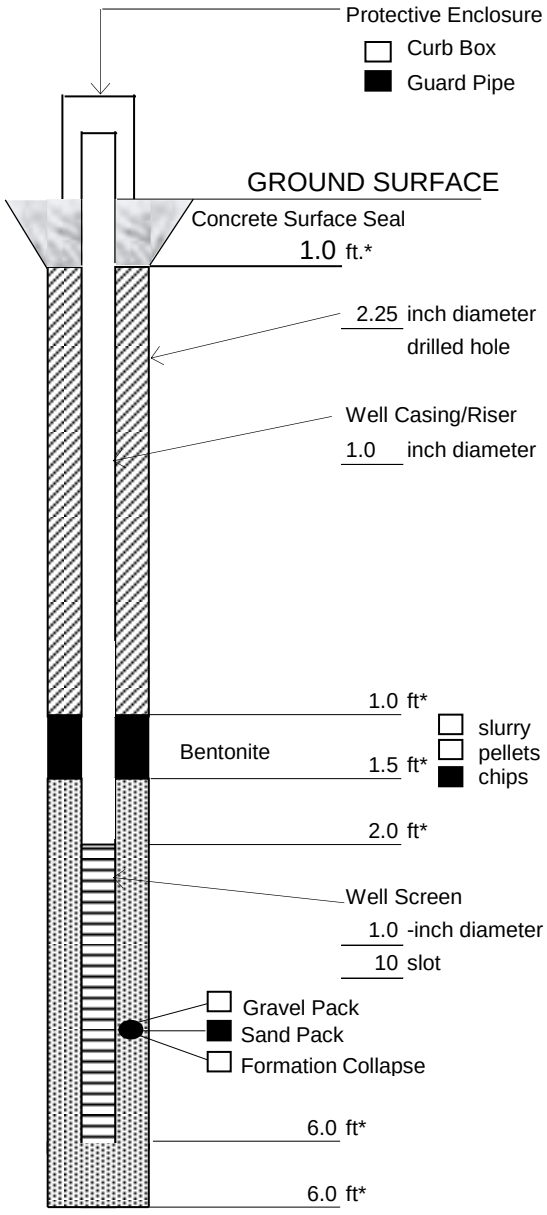
Notes:

1 Guard Pipe (4')

C.T. MALE ASSOCIATES

Well No. MW-17

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: USAI

Project Number: 14.4337

Well No.: MW-17 Boring No.: MW-17

Town/City: New Windsor

County: Orange State: NY

Installation Date(s): 6/25/2015

Drilling Contractor: NYEG

Drilling Method: direct push

C.T. Male Observer: Jonathan Dippert

Materials Used:

1/2	Bags of Sand	(50 lb. bags)
	Sand Size: 00	Brand: US Silica
1/4	Bags of Bentonite	(50 lb. bags)
	Brand: PDS Bentonite Plug	
4	ft. of Schedule 40 PVC	well screen
4 1/2	ft. of Schedule 40 PVC	well riser
1 1/2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Sakrete	

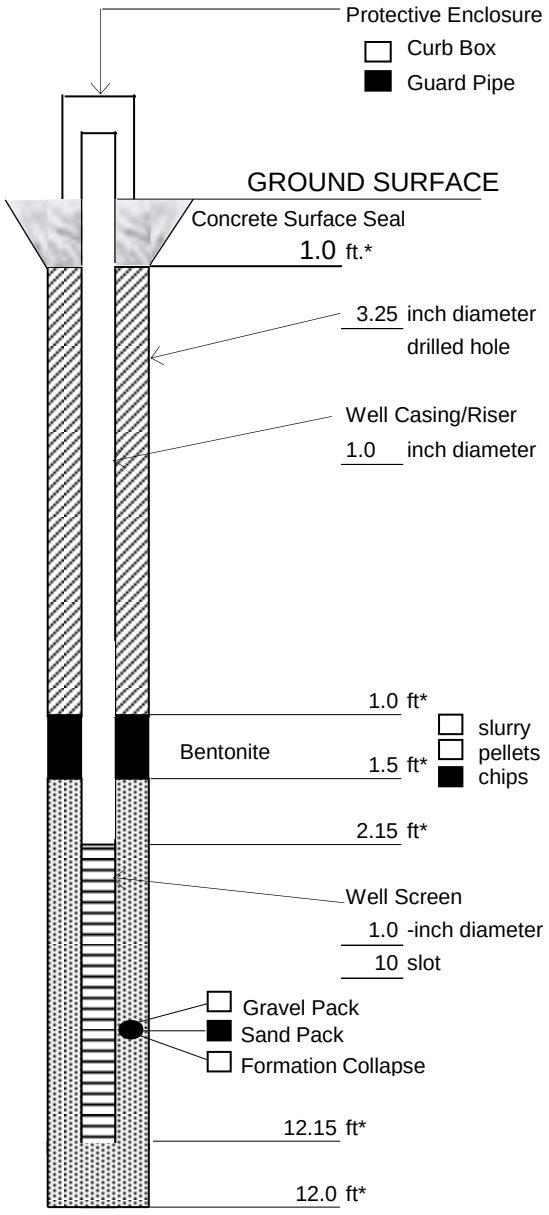
Notes:

1 Guard Pipe (4')

C.T. MALE ASSOCIATES

Well No. MW-18

MONITORING WELL CONSTRUCTION LOG



* Depth below ground surface.

Project Name: USAI

Project Number: 14.4337

Well No.: MW-18 Boring No.: MW-18

Town/City: New Windsor

County: Orange State: NY

Installation Date(s): 6/25/2015

Drilling Contractor: NYEG

Drilling Method: direct push

C.T. Male Observer: Jonathan Dippert

Materials Used:

1	Bags of Sand	(50 lb. bags)
	Sand Size: 00	Brand: US Silica
1/3	Bags of Bentonite	(50 lb. bags)
	Brand: PDS Bentonite Plug	
10	ft. of Schedule 40 PVC	well screen
4 1/2	ft. of Schedule 40 PVC	well riser
1 1/2	Bags of Cement/Concrete	(80 lb. bags)
	Brand: Sakrete	

Notes:

1 Guard Pipe (4')

1 Expendable Point (drive casing to install well)

APPENDIX H
GENERIC COMMUNITY AIR MONITORING PLAN

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

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518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

June 15, 2015

Mr. Matthew Hubicki, Environmental Engineer
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

Re: Vapor Intrusion (VI) Sampling Summary
USAI Lighting Brownfield Cleanup Program Site
1116 - 1126 River Road, New Windsor, NY
BCP Site Number: C336087

Dear Matt,

An evaluation of the potential for soil vapor intrusion was performed at the warehouse and office building space on April 2, 2015 at the USAI facility. The areas investigated within the warehouse and office building spaces are currently occupied by USAI. Other warehouse space on the north side of the building was not profiled during this investigation; however, that warehouse space is used solely for the storage of products for sale by Hudson Valley Lighting, Inc.

Temporary sub-slab sampling points were installed within the first floor concrete slab of the building in accordance with the protocols identified in the New York State Department of Health's (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York October 2006 (SVI Guidance). Sub-slab soil vapor samples were collected from five (5) sub-slab sampling points; and air samples were collected from three (3) indoor ambient locations and two (2) outdoor ambient air locations. The approximate locations for the sampling points are depicted on Figure 1.

The sub-slab soil vapor and ambient air samples were collected in accordance with the procedures outline in the NYSDOH's SVI Guidance. The samples were identified as follows:

- One (1) from each sub-slab vapor sampling point (S.S. #1 through S.S. #5).
- Three (3) indoor ambient air samples identified as I.A.#1 through I.A.#3, collected separately. I.A.#1 was collected while adjacent to S.S.#1. I.A.#3 was collected while adjacent to S.S.#5. Due to limited access, I.A#3 was collected in

the northern portion of the building where a sub-slab sample could not be collected.
- One (1) from ambient air outside the building along the northeast side of the building identified as O.A.#1.
- One (1) from ambient air outside the building along the western side of the building identified as O.A.#2.

Refer to Figure 1 (attached) for a depiction of the approximate location of the samples, as shown on an aerial map.

Sampling Methodology

The sub-slab vapor samples were collected using 6-Liter Summa Canisters and were analyzed for the full list of volatile organic compounds by the TO-15 method. The indoor air and outdoor air samples were collected using 6-Liter Summa Canisters and were analyzed for the full list of volatile organic compounds by the TO-15 SIM method. The samples were collected using a regulator set for an 8 hour sampling period. The analysis was performed by Alpha Analytical Labs of Mansfield, Massachusetts.

Quality Assurance/Quality Control

Prior to collection of soil vapor samples, a tracer gas (helium) was used to verify the integrity of the seal around the soil vapor tubing at the top of the concrete floor. The method used with the tracer gas is shown in Figure 2.4 A of the NYSDOH SVI Guidance whereby a 2' by 2' rectangular piece of plastic was placed over the concrete slab and flooring material, sealed with modeling clay and a hole cut in the plastic to allow the sample tubing to penetrate. After sealing the tubing at the penetration point of the plastic with modeling clay, a new 5-gallon plastic bucket was placed on the plastic and sealed to the plastic with modeling clay. Using a hole in the bucket and a rubber stopper, the atmosphere in the bucket was charged with helium, and a portable device was used to analyze a soil vapor sample for the helium before and after sample collection. All of the soil vapor samples exhibited no evidence of influence by helium, except for S.S.#3. At S.S.#3, a relative low reading of 50 ppm was detected on the helium field instrument after completion of lab sample collection, which is well below the 10% trigger in SVI Guidance that would suggest dilution of the soil vapor samples from outside air. Therefore, no effect on the soil vapor sample was anticipated.

The laboratory results of the soil vapor and ambient air samples were subject to ASP Category B Data Deliverables. At the time of this report, the soil vapor and ambient air

samples have not been validated or submitted to EQuIS. The ASP Category B Data Deliverables will be subjected to data validation and submitted to EQuIS as directed by the NYSDEC Division of Environmental Remediation, if warranted.

Alpha Analytical, the project's lab of record, provided the batch cleaned Summa canisters, regulators, and performed the analysis. Alpha is an ELAP-certified laboratory.

Analytical Results Comparison to Applicable Guidance

The NYSDOH does not have any standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either in soil vapor or sub-slab vapor). The NYSDOH has developed guidelines for indoor air concentration for methylene chloride, trichloroethene, and tetrachloroethene.

Sampling results for these compounds are summarized as follows:

- Methylene chloride was detected above the limit of laboratory detected in three (3) of the five (5) soil vapor samples at 4.3 mcg/m^3 to 7.5 mcg/m^3, two (2) of the three (3) indoor air samples at 6.8 mcg/m^3 to 9.6 mcg/m^3, and one (1) of the two (2) outdoor air samples at 8.6 mcg/m^3. Considering all of the detections are similar in concentration, it would be reasonable to assume there is no source of methylene chloride in the sub-slab vapor. The concentrations in indoor air samples were significantly below the applicable guideline value of 60 mcg/m^3.

- Trichloroethene was detected in soil vapor samples above the limit of laboratory detection in a range of 1.07 mcg/$m^3$to 58.6 mcg/m^3, with one soil vapor sample location being non-detect at the limit of laboratory detection. Trichloroethene was not detected above the limit of laboratory detection in the indoor air samples and outdoor air samples except for indoor air sample I.A.#3 at 0.172 mcg/m^3. The concentrations in indoor air samples were significantly below the applicable guideline value of 5 mcg/m^3.

- Tetrachloroethene was detected in soil vapor samples above the limit of laboratory detection in a range of 3.25 mcg/$m^3$to 97.6 mcg/m^3, with one soil vapor sample location being non-detect at the limit of laboratory detection. Tetrachloroethene was detected in indoor air at concentrations of 0.183 mcg/m^3 and 0.827 mcg/m^3, much less than soil vapor concentrations. Tetrachloroethene was not detected above the limit of laboratory detection in the outdoor air

samples. The concentrations in indoor air samples are far below the applicable guideline value of 30 mcg/m^3.

Application of NYSDOH Matrix

The NYSDOH has developed two matrices, in the end of Section 3.4 of their guidance, to use as tools for making decisions when soil vapor may be entering buildings. The first decision matrix (Matrix 1) was originally development for trichloroethene (TCE) and the second decision matrix (Matrix 2) was developed for Tetrachloroethene (PCE). Two more chemicals have been assigned to the two matrices; carbon tetrachloride (Matrix 1); and 1,1,1-trichloroethane (Matrix 2).

- Carbon tetrachloride comparison to Matrix 1: Four (4) out of the five (5) sub-slab vapor samples were non-detect at the limit of laboratory detection. For the one (1) compound detected in the last sample, the following comparison applies.
    - For sub-slab vapor < 5 mcg/m^3 and indoor air < 1 mcg/m^3, Matrix 1 says "*Take reasonable and practical actions to identify source(s) and reduce exposures*".

