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March 3, 2014

Ms. Tara M. Blum, P.E.
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615 Erie Boulevard West
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**Subject: Data Summary/Transmittal Report
November 2013 Wetland Delineation and Sampling
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, NY**

Dear Ms. Blum:

On behalf of United Technologies Corporation (UTC), AECOM USA, Inc. (AECOM) is pleased to provide this transmittal of data recently collected at the Carrier-Dewitt Landfill site (AOC G) on Thompson Road in Syracuse, New York. The sampling procedures and analytical results described below were commissioned as components of a Remedial Investigation for AOC G. These work elements and procedures were performed in accordance with the Draft Remedial Investigation Work Plan (RIWP) prepared for AOC G in 2013 by EnSafe Inc. and the comments supplied by the New York State Department of Environmental Conservation (NYSDEC) in a memo dated September 12, 2013.

As stated during previous meetings and correspondence between NYSDEC and UTC, it was determined that proceeding with characterization of the wetland area comprising the western portion of the AOC G site (see Site Plan, **Figure 1**) during the latter part of 2013 would be advantageous due to the beneficial vegetative and climatic conditions provided by the fall season. Accordingly, a field team was mobilized to delineate and sample the wetland during the week of November 4, 2013. The remainder of this letter details the wetland delineation and sampling tasks completed during November 2013. It is intended that the upland areas of AOC G (former landfill area) and additional locations within the wetland will be sampled and reported upon during 2014.

1.0 November 2013 AOC G Wetland Investigation Scope of Work

The scope of work completed during November 2013 included:

- Delineation of the AOC G Wetlands,
- Sampling of the AOC G Wetland Area,
- Surveying the AOC G Wetland Area and the Sanders Creek Corridor, and
- Preparing a Data Summary/Transmittal Report.

1.1 Delineation of the AOC G Wetlands

Wetland Delineation and Flagging Methodology

AECOM delineated the jurisdictional boundary between the upland portions of AOC G and the adjacent wetlands using the three-parameter method documented in the *Corps of Engineers Wetlands Delineation Manual* (Technical Report Y-87-1, 1987) as modified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, V2* (ERDC/EL TR-12-1, 2012). The delineation was completed during the week ending

November 8, 2013 and was based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.

Observations and Results

A map showing the wetland features described below is attached as **Figure 2**.

- The wetland boundary line was started along the eastern edge of a swale ("north swale") that drains northward toward Sanders Creek from a ponded area at the north end of the wetland ("north wetland"). The north swale itself is considered a wetland, but its wetland boundary northward to Sanders Creek (including a feature referred to as the "Hotel Pond") was not delineated.
- The wetland boundary extends south from the north swale along the edge of fill used to construct the UTC-Carrier parking lot past a rip-rap drainage swale from the parking lot and continues along the toe of the landfill slope approximately 1,000 feet to a point where historical earth moving activities (presumably clay mining) has left a complex of upland fill areas separated by low wetland/ponded areas.
- The wetlands-uplands complex was further delineated where it abuts the wetlands in the western part of the UTC property. Identified on the map is a low point where a majority of the wetlands-uplands complex drains into the western wetland area and a low upland peninsula composed of discarded bricks.
- The wetland line continues south along the toe of the landfill slope across the complex of wetlands-uplands to the southwest corner of the landfill, where it meets a drainage swale that drains the truck parking area on the adjacent property south of the landfill.

This was the extent of delineation of the wetland completed during this project phase, as it was expected that this wetland/landfill boundary may be involved in future remedial action permitting.

Seasonal/Water Elevation Impacts on Wetland Delineation

The level of water in the wetlands was higher than that observed during a September 11, 2013 field reconnaissance conducted by AECOM. The lower water elevation aided in delineating wetland hydrology. However, the vegetation was dying back for the winter as a result of previous frosts, so documentation of hydrophytic vegetation was hampered. Additional documentation of selected data points will be completed during the spring field season when hydrophytic vegetation is fully evident.

Visual Observation of Water Sources and Outlets (Including Presence or Absence of Outlets for Outlet Flow or Overland Flooding to Sanders Creek and South Branch of Ley Creek)

- A swale to Sanders Creek (north swale) from the northern wetland was verified.
- The water level in the north wetland at the beginning of the week of November 4, 2013 was 6 to 8 inches below the elevation to initiate flow into the swale to Sanders Creek. At the end of the week the water level in the north wetland was approximately 3 to 4 inches below the threshold into the swale.
- An active outfall (**Figures 1 and 2**, Outfall A) to South Branch of Ley Creek was located on County Sewer District property near the southwest corner of the UTC property. The flow was traced back to the western ponded area on the UTC property. This confirms that water from the landfill area may discharge to Ley Creek and that this drainage pathway is active before discharge through the north swale to Sanders Creek.
- A second trickling outfall to South Branch of Ley Creek (**Figures 1 and 2**, Outfall B), potentially originating on UTC property, was located approximately 800 feet downstream (northwest) from the main outfall.