- Trichloroethene comparison to Matrix 1: Two (2) out of the five (5) sub-slab vapor samples were non-detect at the limit of laboratory detection. For the other three (3) samples, two comparisons to those detections apply.
    - For sub-slab vapor between 5 mcg/$m^3$and < 50 mcg/$m^3$and indoor air < 0.25 mcg/m^3, Matrix 1 says "*No further action*" [applies to S.S.#1 & S.S.#3 with detections of 7.36 mcg/$m^3$and 34.7 mcg/m^3, respectively].
    - For sub-slab vapor between 50 mcg/$m^3$and < 250 mcg/$m^3$and indoor air < 0.25 mcg/m^3, Matrix 1 says "*Monitor*" [applies to S.S.#5 with detection of 58.6 mcg/m^3].

- Tetrachloroethene comparison to Matrix 2: Four (4) out of the five (5) sub-slab vapor samples had detections above the limit of laboratory detection. For the range detected, the one comparison applies.
    - For sub-slab < 100 and indoor air < 3, Matrix 2 says "*No further Action*".

- 1,1,1-Trichloroethane comparison to Matrix 2: All five (5) sub-slab vapor samples had detections above the limit of laboratory detection. For the range detected, the three comparisons applies.
    - For sub-slab between < 100 and indoor air < 3, Matrix 2 says "*No further action*". [applies to S.S.#1, S.S.#2 & S.S.#5 with detections of 3.93 mcg/m^3, 1.69 mcg/$m^3$and 28.2 mcg/m^3, respectively].
    - For sub-slab between 100 to < 1,000 and indoor air < 3, Matrix 2 says "*Monitor*". [applies to S.S.#4 with detection of 130 mcg/m^3].
    - For sub-slab between 1,000 and above and indoor air < 3, Matrix 2 says "*Mitigate*". [applies to S.S.#3 with detection of 3,460 mcg/m^3]. This detection is unusually higher than the all of the other samples and its validity should be checked with future sampling events with an indoor air sample adjacent to it for direct comparison. The indoor air samples, where collected were non-detect for this compound.

Background Levels for Selected Compounds

The EPA conducted a study from 1994 to 1996 of indoor air quality referred to as Building Assessment and Survey Evaluation (BASE '94-96'). The study included measurement of volatile organic compounds in indoor and outdoor air at 100 randomly selected public and private office buildings across the United States with no known indoor air related complaints. The study is unpublished and the data summaries are Summa canisters results only. Also, the EPA published a Volatile Organic Compound Database in 1988 of indoor and outdoor data from studies across the United States. Below is a comparison of the indoor air concentrations detected in the building to indoor air results EPA has collected that represent typical background concentrations for some of the compounds that could be linked to petroleum related impacts.

Compound	USAI Indoor Air Concentration Range Detected in April 2015 (ug/m^3)	EPA BASE Data Background Levels Indoor Air - 1994 to 1996 (ug/m^3)	EPA Database Homes & Offices Indoor Air - 1988 (ug/m^3)
Benzene	0.95 to 1.06	2.1 to 5.1	3.3 to 21
Carbon Tetrachloride	0.459 to 0.484	< 0.9	Non-detect to 0.8
Ethylbenzene	3.05 to 28.6	1.6 to 3.4	2 to 9.6
m,p-Xylene	5.86 to 96.9	4.1 to 12	4.3 to 18
o-Xylene	2.29 to 34.9	< 2.4 to 4.4	2 to 9.3
Toluene	5.2 to 34.7	10.7 to 26	Not Available
Tetrachloroethene	0.183 to 0.827	< 1.9 to 5.9	1.7 to 11
Trichloroethene	Non-detect to 0.172	< 1.2 to 1.2	Non-detect to 4.5

As shown in the table above, many of the typical petroleum related compounds that were detected in indoor air appear to be at concentrations that have been documented by EPA to be background concentrations and therefore, not indicative of concentrations affected by sub-slab soil vapor. However, ethylbenzene, xylenes and toluene, which can be indicative of gasoline impacts, were detected at concentrations slightly higher than the range. These compounds were also detected in sub-slab vapor samples indicating potential to be from soil and/or groundwater impacts in the area of the building.

Conclusions

The findings indicate the presence of a variety of volatile organic compounds in sub-slab vapor, indoor air and outdoor air. Based on NYSDOH guidance, methylene chloride, trichloroethene and tetrachloroethene are below applicable guidance values for indoor air with the current construction of the existing building.

Using the NYSDOH matrices for an evaluation on detections, carbon tetrachloride, trichloroethene and tetrachloroethene are present but recommendations from NYSDOH guidance include "take reasonable and practical actions to identify source(s) and reduce exposures", "no further action" or "monitor". These recommendations were similar for 1,1,1-trichloroethane including "no further action" and "monitor" which the exception of one outlier orders of magnitude higher than the rest that triggers a "mitigate" recommendation. Before taking any further action is taken, additional characterization may be warranted to determine the accuracy of the information obtained during this

initial assessment. This characterization should be coupled with review of the findings of the pending pre-design remedial investigation and ultimate discussion with NYSDEC and NYSDOH.

There are petroleum related compounds detected in sub-slab vapor which consisted of ethylbenzene, xylenes and toluene. These compounds were also detected in indoor air, but in the absence of applicable guidance, the level of action, if any needs to be discussed further. Using historical background concentrations available from EPA, some of the concentrations may be slightly higher than reported background concentrations in indoor air. The significance of any detection should be compared with additional soil and groundwater sample analysis scheduled to be part of pending pre-design remedial investigation.

We plan on obtaining additional data from the northern part of the building where storage prevented the collection of sub-slab vapor samples. USAI needs to move the storage materials before taking these samples but we want NYSDEC's opinion on collecting samples outside the typical heating system to determine if that is acceptable.

We look forward to engaging in a conversation with the NYSDEC and NYSDOH about these results and the significance thereof. If you have technical questions, please contact Jeff Marx at (518) 786-7548. Legal questions should be directed to the Applicants' attorney, John Cappello (845) 778-2121.

Sincerely
C.T. MALE ASSOCIATES

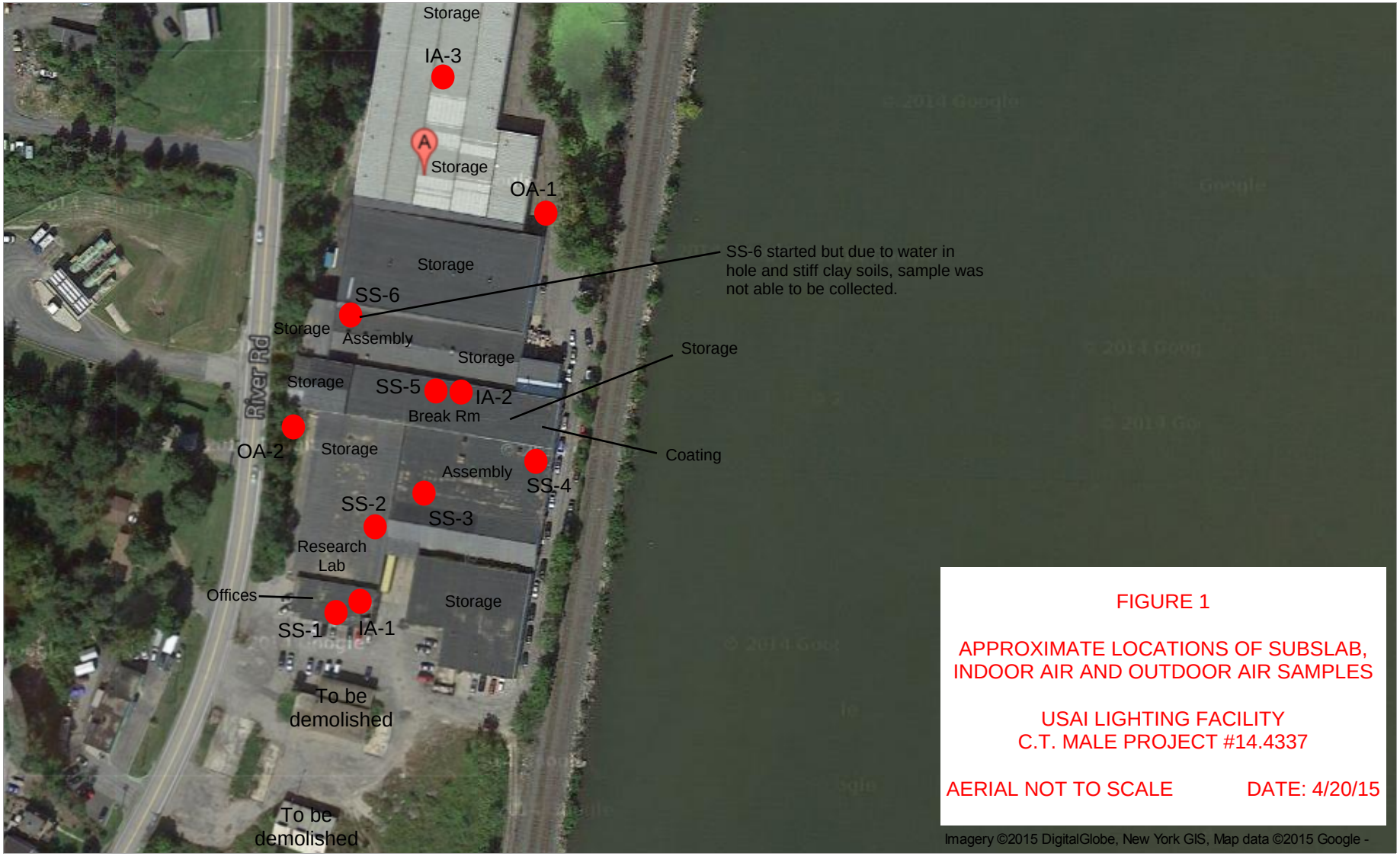
Jeffrey A. Marx, PE
Environmental Engineer

Att Sampling Location Map
Summary Analytical Table (Detections Only)
Full laboratory Report by Alpha Analytical

ec: John Cappello, Jacobowitz and Gubits, LLP
Sue Sullivan, iSER Consulting, LLC
Jim McIver, C.T. Male Associate
James Candiloro, P.E., NYSDEC

To see all the details that are visible on the screen, use the "Print" link next to the map.

Google



USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015
DATA HAS NOT BEEN SUBJECT TO DUSR VALIDATION

LOCATION				S.S. #1		S.S. #3		S.S. #4		S.S. #5		S.S. #2		I.A. #1		I.A. #2		I.A. #3		O.A. #1		O.A. #2	
SAMPLING DATE				4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015		4/2/2015	
LAB SAMPLE ID				L1506599-01		L1506599-03		L1506599-04		L1506599-05		L1506599-06		L1506599-02		L1506599-07		L1506599-08		L1506599-09		L1506599-10	
Volatile Organics in Air - Mansfield Lab	CasNum	NYSDOH Air Guidance Values	Units		Qual		Qual		Qual		Qual		Qual		Qual		Qual		Qual		Qual		Qual
Dichlorodifluoromethane	75-71-8	No Guidance Value	ug/m3	1.76		ND (< 9.89)	U	1.88		8.55		1.5		1.68		2.33		2.64		1.63		1.76	
Chloromethane	74-87-3	No Guidance Value	ug/m3	ND (< 0.413)	U	ND (< 4.13)	U	ND (< 4.13)	U	ND (< 4.13)	U	0.991		1.52		1.24		1.46		1.21		1.21	
1,3-Butadiene	106-99-0	No Guidance Value	ug/m3	1.5		ND (< 4.42)	U	ND (< 4.42)	U	ND (< 4.42)	U	0.796		ND (< 0.442)	U	ND (< 0.442)	U	1.32		ND (< 0.442)	U	ND (< 0.442)	U
Ethanol	64-17-5	No Guidance Value	ug/m3	11.6		ND (< 47.1)	U	8.54		9.31		11.9		1050	E	170		58.4		6.76		6.67	
Acetone	67-64-1	No Guidance Value	ug/m3	190		ND (< 23.8)	U	37.3		46.1		48.9		63.2		ND (< 2.38)	U	ND (< 2.38)	U	8.08		6.25	
Trichlorofluoromethane	75-69-4	No Guidance Value	ug/m3	1.48		ND (< 11.2)	U	1.15		2.3		ND (< 1.12)	U	1.52		1.92		2.56		1.2		1.14	
Isopropanol	67-63-0	No Guidance Value	ug/m3	5.16		ND (< 12.3)	U	2.48		2.78		2.35		354	E	102		27.5		ND (< 1.23)	U	ND (< 1.23)	U
Tertiary butyl Alcohol	75-65-0	No Guidance Value	ug/m3	7.94		ND (< 15.2)	U	14.4		6.73		28.6		ND (< 1.52)	U	ND (< 1.52)	U	2.32		ND (< 1.52)	U	ND (< 1.52)	U
Methylene chloride	75-09-2	60	ug/m3	ND (< 1.74)	U	ND (< 17.4)	U	7.54		6.6		4.27		ND (<1.74)	U	6.84		9.59		ND (<1.74)	U	8.55	
Carbon disulfide	75-15-0	No Guidance Value	ug/m3	0.944		ND (< 6.23)	U	1.16		ND (< 0.623)	U	4.24		ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U
1,1-Dichloroethane	75-34-3	No Guidance Value	ug/m3	ND (< 0.809)	U	ND (< 8.09)	U	ND (< 8.09)	U	2.23		ND (< 8.09)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U
2-Butanone	78-93-3	No Guidance Value	ug/m3	34.8		ND (< 14.7)	U	ND (< 7.99)		6.02		5.04		2.46		5.4		4.72		ND (< 1.47)	U	ND (< 1.47)	U
Ethyl Acetate	141-78-6	No Guidance Value	ug/m3	ND (< 1.8)	U	ND (< 18)	U	ND (< 1.8)	U	ND (< 1.8)	U	ND (< 1.8)	U	3.89		9.91		21		ND (< 1.8)	U	ND (< 1.8)	U
Chloroform	67-66-3	No Guidance Value	ug/m3	6.35		22.5		4.8		17.5		8.06		ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U
Tetrahydrofuran	109-99-9	No Guidance Value	ug/m3	5.93		ND (< 14.7)	U	8.73		3.13		5.34		ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U
n-Hexane	110-54-3	No Guidance Value	ug/m3	1.93		ND (< 7.05)	U	2.32		1.76		2.88		1.08		1.3		1.47		0.99		1.65	
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	3.93		3,460		130		28.2		1.69		ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U
Benzene	71-43-2	No Guidance Value	ug/m3	1.92		ND (< 6.39)	U	1.39		1.15		3.18		0.965		1.06		1.56		0.668		0.827	
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	ND (< 1.26)	U	ND (< 12.6)	U	ND (< 1.26)	U	1.61		ND (< 1.26)	U	-		-	-	-	-	-	-	-	-

C.T. Male Proj. No. 14.4337

USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015
DATA HAS NOT BEEN SUBJECT TO DUSR VALIDATION

LOCATION SAMPLING DATE LAB SAMPLE ID	CasNum	NYSDOH Air Guidance Values	Units	S.S. #1 4/2/2015 L1506599-01	Qual	S.S. #3 4/2/2015 L1506599-03	Qual	S.S. #4 4/2/2015 L1506599-04	Qual	S.S. #5 4/2/2015 L1506599-05	Qual	S.S. #2 4/2/2015 L1506599-06	Qual	I.A. #1 4/2/2015 L1506599-02	Qual	I.A. #2 4/2/2015 L1506599-07	Qual	I.A. #3 4/2/2015 L1506599-08	Qual	O.A. #1 4/2/2015 L1506599-09	Qual	O.A. #2 4/2/2015 L1506599-10	Qual
Cyclohexane	110-82-7	No Guidance Value	ug/m3	ND (< 0.688)	U	ND (< 6.88)	U	ND (< 0.688)	U	4.51		4.58		ND (< 0.688)	U	ND (< 0.771)		ND (< 0.688)	U	ND (< 0.688)	U	ND (< 0.688)	U
1,4-Dioxane	123-91-1	No Guidance Value	ug/m3	ND (< 0.721)	U	ND (< 7.21)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	2.37		ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U
Trichloroethene	79-01-6	No Guidance Value	ug/m3	7.36		34.7		ND (< 1.07)	U	58.6		ND (< 1.07)	U	-		-	-	-	-	-	-	-	-
Heptane	142-82-5	No Guidance Value	ug/m3	3.78		ND (< 8.2)	U	3.27		2.7		3.82		1.03		1.05		1.08		ND (< 0.82)	U	ND (< 0.82)	U
4-Methyl-2-pentanone	108-10-1	No Guidance Value	ug/m3	21.2		ND (< 20.5)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U
Toluene	108-88-3	No Guidance Value	ug/m3	18.4		22.1		22.6		18.2		17.2		5.2		34.7		24.3		2.5		1.92	
2-Hexanone	591-78-6	No Guidance Value	ug/m3	3.87		ND (< 8.2)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
Tetrachloroethene	127-18-4	No Guidance Value	ug/m3	5.23		ND (< 13.6)	U	3.59		97.6		3.25		-		-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	No Guidance Value	ug/m3	7.47		ND (< 8.69)	U	7.12		6.82		7.34		3.05		14.2		28.6		ND (< 0.869)	U	ND (< 0.869)	U
p/m-Xylene	179601-23-1	No Guidance Value	ug/m3	20.2		20.5		16.1		17		15.4		5.86		41.8		96.9		ND (< 1.74)	U	ND (< 1.74)	U
Styrene	100-42-5	No Guidance Value	ug/m3	4.98		ND (< 8.52)	U	3.81		4.73		3.83		0.864		15.2		60.5		ND (< 0.852)	U	ND (< 0.852)	U
o-Xylene	95-47-6	No Guidance Value	ug/m3	5.86		ND (< 8.69)	U	4.2		4.82		3.98		2.29		13.6		34.9		ND (< 0.869)	U	ND (< 0.869)	U
4-Ethyltoluene	622-96-8	No Guidance Value	ug/m3	1.58		ND (< 9.83)	U	ND (< 0.983)	U	1.05		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
1,3,5-Trimethylbenzene	108-67-8	No Guidance Value	ug/m3	1.06		ND (< 9.83)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
1,2,4-Trimethylbenzene	95-63-6	No Guidance Value	ug/m3	3.44		ND (< 9.83)	U	2.09		1.84		1.51		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
Volatile Organics in Air by SIM - Mansfield Lab																							
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	-		-		-		-		-		0.484		0.459		0.484		0.434		0.44	
Trichloroethene	79-01-6	5	ug/m3	-		-		-		-		-		ND (< 0.107)	U	ND (< 0.107)	U	0.172		ND (< 0.107)	U	ND (< 0.107)	U
Tetrachloroethene	127-18-4	30	ug/m3	-		-		-		-		-		0.183		0.271		0.827		ND (< 0.136)	U	ND (< 0.136)	U

Notes:
U denotes not detected at the limit of laboratory detection.
Analysis performed by Alpha Analytical Labs.

ANALYTICAL REPORT

Lab Number:	L1506599
Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
ATTN:	Jeffrey Marx
Phone:	(518) 786-7548
Project Name:	USAI LIGHTING
Project Number:	14.4337
Report Date:	04/10/15

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1506599-01	S.S. #1	SOIL_VAPOR	NEW WINDSOR, NY	04/02/15 16:51	04/02/15
L1506599-02	I.A. #1	AIR	NEW WINDSOR, NY	04/02/15 15:22	04/02/15
L1506599-03	S.S. #3	SOIL_VAPOR	NEW WINDSOR, NY	04/02/15 16:55	04/02/15
L1506599-04	S.S. #4	SOIL_VAPOR	NEW WINDSOR, NY	04/02/15 16:56	04/02/15
L1506599-05	S.S. #5	SOIL_VAPOR	NEW WINDSOR, NY	04/02/15 16:58	04/02/15
L1506599-06	S.S. #2	SOIL_VAPOR	NEW WINDSOR, NY	04/02/15 16:54	04/02/15
L1506599-07	I.A. #2	AIR	NEW WINDSOR, NY	04/02/15 16:57	04/02/15
L1506599-08	I.A. #3	AIR	NEW WINDSOR, NY	04/02/15 16:00	04/02/15
L1506599-09	O.A. #1	AIR	NEW WINDSOR, NY	04/02/15 17:10	04/02/15
L1506599-10	O.A. #2	AIR	NEW WINDSOR, NY	04/02/15 17:12	04/02/15

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: USAI LIGHTING **Lab Number:** L1506599
Project Number: 14.4337 **Report Date:** 04/10/15

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 31, 2015. The canister certification results are provided as an addendum.

Sample L1506599-02 was diluted and re-analyzed to quantify the sample within the calibration range. The result should be considered estimated, and are qualified with an E flag, for any compounds that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compounds that exceeded the calibration range.

Sample L1506599-03 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

Samples L1506599-07 , -08 and WG774764-5 Duplicate: The presence of Acetone could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

Sample L1506599-08 The presence of Tetrahydrofuran could not be determined in this sample due to a non-target compound interfering with the identification and quantification of this compound.

Sample Receipt

The sample designated S.S. #1 (L1506599-01) had a RPD for the pre- and post-flow controller calibration check (24% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 9.5 mL/minute; the final flow rate was 12.1 mL/minute. The final pressure recorded by the laboratory of the associated canister was -4.3 inches of mercury.

The sample designated I.A. #1 (L1506599-02) had a RPD for the pre- and post-flow controller calibration check (36% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 9.7 mL/minute; the final flow rate was 13.9mL/minute. The final pressure recorded by the laboratory of the

Project Name: USAI LIGHTING **Lab Number:** L1506599
Project Number: 14.4337 **Report Date:** 04/10/15

Case Narrative (continued)

associated canister was -4.2 inches of mercury.

The sample designated O.A. #1 (L1506599-09) had a RPD for the pre- and post-flow controller calibration check (23% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 10.0 mL/minute; the final flow rate was 12.6 mL/minute. The final pressure recorded by the laboratory of the associated canister was -5.3 inches of mercury.

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 04/10/15

AIR

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-01
Client ID: S.S. #1
Sample Location: NEW WINDSOR, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 20:49
Analyst: RY

Date Collected: 04/02/15 16:51
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.355	0.200	--	1.76	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.678	0.200	--	1.50	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	6.18	2.50	--	11.6	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	79.9	1.00	--	190	2.38	--		1
Trichlorofluoromethane	0.264	0.200	--	1.48	1.12	--		1
Isopropanol	2.10	0.500	--	5.16	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.62	0.500	--	7.94	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.303	0.200	--	0.944	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	11.8	0.500	--	34.8	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-01
Client ID: S.S. #1
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:51
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chloroform	1.30	0.200	--	6.35	0.977	--		1
Tetrahydrofuran	2.01	0.500	--	5.93	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.549	0.200	--	1.93	0.705	--		1
1,1,1-Trichloroethane	0.720	0.200	--	3.93	1.09	--		1
Benzene	0.602	0.200	--	1.92	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	1.37	0.200	--	7.36	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.923	0.200	--	3.78	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	5.18	0.500	--	21.2	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.87	0.200	--	18.4	0.754	--		1
2-Hexanone	0.945	0.200	--	3.87	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.771	0.200	--	5.23	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.72	0.200	--	7.47	0.869	--		1
p/m-Xylene	4.65	0.400	--	20.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.17	0.200	--	4.98	0.852	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-01
Client ID: S.S. #1
Sample Location: NEW WINDSOR, NY

Date Collected: 04/02/15 16:51
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.35	0.200	--	5.86	0.869	--		1
4-Ethyltoluene	0.321	0.200	--	1.58	0.983	--		1
1,3,5-Trimethylbenzene	0.215	0.200	--	1.06	0.983	--		1
1,2,4-Trimethylbenzene	0.700	0.200	--	3.44	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-02
Client ID: I.A. #1
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 21:20
Analyst: RY

Date Collected: 04/02/15 15:22
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.340	0.200	--	1.68	0.989	--		1
Chloromethane	0.734	0.200	--	1.52	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	536	2.50	--	1010	4.71	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	26.6	1.00	--	63.2	2.38	--		1
Trichlorofluoromethane	0.271	0.200	--	1.52	1.12	--		1
Isopropanol	141	0.500	--	347	1.23	--	E	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.835	0.500	--	2.46	1.47	--		1
Ethyl Acetate	1.08	0.500	--	3.89	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-02
Client ID: I.A. #1
Sample Location: NEW WINDSOR, NY

Date Collected: 04/02/15 15:22
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.306	0.200	--	1.08	0.705	--		1
Benzene	0.302	0.200	--	0.965	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	0.657	0.200	--	2.37	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.252	0.200	--	1.03	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.38	0.200	--	5.20	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.703	0.200	--	3.05	0.869	--		1
p/m-Xylene	1.35	0.400	--	5.86	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.203	0.200	--	0.864	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.528	0.200	--	2.29	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-02
Client ID: I.A. #1
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 15:22
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-02
Client ID: I.A. #1
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 21:20
Analyst: RY

Date Collected: 04/02/15 15:22
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.027	0.020	--	0.183	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	82		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	90		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-02 D
Client ID: I.A. #1
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/10/15 06:58
Analyst: RY

Date Collected: 04/02/15 15:22
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	559	6.25	--	1050	11.8	--		2.5
Isopropanol	144	1.25	--	354	3.07	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-03 D
Client ID: S.S. #3
Sample Location: NEW WINDSOR, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 21:52
Analyst: RY