The elevations of both the northern and southwestern drainage pathways are such that water levels in South Branch of Ley Creek or Sanders Creek are unlikely to rise sufficiently to initiate flow onto the UTC property.

1.2 Sampling of the AOC G Wetland Area

Due to the historic usage of the AOC G landfill for disposal of industrial waste material, the RIWP includes activities to investigate potential releases of organic compounds and metals from the landfill into the adjacent wetlands to its north and west. These chemicals may have been present in soils eroded from the landfill and deposited into the wetland sediment by surface water runoff. During the years of operation of the landfill and after its closure, alternating layers of contaminated and clean sediment may have been deposited in the wetlands, so that a layer of contaminated sediment may potentially be buried beneath a layer of uncontaminated sediment. Therefore, during this investigation AECOM collected sediment samples from three depth intervals as described below.

In addition, the infiltration of precipitation into the landfill mass may have dissolved chemicals from the waste and soils and transported these contaminants through groundwater discharge into the wetland. During this wetland sampling event, pore water and surface water samples were not collected because the site was inundated with standing water. A concern that standing water could make it difficult to distinguish between surface water and pore water quality resulted in pore water sampling being deferred until the surface water elevation is lower.

Choice of Sediment Sampling Locations (Including Sampling of Flow Paths and Transects Outward from Landfill Area to Determine Gradient of Contamination)

- Sediment sample locations were placed on eleven transects (A – K) radiating from the landfill boundary (refer to **Figure 2**), to aid in assessing the presence or absence of a concentration gradient from the landfill into the wetland.
- Nine sediment samples (sample prefix S) were collected along the north swale from the northern wetland to Sanders Creek.
- The Baldock Method was used to estimate the approximate number of sediment sample locations needed to characterize the potential landfill impact on the wetlands. Using an area of approximately 112,500 square yards to estimate the area to be characterized (300 X 375 yards), and an assigned degrees of freedom (Df) of 3:

$$N = Df * 30 * (W * L * (1/1.2E06))^{0.33} = 41 \text{ sample locations}$$

where:

N is the number of samples for the area derived by the Baldock Method;
Df (degrees of freedom) is a theoretical constant and the chosen value (3) is conservative;
W and L are the width and length of the subject wetland area.

- AECOM collected 135 samples from 45 locations, including the nine samples collected in the northern swale to Sanders Creek. Quality control (QC) samples were also collected. The locations where sediments were sampled during November 2013 are shown on **Figure 2**.

Sample Depth Intervals

AECOM collected sediment samples from three depth intervals (0-6 inches, 6-12 inches, and 18-24 inches) from all sample locations.

Sample Collection Procedures

- AECOM collected sediment cores using a slide hammer and hand auger. Upon collection, the cores were immediately sealed in plastic zipper bags and transported to the processing team to be logged and sampled.

- After screening with a photoionization detector (PID), volatile organic compound (VOC) samples were collected from each interval prior to homogenization of the interval material for polychlorinated biphenyl (PCB), total organic carbon (TOC), metals, semi-volatile organic compound (SVOC), and polycyclic aromatic hydrocarbon (PAH) sampling.

Piezometer Installation

- Pre-constructed piezometers were installed at ten locations around the toe of the landfill to a depth of 3 feet below ground surface (bgs).
- The piezometers were constructed of 2.5 feet of 1½-inch inside diameter polyvinyl chloride (PVC) 0.010" slotted pipe threaded onto a 3-foot solid riser. The slotted section of pipe was surrounded by filter sand held in place by food-grade plastic mesh. The bottom was capped and the top was fitted with a plug.
- Piezometers were installed at locations A-1, B-2, C-2, D-1, E-1, F-2, H-1, I-1, J-1, and K-1 shown on **Figure 2**. The locations were not underwater at the time of installation.

Equipment Decontamination

The hand augers and slide hammers were decontaminated with an Alconox rinse followed by a de-ionized water rinse between locations. New core-liners were used for each sediment core in the slide hammer.

Analytical Methods

- Each sediment sample was analyzed for VOCs (United States Environmental Protection Agency [US EPA] Method 5035/8260),
- TOC (Lloyd-Kahn method),
- SVOCs (US EPA Method 8270C),
- PCBs (US EPA Method 8082),
- Metals (US EPA method 6010B),
- Percent moisture, and
- T34 PAHs by SIMS (US EPA Method 8270D).