Date Collected: 04/02/15 16:55
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	ND	25.0	--	ND	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	ND	10.0	--	ND	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Tertiary butyl Alcohol	ND	5.00	--	ND	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	ND	5.00	--	ND	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-03 D
Client ID: S.S. #3
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:55
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chloroform	4.61	2.00	--	22.5	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	634	2.00	--	3460	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	6.46	2.00	--	34.7	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	5.86	2.00	--	22.1	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	ND	2.00	--	ND	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	4.72	4.00	--	20.5	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-03 D
Client ID: S.S. #3
Sample Location: NEW WINDSOR, NY

Date Collected: 04/02/15 16:55
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	84		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	84		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-04
Client ID: S.S. #4
Sample Location: NEW WINDSOR, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 22:23
Analyst: RY

Date Collected: 04/02/15 16:56
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.381	0.200	--	1.88	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	4.53	2.50	--	8.54	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	15.7	1.00	--	37.3	2.38	--		1
Trichlorofluoromethane	0.204	0.200	--	1.15	1.12	--		1
Isopropanol	1.01	0.500	--	2.48	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	4.75	0.500	--	14.4	1.52	--		1
Methylene chloride	2.17	0.500	--	7.54	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.374	0.200	--	1.16	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.71	0.500	--	7.99	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-04
Client ID: S.S. #4
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:56
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chloroform	0.982	0.200	--	4.80	0.977	--		1
Tetrahydrofuran	2.96	0.500	--	8.73	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.658	0.200	--	2.32	0.705	--		1
1,1,1-Trichloroethane	23.8	0.200	--	130	1.09	--		1
Benzene	0.434	0.200	--	1.39	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.798	0.200	--	3.27	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	6.01	0.200	--	22.6	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.530	0.200	--	3.59	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.64	0.200	--	7.12	0.869	--		1
p/m-Xylene	3.71	0.400	--	16.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.894	0.200	--	3.81	0.852	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-04
Client ID: S.S. #4
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:56
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.966	0.200	--	4.20	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.426	0.200	--	2.09	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	84		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-05
Client ID: S.S. #5
Sample Location: NEW WINDSOR, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 22:54
Analyst: RY

Date Collected: 04/02/15 16:58
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	1.73	0.200	--	8.55	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	4.94	2.50	--	9.31	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.4	1.00	--	46.1	2.38	--		1
Trichlorofluoromethane	0.409	0.200	--	2.30	1.12	--		1
Isopropanol	1.13	0.500	--	2.78	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.22	0.500	--	6.73	1.52	--		1
Methylene chloride	1.90	0.500	--	6.60	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	0.552	0.200	--	2.23	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.04	0.500	--	6.02	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-05
Client ID: S.S. #5
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:58
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chloroform	3.58	0.200	--	17.5	0.977	--		1
Tetrahydrofuran	1.06	0.500	--	3.13	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.499	0.200	--	1.76	0.705	--		1
1,1,1-Trichloroethane	5.16	0.200	--	28.2	1.09	--		1
Benzene	0.359	0.200	--	1.15	0.639	--		1
Carbon tetrachloride	0.256	0.200	--	1.61	1.26	--		1
Cyclohexane	1.31	0.200	--	4.51	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	10.9	0.200	--	58.6	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.660	0.200	--	2.70	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.83	0.200	--	18.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	14.4	0.200	--	97.6	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.57	0.200	--	6.82	0.869	--		1
p/m-Xylene	3.91	0.400	--	17.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.11	0.200	--	4.73	0.852	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-05
Client ID: S.S. #5
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:58
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.11	0.200	--	4.82	0.869	--		1
4-Ethyltoluene	0.213	0.200	--	1.05	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.374	0.200	--	1.84	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-06
Client ID: S.S. #2
Sample Location: NEW WINDSOR, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 23:26
Analyst: RY

Date Collected: 04/02/15 16:54
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.304	0.200	--	1.50	0.989	--		1
Chloromethane	0.480	0.200	--	0.991	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.360	0.200	--	0.796	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	6.30	2.50	--	11.9	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	20.6	1.00	--	48.9	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.958	0.500	--	2.35	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	9.45	0.500	--	28.6	1.52	--		1
Methylene chloride	1.23	0.500	--	4.27	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.36	0.200	--	4.24	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.71	0.500	--	5.04	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-06
Client ID: S.S. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:54
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chloroform	1.65	0.200	--	8.06	0.977	--		1
Tetrahydrofuran	1.81	0.500	--	5.34	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.818	0.200	--	2.88	0.705	--		1
1,1,1-Trichloroethane	0.310	0.200	--	1.69	1.09	--		1
Benzene	0.994	0.200	--	3.18	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	1.33	0.200	--	4.58	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.932	0.200	--	3.82	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.56	0.200	--	17.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.479	0.200	--	3.25	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.69	0.200	--	7.34	0.869	--		1
p/m-Xylene	3.54	0.400	--	15.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.900	0.200	--	3.83	0.852	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-06
Client ID: S.S. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:54
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.916	0.200	--	3.98	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.308	0.200	--	1.51	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	82		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	90		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-07
Client ID: I.A. #2
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 19:15
Analyst: RY

Date Collected: 04/02/15 16:57
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.471	0.200	--	2.33	0.989	--		1
Chloromethane	0.602	0.200	--	1.24	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	90.3	2.50	--	170	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	0.341	0.200	--	1.92	1.12	--		1
Isopropanol	41.5	0.500	--	102	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	1.97	0.500	--	6.84	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.83	0.500	--	5.40	1.47	--		1
Ethyl Acetate	2.75	0.500	--	9.91	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-07
Client ID: I.A. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:57
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.368	0.200	--	1.30	0.705	--		1
Benzene	0.331	0.200	--	1.06	0.639	--		1
Cyclohexane	0.224	0.200	--	0.771	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.256	0.200	--	1.05	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	9.20	0.200	--	34.7	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.28	0.200	--	14.2	0.869	--		1
p/m-Xylene	9.62	0.400	--	41.8	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	3.56	0.200	--	15.2	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.13	0.200	--	13.6	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-07
Client ID: I.A. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:57
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	84		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-07
Client ID: I.A. #2
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 19:15
Analyst: RY

Date Collected: 04/02/15 16:57
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	83		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-08
Client ID: I.A. #3
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 20:17
Analyst: RY

Date Collected: 04/02/15 16:00
Date Received: 04/02/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.534	0.200	--	2.64	0.989	--		1
Chloromethane	0.708	0.200	--	1.46	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.598	0.200	--	1.32	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	31.0	2.50	--	58.4	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	0.455	0.200	--	2.56	1.12	--		1
Isopropanol	11.2	0.500	--	27.5	1.23	--		1
Tertiary butyl Alcohol	0.765	0.500	--	2.32	1.52	--		1
Methylene chloride	2.76	0.500	--	9.59	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.60	0.500	--	4.72	1.47	--		1
Ethyl Acetate	5.84	0.500	--	21.0	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-08
Client ID: I.A. #3
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:00
Date Received: 04/02/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.416	0.200	--	1.47	0.705	--		1
Benzene	0.488	0.200	--	1.56	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.263	0.200	--	1.08	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	6.46	0.200	--	24.3	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	6.58	0.200	--	28.6	0.869	--		1
p/m-Xylene	22.3	0.400	--	96.9	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	14.2	0.200	--	60.5	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	8.04	0.200	--	34.9	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-08
Client ID: I.A. #3
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 16:00
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	81		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	88		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-08
Client ID: I.A. #3
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 20:17
Analyst: RY

Date Collected: 04/02/15 16:00
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	0.032	0.020	--	0.172	0.107	--		1
Tetrachloroethene	0.122	0.020	--	0.827	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	80		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-09
Client ID: O.A. #1
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 18:12
Analyst: RY

Date Collected: 04/02/15 17:10
Date Received: 04/02/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.329	0.200	--	1.63	0.989	--		1
Chloromethane	0.588	0.200	--	1.21	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	3.59	2.50	--	6.76	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.40	1.00	--	8.08	2.38	--		1
Trichlorofluoromethane	0.214	0.200	--	1.20	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-09
Client ID: O.A. #1
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 17:10
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.281	0.200	--	0.990	0.705	--		1
Benzene	0.209	0.200	--	0.668	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.663	0.200	--	2.50	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-09
Client ID: O.A. #1
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 17:10
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	89		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	94		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-09
Client ID: O.A. #1
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 18:12
Analyst: RY

Date Collected: 04/02/15 17:10
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-10
Client ID: O.A. #2
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/09/15 18:43
Analyst: RY

Date Collected: 04/02/15 17:12
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.356	0.200	--	1.76	0.989	--		1
Chloromethane	0.586	0.200	--	1.21	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	3.54	2.50	--	6.67	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.63	1.00	--	6.25	2.38	--		1
Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.46	0.500	--	8.55	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-10
Client ID: O.A. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 17:12
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.469	0.200	--	1.65	0.705	--		1
Benzene	0.259	0.200	--	0.827	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.510	0.200	--	1.92	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-10
Client ID: O.A. #2
Sample Location: NEW WINDSOR, NY
Date Collected: 04/02/15 17:12
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	89		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

SAMPLE RESULTS

Lab ID: L1506599-10
Client ID: O.A. #2
Sample Location: NEW WINDSOR, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 18:43
Analyst: RY

Date Collected: 04/02/15 17:12
Date Received: 04/02/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 14:25

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02,07-10 Batch: WG774763-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 14:25

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02,07-10 Batch: WG774763-4								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/09/15 14:25

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02,07-10 Batch: WG774763-4								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/09/15 13:54

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG774764-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/09/15 13:54

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG774764-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1

Project Name: USAI LIGHTING
Project Number: 14.4337
Lab Number: L1506599
Report Date: 04/10/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/09/15 13:54

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG774764-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,07-10 Batch: WG774763-3								
Dichlorodifluoromethane	89		-		70-130	-		25
Chloromethane	94		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	96		-		70-130	-		25
Vinyl chloride	96		-		70-130	-		25
1,3-Butadiene	101		-		70-130	-		25
Bromomethane	93		-		70-130	-		25
Chloroethane	94		-		70-130	-		25
Acetone	105		-		70-130	-		25
Trichlorofluoromethane	96		-		70-130	-		25
Acrylonitrile	95		-		70-130	-		25
1,1-Dichloroethene	86		-		70-130	-		25
Methylene chloride	96		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		-		70-130	-		25
Halothane	87		-		70-130	-		25
trans-1,2-Dichloroethene	86		-		70-130	-		25
1,1-Dichloroethane	94		-		70-130	-		25
Methyl tert butyl ether	94		-		70-130	-		25
2-Butanone	94		-		70-130	-		25
cis-1,2-Dichloroethene	104		-		70-130	-		25
Chloroform	97		-		70-130	-		25
1,2-Dichloroethane	93		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,07-10 Batch: WG774763-3								
1,1,1-Trichloroethane	92		-		70-130	-		25
Benzene	91		-		70-130	-		25
Carbon tetrachloride	94		-		70-130	-		25
1,2-Dichloropropane	93		-		70-130	-		25
Bromodichloromethane	95		-		70-130	-		25
1,4-Dioxane	95		-		70-130	-		25
Trichloroethene	94		-		70-130	-		25
cis-1,3-Dichloropropene	98		-		70-130	-		25
4-Methyl-2-pentanone	91		-		70-130	-		25
trans-1,3-Dichloropropene	82		-		70-130	-		25
1,1,2-Trichloroethane	95		-		70-130	-		25
Toluene	95		-		70-130	-		25
Dibromochloromethane	96		-		70-130	-		25
1,2-Dibromoethane	98		-		70-130	-		25
Tetrachloroethene	97		-		70-130	-		25
1,1,1,2-Tetrachloroethane	89		-		70-130	-		25
Chlorobenzene	99		-		70-130	-		25
Ethylbenzene	98		-		70-130	-		25
p/m-Xylene	99		-		70-130	-		25
Bromoform	98		-		70-130	-		25
Styrene	100		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,07-10 Batch: WG774763-3								
1,1,2,2-Tetrachloroethane	100		-		70-130	-		25
o-Xylene	101		-		70-130	-		25
Isopropylbenzene	**153**	Q	-		70-130	-		25
4-Ethyltoluene	**138**	Q	-		70-130	-		25
1,3,5-Trimethylbenzene	127		-		70-130	-		25
1,2,4-Trimethylbenzene	100		-		70-130	-		25
1,3-Dichlorobenzene	106		-		70-130	-		25
1,4-Dichlorobenzene	106		-		70-130	-		25
sec-Butylbenzene	92		-		70-130	-		25
p-Isopropyltoluene	88		-		70-130	-		25
1,2-Dichlorobenzene	105		-		70-130	-		25
n-Butylbenzene	101		-		70-130	-		25
1,2,4-Trichlorobenzene	113		-		70-130	-		25
Naphthalene	112		-		70-130	-		25
1,2,3-Trichlorobenzene	107		-		70-130	-		25
Hexachlorobutadiene	108		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG774764-3								
Chlorodifluoromethane	84		-		70-130	-		
Propylene	96		-		70-130	-		
Dichlorodifluoromethane	84		-		70-130	-		
Chloromethane	93		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	92		-		70-130	-		
Methanol	83		-		70-130	-		
Vinyl chloride	94		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Butane	88		-		70-130	-		
Bromomethane	94		-		70-130	-		
Chloroethane	92		-		70-130	-		
Ethyl Alcohol	88		-		70-130	-		
Dichlorofluoromethane	84		-		70-130	-		
Vinyl bromide	92		-		70-130	-		
Acrolein	85		-		70-130	-		
Acetone	103		-		70-130	-		
Acetonitrile	83		-		70-130	-		
Trichlorofluoromethane	96		-		70-130	-		
iso-Propyl Alcohol	103		-		70-130	-		
Acrylonitrile	84		-		70-130	-		
Pentane	88		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG774764-3								
Ethyl ether	87		-		70-130	-		
1,1-Dichloroethene	86		-		70-130	-		
tert-Butyl Alcohol	88		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	88		-		70-130	-		
Carbon disulfide	91		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	95		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
Vinyl acetate	110		-		70-130	-		
2-Butanone	91		-		70-130	-		
cis-1,2-Dichloroethene	106		-		70-130	-		
Ethyl Acetate	98		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	96		-		70-130	-		
2,2-Dichloropropane	84		-		70-130	-		
1,2-Dichloroethane	94		-		70-130	-		
n-Hexane	91		-		70-130	-		
Isopropyl Ether	85		-		70-130	-		
Ethyl-Tert-Butyl-Ether	85		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG774764-3								
1,1,1-Trichloroethane	93		-		70-130	-		
1,1-Dichloropropene	91		-		70-130	-		
Benzene	92		-		70-130	-		
Carbon tetrachloride	96		-		70-130	-		
Cyclohexane	90		-		70-130	-		
Tertiary-Amyl Methyl Ether	87		-		70-130	-		
Dibromomethane	88		-		70-130	-		
1,2-Dichloropropane	93		-		70-130	-		
Bromodichloromethane	94		-		70-130	-		
1,4-Dioxane	93		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	95		-		70-130	-		
Methyl Methacrylate	90		-		70-130	-		
Heptane	91		-		70-130	-		
cis-1,3-Dichloropropene	101		-		70-130	-		
4-Methyl-2-pentanone	93		-		70-130	-		
trans-1,3-Dichloropropene	82		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	98		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		
2-Hexanone	97		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG774764-3								
Dibromochloromethane	100		-		70-130	-		
1,2-Dibromoethane	101		-		70-130	-		
Butyl Acetate	83		-		70-130	-		
Octane	88		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
1,1,1,2-Tetrachloroethane	92		-		70-130	-		
Chlorobenzene	100		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	98		-		70-130	-		
Styrene	97		-		70-130	-		
1,1,2,2-Tetrachloroethane	99		-		70-130	-		
o-Xylene	99		-		70-130	-		
1,2,3-Trichloropropane	91		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	**144**	Q	-		70-130	-		
Bromobenzene	130		-		70-130	-		
o-Chlorotoluene	**137**	Q	-		70-130	-		
n-Propylbenzene	**134**	Q	-		70-130	-		
p-Chlorotoluene	119		-		70-130	-		
4-Ethyltoluene	125		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG774764-3								
1,3,5-Trimethylbenzene	122		-		70-130	-		
tert-Butylbenzene	96		-		70-130	-		
1,2,4-Trimethylbenzene	104		-		70-130	-		
Decane (C10)	87		-		70-130	-		
Benzyl chloride	104		-		70-130	-		
1,3-Dichlorobenzene	106		-		70-130	-		
1,4-Dichlorobenzene	104		-		70-130	-		
sec-Butylbenzene	95		-		70-130	-		
p-Isopropyltoluene	90		-		70-130	-		
1,2-Dichlorobenzene	101		-		70-130	-		
n-Butylbenzene	98		-		70-130	-		
1,2-Dibromo-3-chloropropane	91		-		70-130	-		
Undecane	89		-		70-130	-		
Dodecane (C12)	112		-		70-130	-		
1,2,4-Trichlorobenzene	109		-		70-130	-		
Naphthalene	102		-		70-130	-		
1,2,3-Trichlorobenzene	103		-		70-130	-		
Hexachlorobutadiene	104		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,07-10 QC Batch ID: WG774763-5 QC Sample: L1506599-07 Client ID: I.A. #2						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.073	0.073	ppbV	0		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.040	0.040	ppbV	0		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG774764-5 QC Sample: L1506599-07 Client ID: I.A. #2					
Dichlorodifluoromethane	0.471	0.437	ppbV	7	25
Chloromethane	0.602	0.631	ppbV	5	25
Freon-114	ND	ND	ppbV	NC	25
1,3-Butadiene	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Chloroethane	ND	ND	ppbV	NC	25
Ethanol	90.3	90.1	ppbV	0	25
Vinyl bromide	ND	ND	ppbV	NC	25
Acetone	ND	ND	ppbV	NC	25
Trichlorofluoromethane	0.341	0.356	ppbV	4	25
Isopropanol	41.5	40.5	ppbV	2	25
Tertiary butyl Alcohol	ND	ND	ppbV	NC	25
Methylene chloride	1.97	1.87	ppbV	5	25
3-Chloropropene	ND	ND	ppbV	NC	25
Carbon disulfide	ND	ND	ppbV	NC	25
Freon-113	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG774764-5 QC Sample: L1506599-07 Client ID: I.A. #2					
2-Butanone	1.83	1.82	ppbV	1	25
Ethyl Acetate	2.75	2.73	ppbV	1	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	0.368	0.381	ppbV	3	25
Benzene	0.331	0.326	ppbV	2	25
Cyclohexane	0.224	0.244	ppbV	9	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25
Heptane	0.256	0.240	ppbV	6	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	9.20	9.40	ppbV	2	25
2-Hexanone	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG774764-5 QC Sample: L1506599-07 Client ID: I.A. #2					
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	3.28	3.25	ppbV	1	25
p/m-Xylene	9.62	9.60	ppbV	0	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	3.56	3.60	ppbV	1	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	3.13	3.14	ppbV	0	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: USAI LIGHTING

Lab Number: L1506599

Project Number: 14.4337

Report Date: 04/10/15

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1506599-01	S.S. #1	0026	#20 SV	03/31/15	201692		-	-	-	Pass	9.5	12.1	24
L1506599-01	S.S. #1	978	6.0L Can	03/31/15	201692	L1506114-01	Pass	-29.5	-4.3	-	-	-	-
L1506599-02	I.A. #1	0076	#16 AMB	03/31/15	201692		-	-	-	Pass	9.7	13.9	36
L1506599-02	I.A. #1	1780	6.0L Can	03/31/15	201692	L1506015-02	Pass	-29.6	-4.2	-	-	-	-
L1506599-03	S.S. #3	0244	#20 AMB	03/31/15	201692		-	-	-	Pass	9.5	10.8	13
L1506599-03	S.S. #3	1533	6.0L Can	03/31/15	201692	L1506114-01	Pass	-28.5	-4.1	-	-	-	-
L1506599-04	S.S. #4	0358	#20 SV	03/31/15	201692		-	-	-	Pass	9.5	10.1	6
L1506599-04	S.S. #4	652	6.0L Can	03/31/15	201692	L1506114-01	Pass	-28.0	-6.7	-	-	-	-
L1506599-05	S.S. #5	0359	#90 SV	03/31/15	201692		-	-	-	Pass	10.0	10.5	5
L1506599-05	S.S. #5	1676	6.0L Can	03/31/15	201692	L1506114-01	Pass	-29.1	-5.5	-	-	-	-
L1506599-06	S.S. #2	0214	#20 SV	03/31/15	201692		-	-	-	Pass	9.5	11.0	15
L1506599-06	S.S. #2	1615	6.0L Can	03/31/15	201692	L1506114-02	Pass	-29.6	-8.0	-	-	-	-
L1506599-07	I.A. #2	0208	#16 AMB	03/31/15	201692		-	-	-	Pass	10.0	10.3	3
L1506599-07	I.A. #2	1661	6.0L Can	03/31/15	201692	L1506114-01	Pass	-29.5	-6.0	-	-	-	-
L1506599-08	I.A. #3	0559	#20 SV	03/31/15	201692		-	-	-	Pass	9.6	9.9	3

Project Name: USAI LIGHTING

Lab Number: L1506599

Project Number: 14.4337

Report Date: 04/10/15

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1506599-08	I.A. #3	653	6.0L Can	03/31/15	201692	L1506114-01	Pass	-29.6	-9.8	-	-	-	-
L1506599-09	O.A. #1	0682	#30 AMB	03/31/15	201692		-	-	-	Pass	10.0	12.6	23
L1506599-09	O.A. #1	1619	6.0L Can	03/31/15	201692	L1506114-01	Pass	-29.5	-1.8	-	-	-	-
L1506599-10	O.A. #2	0074	#16 AMB	03/31/15	201692		-	-	-	Pass	10.0	10.2	2
L1506599-10	O.A. #2	1620	6.0L Can	03/31/15	201692	L1506015-02	Pass	-28.9	-5.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506015
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02
Client ID: CAN 1620 SHELF 37
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/27/15 17:01
Analyst: MB

Date Collected: 03/26/15 18:00
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506015

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02 Date Collected: 03/26/15 18:00

Client ID: CAN 1620 SHELF 37 Date Received: 03/27/15

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506015

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02 Date Collected: 03/26/15 18:00

Client ID: CAN 1620 SHELF 37 Date Received: 03/27/15

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506015

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02 Date Collected: 03/26/15 18:00

Client ID: CAN 1620 SHELF 37 Date Received: 03/27/15

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506015
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02
Client ID: CAN 1620 SHELF 37
Sample Location:
Date Collected: 03/26/15 18:00
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	98		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506015

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02
Client ID: CAN 1620 SHELF 37
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/27/15 17:01
Analyst: MB

Date Collected: 03/26/15 18:00
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1506015
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02
Client ID: CAN 1620 SHELF 37
Sample Location:

Date Collected: 03/26/15 18:00
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506015
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506015-02
Client ID: CAN 1620 SHELF 37
Sample Location:
Date Collected: 03/26/15 18:00
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/27/15 17:40
Analyst: MB

Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:

Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	82		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	99		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/27/15 17:40
Analyst: MB

Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-01
Client ID: CAN 643 SHELF 38
Sample Location:
Date Collected: 03/27/15 10:49
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	81		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506114

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/27/15 18:12
Analyst: MB

Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506114

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02 Date Collected: 03/27/15 10:55

Client ID: CAN 991 SHELF 39 Date Received: 03/27/15

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:

Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:

Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:
Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	83		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1506114

Project Number: CANISTER QC BAT **Report Date:** 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/27/15 18:12
Analyst: MB

Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:
Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1506114
Report Date: 04/10/15

Air Canister Certification Results

Lab ID: L1506114-02
Client ID: CAN 991 SHELF 39
Sample Location:
Date Collected: 03/27/15 10:55
Date Received: 03/27/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	83		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	91		60-140

Project Name: USAI LIGHTING
Project Number: 14.4337

Lab Number: L1506599
Report Date: 04/10/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**
Cooler
N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1506599-01A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30)
L1506599-02A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30),TO15-SIM(30)
L1506599-03A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30)
L1506599-04A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30)
L1506599-05A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30)
L1506599-06A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30)
L1506599-07A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30),TO15-SIM(30)
L1506599-08A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30),TO15-SIM(30)
L1506599-09A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30),TO15-SIM(30)
L1506599-10A	Canister - 6 Liter	N/A	NA		Y	Absent	TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	USAI LIGHTING	**Lab Number:**	L1506599
Project Number:	14.4337	**Report Date:**	04/10/15

GLOSSARY

Acronyms

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NI - Not Ignitable.