1.3 Surveying the AOC G Wetland Area and Sanders Creek Corridor

A topographic survey of AOC G and adjoining portions of the Sanders Creek Corridor was performed by a New York State Licensed land surveyor.

- Topographic and planimetric features were mapped utilizing photogrammetric mapping techniques based on aerial photography obtained on November 16, 2013.
- Four established benchmarks and 16 survey points were used to provide physical control for the survey. A field edit was performed on January 3, 2014 to verify the accuracy and completeness of the photogrammetric mapping.
- The survey is referenced to the North American datum of 1983, 2011 adjustment (NAD83/2011) and projected on the New York State Plane Coordinate System and vertically to the North American Vertical Datum of 1988 (NAVD88-Geoid 09).

This survey was used as the basis of the maps included with this report, which were prepared at a 1-foot contour interval.

2.0 AOC G Wetland Sediment Sampling Data and Discussion

2.1 Review of New York State Sediment Screening Methodology

Protection of ecological resources, specifically, fish, wildlife, and habitat thereof within New York State is a responsibility of the NYSDEC Division of Fish, Wildlife and Marine Resources (DFWMR). As part of this responsibility, DFWMR has developed draft guidance for the assessment of sediment quality and the potential for organic and inorganic contamination to adversely affect sediment-dwelling (benthic) organisms.

This document (*Screening and Assessment of Contaminated Sediment*, NYSDEC, DFWMR, Bureau of Habitat, January 24, 2013) is intended to provide information and guidance to DFWMR staff and other interested parties for screening, evaluating and assessing contaminated sediments in New York State; that is, for determining whether or not a given sediment is toxic and whether it potentially poses a risk to aquatic life.

The guidance document describes criteria and procedures for assessing whether or not contaminants present in sediment at a given site are causing toxicity, and if they pose a risk to aquatic life.

Screening sediments is the first, necessary step in the assessment process. In order to screen sediments to assess the potential for risk to aquatic life, a set of numeric criteria is needed for comparing bulk sediment contaminant concentrations. The NYSDEC draft guidance identifies numerical thresholds for various chemical contaminants found in sediments that can be used to identify potential risk to aquatic life. Given no information other than the concentration of a contaminant in sediment, these values allow for a reasonable assessment of the potential for the contaminants to be harmful to aquatic life.

In addition to identifying specific numerical criteria, the draft guidance document explains the technical basis for the derivation of the criteria values selected, and explains how those numeric criteria values can be modified if more information, such as site-specific data, becomes available.

Sediment Assessment Procedure

The NYSDEC sediment assessment procedure is a stepwise process:

1. Sediment Guidance Values (SGVs) in Tables 1a (fresh water sediments) and 1b (salt water sediments) are used to make the initial assessment (i.e., Tier 1 screening) of risk to aquatic life from contaminants in sediment.
2. If the concentrations of all of the contaminants present are below the Class A threshold values, the sediment is considered to present a low risk to aquatic life.
3. If the concentration of one or more contaminants exceeds the Class C threshold values, then the sediment is considered highly contaminated, and likely to present a high risk to aquatic life.
4. If the concentration of one or more contaminants lies between the Class A and Class C threshold values and no contaminants exceed the Class C threshold values, then the sediments are considered to be moderately contaminated (Class B). Additional testing and/or evaluation are needed to determine the magnitude and extent of or potential for aquatic life toxicity.
5. For contaminant mixes such as PAHs, the classification of sediment can be based on the mean SGV quotient, assuming none of the individual quotients exceed 1.0. That is, if the mean Class A quotient is less than 1.0, then the sediments may be considered to be Class A; and if the mean Class C threshold is greater than 1.0, then the sediments are considered to be Class C. Sediments with a mean Class A quotient that is greater than 1.0 and a mean Class C quotient that is less than 1.0 are considered to be Class B. Total SGV quotients are used instead of mean SGV quotients if the contaminants are likely to be additive in toxicity.

6. The second tier of sediment assessment is to adjust the SGVs for local conditions, such as TOC. This is applicable only to equilibrium partitioning-based SGVs. Once the site-specific TOC has been measured, the equilibrium-based SGVs can be recalculated and the screening and classification of sediments adjusted.
7. The third tier of sediment assessment is to conduct additional studies to measure and evaluate the potential for toxicity from contaminants in the sediment. The additional studies constitute a weight of evidence approach; that is, multiple lines of evidence are used to evaluate risk. Additional studies should be designed, as a minimum, to be consistent with the sediment quality triad, which includes toxicity testing and benthic macroinvertebrate community analysis. This report does not include a Tier 3 assessment.