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

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

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

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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

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

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

Report Format: Data Usability Report

Project Name:	USAI LIGHTING	**Lab Number:**	L1506599
Project Number:	14.4337	**Report Date:**	04/10/15

Data Qualifiers

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 16, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

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

Date Rec'd in Lab: 4/2/15

ALPHA Job #: L1506599

Client Information

Client: C.T. Male Associates
Address: 50 Century Hill Dr
Latham NY 12110
Phone: 518 786 7400
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: USAI Lighting
Project Location: New Windsor, NY
Project #: 14.4337
Project Manager: Jeff Marx
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/9/15 Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☒ Additional Deliverables: ASP Cat B Data Pkg
Report to: (if different than Project Manager)
J.Marx@CTMale.com
J.McIver@CTMale.com

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments: ASP Cat B Data Pkg

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
06599-01	S.S. #1	4/2/15	851	1651	-30.08	-4.30	SV	DA	6L	978	0026		X						
-02	~~S.S. #2~~ I.A. #1	"	852	1522	-30.31	-4.09	SV	DA		1780	0076		X						
-03	S.S. #3	"	855	1655	-29.95	-4.36	SV	DA		1533	0244		X						
-04	S.S. #4		856	1656	-29.46	-7.30	SV	DA		652	0358		X						
-05	S.S. #5		858	1658	-30.75	-5.94	SV	DA		1676	0359		X						
-06	~~I.A. #1~~ S.S. #2	"	854	1654	-29.85	-8.21	AA	DA		1615	0214		X						
-07	I.A. #2	"	857	1657	-29.78	-6.03	AA	DA		1661	0208		X						
-08	I.A. #3		900	1600	-29.70	-9.97	AA	DA		653	0359		X						
-09	O.A. #1		910	1710	-30.10	-2.12	AA	DA		1619	0682		X						
-10	O.A. #2		912	1712	-29.10	-5.70	AA	DA		1620	0074		X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
	4/2/15 2220	AAL	4/3/15 2220
	4/3/15 0130	Mansfield Lab	4/3/15 0130
	4/3/15 0410		4/3/15 0410

Form No: 101-02 (19-Jun-09)

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

50 Century Hill Drive, Latham, NY 12110
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

September 14, 2016

Mr. Matthew Hubicki, Environmental Engineer
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

Re: Vapor Intrusion (VI) Supplemental Sampling Summary
USAI Lighting Brownfield Cleanup Program Site
1116 - 1126 River Road, New Windsor, NY
BCP Site Number: C336087

Dear Matt,

An evaluation of the potential for soil vapor intrusion was performed at the warehouse and office building space on April 2, 2015 at the USAI facility. The areas investigated within the warehouse and office building spaces are currently occupied by USAI. Other warehouse space on the north side of the building was not profiled during this investigation due to access limitations. Therefore, supplemental vapor intrusion sampling was performed on January 11 & 12, 2016 to complete the balance of the original NYSDEC approved scope of work. In addition to sampling new locations, there were certain compounds detected during the first phase of testing (see C.T. Male VI Sample Letter report dated June 15, 2015) that were re-tested for confirmation of potentially elevated detections.

Temporary sub-slab sampling points were installed within the first floor concrete slab of the building in accordance with the protocols identified in the New York State Department of Health's (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York October 2006 (SVI Guidance). Sub-slab soil vapor samples were collected from three (3) sub-slab sampling points; and air samples were collected from two (2) indoor ambient locations and one (1) outdoor ambient air location. The approximate locations for the sampling points are depicted on Figure 1.

The sub-slab soil vapor and ambient air samples were collected in accordance with the procedures outline in the NYSDOH's SVI Guidance. The samples were identified as follows:

- One (1) from each sub-slab vapor sampling point (SS-6, SS-7 and SS-8).
- Three (3) re-samples of each previous sub-slab vapor sampling point S.S. #3, S.S. #4 and S.S. #5. The re-samples were identified as SS-3RE, SS-4RE and SS-5RE.
- Two (2) indoor ambient air samples identified as IA-4 and IA-5, collected separately. IA-4 was collected while adjacent to SS-7. IA-5 was collected in the room where SS-3RE and SS-4RE (re-samples).
- One (1) from ambient air outside the building along the northeast side of the building identified as OA-3.

Sampling Methodology

The sub-slab vapor samples were collected using 6-Liter Summa Canisters and were analyzed for the full list of volatile organic compounds by the TO-15 method. The indoor air and outdoor air samples were collected using 6-Liter Summa Canisters and were analyzed for the full list of volatile organic compounds by the TO-15 SIM method. The samples were collected using a regulator set for an 8 hour sampling period. The analysis was performed by Alpha Analytical Labs of Mansfield, Massachusetts.

Quality Assurance/Quality Control

Prior to collection of soil vapor samples, a tracer gas (helium) was used to verify the integrity of the seal around the soil vapor tubing at the top of the concrete floor. The method used with the tracer gas is shown in Figure 2.4 A of the NYSDOH SVI Guidance whereby a 2′ by 2′ rectangular piece of plastic was placed over the concrete slab and flooring material, sealed with modeling clay and a hole cut in the plastic to allow the sample tubing to penetrate. After sealing the tubing at the penetration point of the plastic with modeling clay, a new 5-gallon plastic bucket was placed on the plastic and sealed to the plastic with modeling clay. Using a hole in the bucket and a rubber stopper, the atmosphere in the bucket was charged with helium, and a portable device was used to analyze a soil vapor sample for the helium before and after sample collection. All of the soil vapor samples exhibited no evidence of influence by helium.

The laboratory results of the soil vapor and ambient air samples were subject to ASP Category B Data Deliverables. At the time of this report, the soil vapor and ambient air samples have not been validated or submitted to EQuIS. The ASP Category B Data

Deliverables will be subjected to data validation and submitted to EQuIS as directed by the NYSDEC Division of Environmental Remediation, if warranted.

Alpha Analytical, the project's lab of record, provided the batch cleaned Summa canisters, regulators, and performed the analysis. Alpha is an ELAP-certified laboratory.

There was one quality control issue encountered during this sampling event. The laboratory had identified internal contamination of the canister used to collect the SS-8 sample on January 11 & 12, 2016. Therefore, the lab did not provide the results and re-sampling was performed on January 25, 2016. The re-sampling points were identified as follows:

- One (1) from each sub-slab vapor sampling point (SS-8RE).
- One (1) indoor ambient air samples identified as IA-6, collected separately. IA-6 was collected while adjacent to SS-8RE.
- One (1) from ambient air outside the building along the northeast side of the building identified as OA-4.

Analytical Results Comparison to Applicable Guidance

The NYSDOH does not have any standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either in soil vapor or sub-slab vapor). The NYSDOH has developed guidelines for indoor air concentration for methylene chloride, trichloroethene, and tetrachloroethene.

Sampling results for these compounds are summarized as follows:

- Methylene chloride was detected above the limit of laboratory detection in one (1) of the three (3) supplemental soil vapor samples at 2.95 mcg/m^3 (other soil vapor samples were non-detect at 1.74 mcg/m^3). This detection is lower than previous range of detections of 4.3 mcg/m^3 to 7.5 mcg/m^3. Methylene chloride was not detected above the limit of laboratory detection in the additional indoor air and outdoor air samples. Considering the supplemental results, it would not be reasonable to assume there is a source of methylene chloride in the sub-slab vapor, nor is it present in indoor air samples above the applicable guideline value of 60 mcg/m^3.

- Trichloroethene was not detected above the limit of laboratory detection in the three (3) supplemental soil vapor samples. The previous range of soil vapor detection was non-detect (1.07 mcg/m^3) to 58.6 mcg/m^3. Trichloroethene was not detected above the limit of laboratory detection in the indoor air samples and outdoor air samples. The non-detect laboratory detection limit (0.107 mcg/m^3) concentrations of the indoor air samples were significantly below the applicable guideline value of 5 mcg/m^3.

- Tetrachloroethene was detected above the limit of laboratory detection in one (1) of the three (3) supplemental soil vapor samples at 64.5 mcg/m^3 (other soil vapor samples were non-detect at 1.36 mcg/m^3). This detection is similar to the previous range of detections of 3.3 mcg/$m^3$to 97.6 mcg/m^3. Tetrachloroethene was detected in indoor air at concentrations of 0.156 mcg/m^3, much less than soil vapor concentrations. Tetrachloroethene was not detected above the limit of laboratory detection in the outdoor air samples. The concentrations in indoor air samples are far below the applicable guideline value of 30 mcg/m^3.

Application of NYSDOH Matrix

The NYSDOH has developed two matrices, in the end of Section 3.4 of their guidance, to use as tools for making decisions when soil vapor may be entering buildings. The first decision matrix (Matrix 1) was originally development for trichloroethene (TCE) and the second decision matrix (Matrix 2) was developed for Tetrachloroethene (PCE). Two more chemicals have been assigned to the two matrices; carbon tetrachloride (Matrix 1); and 1,1,1-trichloroethane (Matrix 2).

- Carbon tetrachloride comparison to Matrix 1: Two (2) of the three (2) sub-slab vapor samples were non-detect at the limit of laboratory detection. For the one (1) compound detected in the SS-7, the following comparison applies.
    - For sub-slab vapor 5 to <50 mcg/m^3 and indoor air < 1 mcg/m^3, Matrix 1 says "*Monitor*".
    - The previous sampling laboratory data indicated that for sub-slab vapor < 5 mcg/m^3 and indoor air < 1 mcg/m^3, Matrix 1 says "*Take reasonable and practical actions to identify source(s) and reduce exposures*".

- Trichloroethene comparison to Matrix 1: Three (3) sub-slab vapor samples were non-detect at the limit of laboratory detection which would correlate to *"No Further Action"*. For the previous sampling laboratory data, the following comparisons were concluded.

- For sub-slab vapor between 5 mcg/$m^3$and < 50 mcg/$m^3$and indoor air < 0.25 mcg/m^3, Matrix 1 says "*No further action*" [applies to previous samples S.S.#1 & S.S.#3 with detections of 7.36 mcg/$m^3$and 34.7 mcg/m^3, respectively].
- For sub-slab vapor between 50 mcg/$m^3$and < 250 mcg/$m^3$and indoor air < 0.25 mcg/m^3, Matrix 1 says "*Monitor*" [applies to previous sample S.S.#5 with detection of 58.6 mcg/m^3].

- Tetrachloroethene comparison to Matrix 2: One (1) out of the three (3) sub-slab vapor samples had a detection above the limit of laboratory detection. For the concentration detected (64.6 mcg/m^3), the one comparison applies, which is the same conclusion from the previous sampling laboratory data.
  - For sub-slab < 100 and indoor air < 3, Matrix 2 says "*No further Action*".

- 1,1,1-Trichloroethane comparison to Matrix 2: Two (2) of the three (3) sub-slab vapor samples had detections above the limit of laboratory detection (the last one was non-detect at 1.09 mcg/m^3). For the range detected, the only one comparison applies.
  - For sub-slab between < 100 and indoor air < 3, Matrix 2 says "*No further action*".

  For the previous sampling laboratory data, the following comparisons were concluded and re-sampling at sampling locations SS-3, SS-4 and SS-5 concluded similar results as further supported below.

  - For sub-slab between < 100 and indoor air < 3, Matrix 2 says "*No further action*". [applies to previous samples S.S.#1, S.S.#2 & S.S.#5 with detections of 3.93 mcg/m^3, 1.69 mcg/$m^3$and 28.2 mcg/m^3, respectively]. [Results of re-sampling (SS-5RE) had a detection of 79.7 mcg/m^3, which would not change the outcome using the matrix].
  - For sub-slab between 100 to < 1,000 and indoor air < 3, Matrix 2 says "*Monitor*". [applies to previous sample S.S.#4 with detection of 130 mcg/m^3]. [Results of re-sampling (SS-4RE) had a detection of 189 mcg/m^3, which would not change the outcome using the matirx].
  - For sub-slab between 1,000 and above and indoor air < 3, Matrix 2 says "*Mitigate*". [applies to previous sample S.S.#3 with detection of 3,460 mcg/m^3]. [Results of re-sampling (SS-3RE) had a detection of 2,160 mcg/m^3, which does not change the outcome using the matrix].

Background Levels for Selected Compounds

The EPA conducted a study from 1994 to 1996 of indoor air quality referred to as Building Assessment and Survey Evaluation (BASE '94-96'). The study included measurement of volatile organic compounds in indoor and outdoor air at 100 randomly selected public and private office buildings across the United States with no known indoor air related complaints. The study is unpublished and the data summaries are Summa canisters results only. Also, the EPA published a Volatile Organic Compound Database in 1988 of indoor and outdoor data from studies across the United States. Below is a comparison of the indoor air concentrations detected in the building to indoor air results EPA has collected that represent typical background concentrations for some of the compounds that could be linked to petroleum related impacts.

Compound	**USAI Indoor Air Concentration Range Detected in April 2015 and January 2015 (ug/m^3)**	**EPA BASE Data Background Levels Indoor Air - 1994 to 1996 (ug/m^3)**	**EPA Database Homes & Offices Indoor Air - 1988 (ug/m^3)**	**EPA Industrial Air Regional Screening Levels Criteria January 2015**
Benzene	0.712 to 1.36	2.1 to 5.1	3.3 to 21	1.6
Carbon Tetrachloride	0.459 to 0.484	< 0.9	Non-detect to 0.8	2
Ethylbenzene	1.44 to 28.6	1.6 to 3.4	2 to 9.6	4.9
m,p-Xylene	4.2 to 96.9	4.1 to 12	4.3 to 18	440
o-Xylene	1.78 to 34.9	< 2.4 to 4.4	2 to 9.3	440
Toluene	2.02 to 34.7	10.7 to 26	Not Available	22,000
Tetrachloroethene	0.156 to 0.827	< 1.9 to 5.9	1.7 to 11	47
Trichloroethene	Non-detect to 0.172	< 1.2 to 1.2	Non-detect to 4.5	None

As shown in the table above, many of the typical petroleum related compounds that were detected in indoor air appear to be at concentrations that have been documented by EPA to be background concentrations and therefore, not indicative of concentrations affected by sub-slab soil vapor. However, ethylbenzene, xylenes and toluene, which can be indicative of gasoline impacts, were detected at concentrations slightly higher than the range. These compounds were also detected in sub-slab vapor samples indicating potential to be from soil and/or groundwater impacts in the area of the building. Also presented in the table is EPA's Industrial Air Regional Screening Levels which shows ethylbenzene to be above the screening level.

Conclusions

The findings indicate the presence of a variety of volatile organic compounds in sub-slab vapor, indoor air and outdoor air. Based on NYSDOH guidance, methylene chloride, trichloroethene and tetrachloroethene are below applicable guidance values for indoor air with the current construction of the existing building.

Using the NYSDOH matrices for an evaluation on detections, carbon tetrachloride, trichloroethene and tetrachloroethene are present but recommendations from NYSDOH guidance include "take reasonable and practical actions to identify source(s) and reduce exposures", "no further action" or "monitor". These recommendations were similar for 1,1,1-trichloroethane including "no further action" and "monitor" which the exception of one outlier orders of magnitude higher than the rest that triggers a "mitigate" recommendation. Re-sampling of the 1,1,1-trichloroethane detected a similar result at sampling location S.S.#3/SS-3RE suggesting that this compound is present in sub-slab vapor at a relatively elevated concentration. It should be noted, however, that 1,1,1-trichloroethane was not detected above the laboratory detection limit in any of the five (5) indoor air samples collected.

There are petroleum related compounds detected in sub-slab vapor which consisted of ethylbenzene, xylenes and toluene. These compounds were also detected in indoor air, but in the absence of applicable guidance, the level of action, if any needs to be discussed further. Using historical background concentrations available from EPA, some of the concentrations may be slightly higher than reported background concentrations in indoor air. These compounds have been detected in samples collected as part of the remedial action work, which confirms that these compounds are present at the site.

From a general overview of the vapor intrusion data, there appears to be a few localized outliers (i.e., higher than the rest) in sub-slab vapor such as the following:

- 1,1,1-trichlorothane at S.S.#3/SS-3RE, S.S.#4/SS-4RE and S.S.#5/SS-5RE, and to a lesser degree SS-6 and SS-7.
- Benzene at SS-7.
- Carbon tetrachloride at SS-7.
- Toluene at S.S.#4/SS-4RE.

- Tetrachloroethene at SS-5 and SS-6.

When comparing the sub-slab vapor result outliers to indoor air results, there does not appear to be a direct correlation to higher indoor air concentrations. This meaning that where a higher concentration was detected in sub-slab vapor, the indoor air concentration did not appear to be elevated over the others.

We look forward to engaging in a conversation with the NYSDEC and NYSDOH about these results and the significance thereof. If you have technical questions, please contact Jeff Marx at (518) 786-7548. Legal questions should be directed to the Applicants' attorney, John Cappello (845) 778-2121.

Sincerely
C.T. MALE ASSOCIATES

Jeffrey A. Marx, PE
Environmental Engineer

Att Sampling Location Map
Summary Analytical Table (Detections Only)
Full laboratory Reports by Alpha Analytical

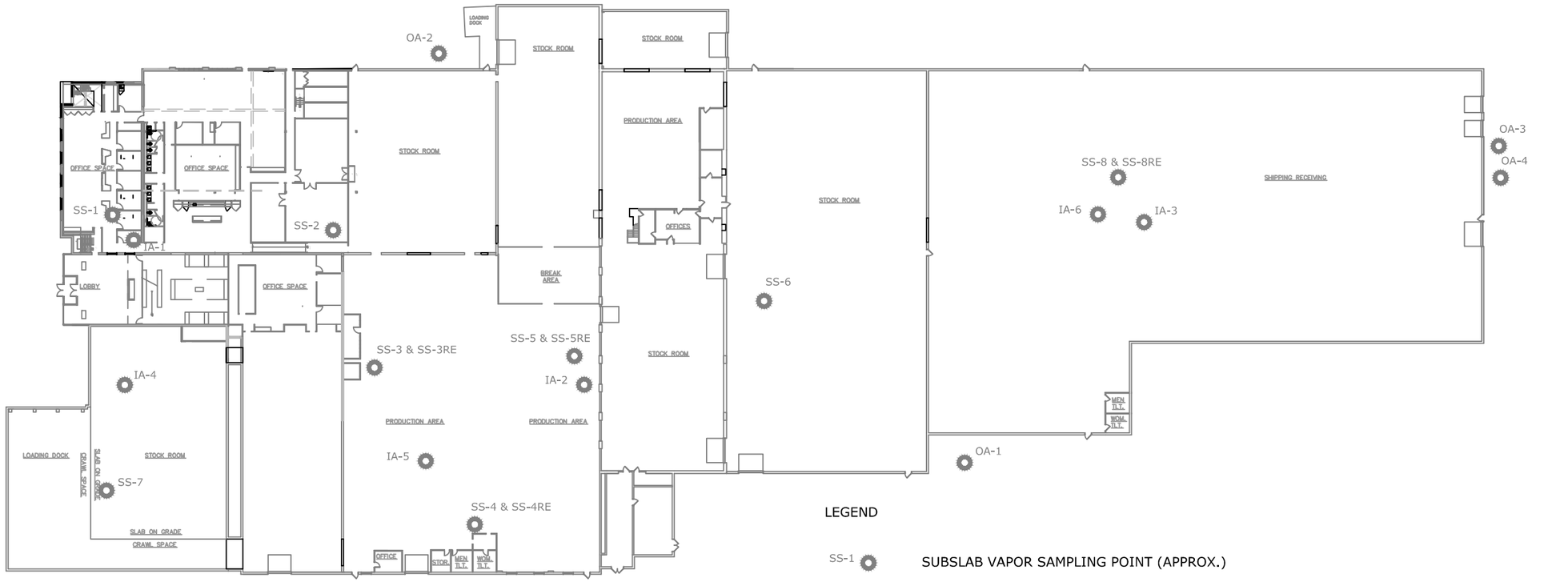
ec: John Cappello, Jacobowitz and Gubits, LLP
Sue Sullivan, iSER Consulting, LLC
Jim McIver, C.T. Male Associate
David Crosby, NYSDEC

XREFS: NONE

PROJECT NUMBER: 14.4337

CAD DWG. FILE NAME: VI BASE MAP.dwg

CAD DWG. FILE NAME: K:\Projects\14337\Env\Drawings and Maps\Bldg drawings from Fellenzer\VI BASE MAP.dwg



LEGEND

SS-1 SUBSLAB VAPOR SAMPLING POINT (APPROX.)

IA-1 INDOOR AMBIENT AIR SAMPLING POINT (APPROX.)

OA-1 OUTDOOR AMBIENT AIR SAMPLING POINT (APPROX.)

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTED	CHECK	APPR.
	1			
	2			
	3			
	4			
	5			
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DESIGNED :

DRAFTED : J.MARX

CHECKED : J.MCIVER

PROJ. NO : 14.4337

SCALE : NOT TO SCALE

DATE : SEPT. 14, 2016

FIGURE 1
VAPOR INTRUSION SAMPLING LOCATIONS

USAI LIGHTING FACILITY
1126 RIVER ROAD

TOWN OF NEW WINDSOR — ORANGE COUNTY, NEW YORK

C.T. MALE ASSOCIATES
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SHEET 1 OF 1

DWG. NO: 16-524

USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015, JANUARY 12 AND 25, 2016
DATA HAS BEEN SUBJECT TO DUSR VALIDATION

LOCATION SAMPLING DATE LAB SAMPLE ID				SUBSLAB AIR SAMPLES																					
				S.S. #1 4/2/2015 L1506599-01		S.S. #2 4/2/2015 L1506599-06		S.S. #3 4/2/2015 L1506599-03		SS-3RE 1/12/2016 L1600977-01		S.S. #4 4/2/2015 L1506599-04		SS-4RE 1/12/2016 L1600977-02		S.S. #5 4/2/2015 L1506599-05		SS-5RE 1/12/2016 L1600977-03		SS-6 1/12/2016 L1600977-04		SS-7 1/12/2016 L1600977-05		SS-8 RE 1/25/2016 L1602117-01	
	CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics in Air - Mansfield Lab																									
Dichlorodifluoromethane	75-71-8	No Guidance Value	ug/m3	1.76		1.5		ND (< 9.89)	U	Not Analyzed		1.88		Not Analyzed		8.55		Not Analyzed		ND (< 0.989)	UJ	1.95	J	3.02	
Chloromethane	74-87-3	No Guidance Value	ug/m3	ND (< 0.413)	U	0.991		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	Not Analyzed		ND (< 4.13)	U	ND (< 4.13)	U	ND (< 4.13)	U
1,3-Butadiene	106-99-0	No Guidance Value	ug/m3	1.5		0.796		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	Not Analyzed		ND (< 4.42)	U	ND (< 4.42)	U	ND (< 4.42)	U
Ethanol	64-17-5	No Guidance Value	ug/m3	11.6		11.9		ND (< 47.1)	U	Not Analyzed		8.54		Not Analyzed		9.31		Not Analyzed		ND (< 9.42)	UJ	ND (< 9.42)	UJ	ND (< 9.42)	U
Acetone	67-64-1	No Guidance Value	ug/m3	190		48.9		ND (< 23.8)	U	Not Analyzed		37.3		Not Analyzed		46.1		Not Analyzed		31.1		36.1		19.6	
Trichlorofluoromethane	75-69-4	No Guidance Value	ug/m3	1.48		ND (< 1.12)	U	ND (< 11.2)	U	Not Analyzed		1.15		Not Analyzed		2.3		Not Analyzed		ND (< 2.41)		ND (< 1.12)	U	1.4	
Isopropanol	67-63-0	No Guidance Value	ug/m3	5.16		2.35		ND (< 12.3)	U	Not Analyzed		2.48		Not Analyzed		2.78		Not Analyzed		2.73		1.38		2.43	
Tertiary butyl Alcohol	75-65-0	No Guidance Value	ug/m3	7.94		28.6		ND (< 15.2)	U	Not Analyzed		14.4		Not Analyzed		6.73		Not Analyzed		ND (< 1.52)	U	ND (< 1.52)	U	4.94	
Methylene chloride	75-09-2	60	ug/m3	ND (< 1.74)	U	4.27		ND (< 17.4)	U	Not Analyzed		7.54		Not Analyzed		6.6		Not Analyzed		2.95		1.74	U	1.74	U
Carbon disulfide	75-15-0	No Guidance Value	ug/m3	0.944		4.24		ND (< 6.23)	U	Not Analyzed		1.16		Not Analyzed		ND (< 0.623)	U	Not Analyzed		0.623	U	0.925		1.4	
1,1-Dichloroethane	75-34-3	No Guidance Value	ug/m3	ND (< 0.809)	U	ND (< 8.09)	U	ND (< 8.09)	U	Not Analyzed		ND (< 8.09)	U	Not Analyzed		2.23		Not Analyzed		0.809	U	0.809	U	0.809	U
2-Butanone	78-93-3	No Guidance Value	ug/m3	34.8		5.04		ND (< 14.7)	U	ND (< 7.37)	U	ND (< 7.99)	U	2.47		6.02		21.7		7.11		3.04		3.54	
Ethyl Acetate	141-78-6	No Guidance Value	ug/m3	ND (< 1.8)	U	ND (< 1.8)	U	ND (< 18)	U	Not Analyzed		ND (< 1.8)	U	Not Analyzed		ND (< 1.8)	U	Not Analyzed		1.8	U	1.8	U	1.8	U
Chloroform	67-66-3	No Guidance Value	ug/m3	6.35		8.06		22.5		Not Analyzed		4.8		Not Analyzed		17.5		Not Analyzed		1.02		0.977	U	14.5	
Tetrahydrofuran	109-99-9	No Guidance Value	ug/m3	5.93		5.34		ND (< 14.7)	U	Not Analyzed		8.73		Not Analyzed		3.13		Not Analyzed		1.47	U	1.47	U	1.47	U
n-Hexane	110-54-3	No Guidance Value	ug/m3	1.93		2.88		ND (< 7.05)	U	Not Analyzed		2.32		Not Analyzed		1.76		Not Analyzed		1.16		1.75		0.705	U
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	3.93		1.69		3,460		2,160		130		189		28.2		79.7		21.4		23.5		1.09	U
Benzene	71-43-2	No Guidance Value	ug/m3	1.92		3.18		ND (< 6.39)	U	ND (< 3.19)	U	1.39		0.818		1.15		0.997		0.76		10.3		0.639	U
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	ND (< 1.26)	U	ND (< 1.26)	U	ND (< 12.6)	U	Not Analyzed		ND (< 1.26)	U	Not Analyzed		1.61		Not Analyzed		ND (< 1.26)	U	13		ND (< 1.26)	U

USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015, JANUARY 12 AND 25, 2016
DATA HAS BEEN SUBJECT TO DUSR VALIDATION

LOCATION				SUBSLAB AIR SAMPLES																			
SAMPLING DATE				S.S. #1 4/2/2015		S.S. #2 4/2/2015		S.S. #3 4/2/2015		SS-3RE 1/12/2016		S.S. #4 4/2/2015		SS-4RE 1/12/2016		S.S. #5 4/2/2015		SS-5RE 1/12/2016		SS-6 1/12/2016		SS-7 1/12/2016		SS-8 RE 1/25/2016	
LAB SAMPLE ID				L1506599-01		L1506599-06		L1506599-03		L1600977-01		L1506599-04		L1600977-02		L1506599-05		L1600977-03		L1600977-04		L1600977-05		L1602117-01	
	CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Cyclohexane	110-82-7	No Guidance Value	ug/m3	ND (< 0.688)	U	4.58		ND (< 6.88)	U	ND (< 3.44)	U	ND (< 0.688)	U	ND (< 0.688)	U	4.51		ND (< 0.688)	U	ND (< 0.688)	U	1.04		ND (< 0.688)	U
1,4-Dioxane	123-91-1	No Guidance Value	ug/m3	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 7.21)	U	Not Analyzed		ND (< 0.721)	U	Not Analyzed		ND (< 0.721)	U	Not Analyzed		ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U
Trichloroethene	79-01-6	No Guidance Value	ug/m3	7.36		ND (< 1.07)	U	34.7		Not Analyzed		ND (< 1.07)	U	Not Analyzed		58.6		Not Analyzed		ND (< 1.07)	U	ND (< 1.07)	U	ND (< 1.07)	U
Heptane	142-82-5	No Guidance Value	ug/m3	3.78		3.82		ND (< 8.2)	U	ND (< 4.1)	U	3.27		0.877		2.7		1.25		ND (< 0.82)	U	1.67		0.82	U
4-Methyl-2-pentanone	108-10-1	No Guidance Value	ug/m3	21.2		ND (< 2.05)	U	ND (< 20.5)	U	Not Analyzed		ND (< 2.05)	U	Not Analyzed		ND (< 2.05)	U	Not Analyzed		ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U
Toluene	108-88-3	No Guidance Value	ug/m3	18.4		17.2		22.1		ND (< 3.77)	U	22.6		50.5		18.2		2.26		2.36		4.07		0.852	
2-Hexanone	591-78-6	No Guidance Value	ug/m3	3.87		ND (< 0.82)	U	ND (< 8.2)	U	Not Analyzed		ND (< 0.82)	U	Not Analyzed		ND (< 0.82)	U	Not Analyzed		ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
Tetrachloroethene	127-18-4	No Guidance Value	ug/m3	5.23		3.25		ND (< 13.6)	U	Not Analyzed		3.59		Not Analyzed		97.6		Not Analyzed		64.5		ND (< 1.36)	U	ND (< 1.36)	U
Ethylbenzene	100-41-4	No Guidance Value	ug/m3	7.47		7.34		ND (< 8.69)	U	ND (< 4.34)	U	7.12		ND (< 0.869)	U	6.82		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)		ND (< 0.869)	U
p/m-Xylene	179601-23-1	No Guidance Value	ug/m3	20.2		15.4		20.5		8.69		16.1		3.18		17		3.02		2.44		ND (< 1.74)	U	ND (< 1.74)	U
Styrene	100-42-5	No Guidance Value	ug/m3	4.98		3.83		ND (< 8.52)	U	Not Analyzed		3.81		Not Analyzed		4.73		Not Analyzed		ND (< 0.852)	U	1.22		ND (< 0.852)	U
o-Xylene	95-47-6	No Guidance Value	ug/m3	5.86		3.98		ND (< 8.69)	U	ND (< 4.34)	U	4.2		0.986		4.82		1.42		0.977		ND (< 0.869)	U	ND (< 0.869)	U
4-Ethyltoluene	622-96-8	No Guidance Value	ug/m3	1.58		ND (< 0.983)	U	ND (< 9.83)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		1.05		Not Analyzed		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
1,3,5-Trimethylbenzene	108-67-8	No Guidance Value	ug/m3	1.06		ND (< 0.983)	U	ND (< 9.83)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		ND (< 0.983)	U	Not Analyzed		ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U
1,2,4-Trimethylbenzene	95-63-6	No Guidance Value	ug/m3	3.44		1.51		ND (< 9.83)	U	Not Analyzed		2.09		Not Analyzed		1.84		Not Analyzed		1.15		ND (< 0.983)	U	ND (< 0.983)	U
Volatile Organics in Air by SIM - Mansfield Lab																									
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
Trichloroethene	79-01-6	5	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	
Tetrachloroethene	127-18-4	30	ug/m3	See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above		See Above	

Notes:
U denotes not detected at the limit of laboratory detection.
J denotes estimated value.
Analysis performed by Alpha Analytical Labs.

USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015, JANUARY 12 AND 25, 2016
DATA HAS BEEN SUBJECT TO DUSR VALIDATION

LOCATION SAMPLING DATE LAB SAMPLE ID				INDOOR AMBIENT AIR SAMPLES												OUTDOOR AMBIENT AIR SAMPLES							
				I.A. #1 4/2/2015 L1506599-02		I.A. #2 4/2/2015 L1506599-07		I.A. #3 4/2/2015 L1506599-08		IA-4 1/12/2016 L1600977-07		IA-5 1/12/2016 L1600977-08		IA-6 1/25/2016 L1602117-02		O.A. #1 4/2/2015 L1506599-09		O.A. #2 4/2/2015 L1506599-10		OA-3 1/12/2016 L1600977-09		OA-4 1/25/2016 L1602117-03	
	CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics in Air - Mansfield Lab																							
Dichlorodifluoromethane	75-71-8	No Guidance Value	ug/m3	1.68		2.33		2.64		2.08	J	1.37	J	1.48		1.63		1.76		1.89	J	4.02	
Chloromethane	74-87-3	No Guidance Value	ug/m3	1.52		1.24		1.46		1.1		1.26		1.22		1.21		1.21		1.11		1.24	
1,3-Butadiene	106-99-0	No Guidance Value	ug/m3	ND (< 0.442)	U	ND (< 0.442)	U	1.32		ND (< 0.442)	U	ND (< 0.442)	U	1.16		ND (< 0.442)	U	ND (< 0.442)	U	ND (< 0.442)	U	ND (< 0.442)	U
Ethanol	64-17-5	No Guidance Value	ug/m3	1050		170		58.4		19.6	J	203	J	25.6		6.76		6.67		ND (< 9.42)	UJ	ND (< 9.42)	U
Acetone	67-64-1	No Guidance Value	ug/m3	63.2		ND (< 2.38)	U	ND (< 2.38)	U	11		77.4		41.6		8.08		6.25		2.87		ND (< 2.38)	U
Trichlorofluoromethane	75-69-4	No Guidance Value	ug/m3	1.52		1.92		2.56		ND (< 1.12)	U	1.22		1.21		1.2		1.14		ND (< 1.12)	U	1.64	
Isopropanol	67-63-0	No Guidance Value	ug/m3	354		102		27.5		2.56		31		11.7		ND (< 1.23)	U	ND (< 1.23)	U	ND (< 1.23)	U	ND (< 1.23)	U
Tertiary butyl Alcohol	75-65-0	No Guidance Value	ug/m3	ND (< 1.52)	U	ND (< 1.52)	U	2.32		ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U	ND (< 1.52)	U
Methylene chloride	75-09-2	60	ug/m3	ND (<1.74)	U	6.84		9.59		ND (<1.74)	U	ND (<1.74)	U	ND (<1.74)	U	ND (<1.74)	U	8.55		ND (<1.74)	U	ND (<1.74)	U
Carbon disulfide	75-15-0	No Guidance Value	ug/m3	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U	ND (< 0.623)	U
1,1-Dichloroethane	75-34-3	No Guidance Value	ug/m3	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U	ND (< 0.809)	U
2-Butanone	78-93-3	No Guidance Value	ug/m3	2.46		5.4		4.72		1.83		13.7		2.35		ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U
Ethyl Acetate	141-78-6	No Guidance Value	ug/m3	3.89		9.91		21		ND (< 1.8)	U	2.84		12.6		ND (< 1.8)	U	ND (< 1.8)	U	ND (< 1.8)	U	ND (< 1.8)	U
Chloroform	67-66-3	No Guidance Value	ug/m3	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U	ND (< 0.977)	U
Tetrahydrofuran	109-99-9	No Guidance Value	ug/m3	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U	ND (< 1.47)	U
n-Hexane	110-54-3	No Guidance Value	ug/m3	1.08		1.3		1.47		0.804		ND (< 0.705)	U	ND (< 0.705)	U	0.99		1.65		ND (< 0.705)	U	ND (< 0.705)	U
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	See Below		See Below		See Below		See Below		See Below		See Below		See Below	
Benzene	71-43-2	No Guidance Value	ug/m3	0.965		1.06		1.56		0.767		0.712		1.36		0.668		0.827		0.674		0.639	U
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	

USAI LIGHTING FACILITY
VAPOR INTRUSION SAMPLING
SAMPLE DATE APRIL 2, 2015, JANUARY 12 AND 25, 2016
DATA HAS BEEN SUBJECT TO DUSR VALIDATION

LOCATION				INDOOR AMBIENT AIR SAMPLES												OUTDOOR AMBIENT AIR SAMPLES							
SAMPLING DATE				I.A. #1 4/2/2015		I.A. #2 4/2/2015		I.A. #3 4/2/2015		IA-4 1/12/2016		IA-5 1/12/2016		IA-6 1/25/2016		O.A. #1 4/2/2015		O.A. #2 4/2/2015		OA-3 1/12/2016		OA-4 1/25/2016	
LAB SAMPLE ID				L1506599-02		L1506599-07		L1506599-08		L1600977-07		L1600977-08		L1602117-02		L1506599-09		L1506599-10		L1600977-09		L1602117-03	
	CasNum	NYSDOH Air Guidance Values	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Cyclohexane	110-82-7	No Guidance Value	ug/m3	ND (< 0.688)	U	< 0.771		ND (< 0.688)	U	0.688	U	0.688	U	0.688	U	ND (< 0.688)	U	ND (< 0.688)	U	0.688	U	0.688	U
1,4-Dioxane	123-91-1	No Guidance Value	ug/m3	2.37		ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	ND (< 0.721)	U	0.721	U	0.721	U
Trichloroethene	79-01-6	No Guidance Value	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	
Heptane	142-82-5	No Guidance Value	ug/m3	1.03		1.05		1.08		0.869		ND (< 0.82)	U	0.975		ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
4-Methyl-2-pentanone	108-10-1	No Guidance Value	ug/m3	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U	ND (< 2.05)	U
Toluene	108-88-3	No Guidance Value	ug/m3	5.2		34.7		24.3		2.08		2.02		9.35		2.5		1.92		0.795		1.05	
2-Hexanone	591-78-6	No Guidance Value	ug/m3	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U	ND (< 0.82)	U
Tetrachloroethene	127-18-4	No Guidance Value	ug/m3	See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below		See Below	
Ethylbenzene	100-41-4	No Guidance Value	ug/m3	3.05		14.2		28.6		1.44		2.31		20.2		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)	U	1.23	
p/m-Xylene	179601-23-1	No Guidance Value	ug/m3	5.86		41.8		96.9		4.2		7.04		56.9		ND (< 1.74)	U	ND (< 1.74)	U	ND (< 1.74)	U	3.59	
Styrene	100-42-5	No Guidance Value	ug/m3	0.864		15.2		60.5		ND (< 0.852)	U	ND (< 0.852)	U	41.6		ND (< 0.852)	U	ND (< 0.852)	U	ND (< 0.852)	U	2.21	
o-Xylene	95-47-6	No Guidance Value	ug/m3	2.29		13.6		34.9		1.78		3.41		27.4		ND (< 0.869)	U	ND (< 0.869)	U	ND (< 0.869)	U	1.75	
4-Ethyltoluene	622-96-8	No Guidance Value	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
1,3,5-Trimethylbenzene	108-67-8	No Guidance Value	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
1,2,4-Trimethylbenzene	95-63-6	No Guidance Value	ug/m3	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U	0.983	U	0.983	U	ND (< 0.983)	U	ND (< 0.983)	U	ND (< 0.983)	U	0.983	U
Volatile Organics in Air by SIM - Mansfield Lab																							
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U	ND (< 0.109)	U
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	0.484		0.459		0.484		0.459		0.459		0.472		0.434		0.44		0.44		0.352	
Trichloroethene	79-01-6	5	ug/m3	ND (< 0.107)	U	ND (< 0.107)	U	0.172		ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U	ND (< 0.107)	U
Tetrachloroethene	127-18-4	30	ug/m3	0.183		0.271		0.827		0.156		0.156		ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U	ND (< 0.136)	U

Notes:
U denotes not detected at the limit of laboratory detection.
J denotes estimated value.
Analysis performed by Alpha Analytical Labs.