2.2 Tier 1 Screening Assessment

Bulk sediment concentrations of detected chemicals collected from 45 sample locations at 3 depths (i.e., 0-6 inches, 6-12 inches, and 18-24 inches) were compared to Class A screening values from Table 1a in the DEC sediment guidance document (NYSDEC 2013).

Inorganics

Twenty-two metals in sediment were analyzed using US EPA method SW6010 and mercury was analyzed using US EPA method SW7471B). Twenty-three metals were detected at least once in site sediments. Calcium, magnesium, iron, potassium, and sodium are considered nutrient minerals and have no screening criteria and were not screened. These minerals are needed by organisms for normal metabolism and internal concentrations can be regulated over a wide range of concentrations. Nine other metals (i.e., aluminum, antimony, barium, beryllium, cobalt, manganese, selenium, thallium, and vanadium) also lack Class A screening values and were not evaluated. **Table 1** presents the results of the Tier 1 screening of metals against Class A criteria. A summary of locations where metals exceedances were most common is presented in **Figure 3**.

The greatest number of different metals exceeding Class A criteria occurred in the 0 to 6 inch interval samples. Nickel exhibited the greatest number of exceedances for all intervals (12 exceedances at 0 to 6 inches, 15 exceedances at 6 to 12 inches, and 27 at 18 to 24 inches). Other exceeding metals included arsenic (3 at 0 to 6 inches, 3 at 6 to 12 inches, and 4 at 18 to 24 inches); cadmium (2 at 0 to 6 inches); chromium (3 at 0 to 6 inches); copper (3 at 0 to 6 inches, 3 at 6 to 12 inches, and 1 at 18 to 24 inches); lead (4 at 0 to 6 inches, and 3 at 6 to 12 inches); mercury (3 at 0 to 6 inches, and 1 at 6 to 12 inches); and zinc (4 at 0 to 6 inches, and 1 at 6 to 12 inches). No metals exceeded NYSDEC Class C criteria at any depth. Therefore, all metals that exceed Class A criteria are considered Class B metals.

Because metals are naturally occurring elements in sediment, concentrations of metals within the natural background range are not expected to cause adverse effects to benthic communities. Natural background concentration ranges for metals in the region of the AOC G landfill are not available for sediment.

Site-specific background concentration ranges for metals may be developed from the existing data set using geochemical enrichment normal probability plots and geochemical correlations between naturally occurring elements, and other statistical tools. Alternatively, sediment samples from locations considered to be similar to the geological environment of the site, but not impacted by metal contamination, could be sampled and analyzed to establish background ranges for site metals.

Organic Compounds

Polychlorinated Biphenyls: PCBs were analyzed using US EPA method SW8082 as seven different Aroclor mixtures. Total PCBs were estimated as the sum of concentrations of detected

Aroclors. This is considered a conservative approach because certain congeners found in more than one mixture are "double counted".

- Aroclor 1254 and Aroclor 1260 were the only PCBs detected on the site. No other Aroclors were detected. **Table 2** presents the results of the Tier 1 screening of total PCBs against NYSDEC Class A criteria.

Total PCBs were detected at the transect sample locations closest to the toe of the landfill, except at SDC1 in the wetland-upland complex. Exceedance of NYSDEC Class A criteria were found at SDA4 (at 0 to 6 and 6 to 12 inches); SDB1 (at 0 to 6 inches); SDF1 (at 0 to 6, 6 to 12, and 18 to 24 inches); SDH1 (at 0 to 6 inches); SDJ1 (0 to 6 inches); and SDK1 (0 to 6 inches). The distribution of exceedances suggests a landfill source of PCBs. A summary of total PCB concentrations exceeding Class A criteria is presented on **Figure 4**.

- PCBs also exceeded Class A criteria at 2 locations in the Sanders Creek floodplain at S-8 (6 to 12 inches, and 18 to 24 inches) and S-9 (0 to 6 inches, 6 to 12 inches, and 18 to 24 inches).
- Concentrations of total PCBs at SDF1 (0 to 6 inches and 18 to 24 inches) also exceed the NYSDEC Class C criteria, indicating a potential for adverse effects to the benthic community in the area of SDF1. The potential for adverse effects was further evaluated considering the potential bioavailability of PCBs in the sediment.

Using the equilibrium partitioning (EqP) method provided in NYSDEC draft sediment guidance (NYSDEC 2013), carbon-normalized SGVs for Aroclor 1254, Aroclor 1260 and Total PCBs were developed (see **Appendix A** for details). For those locations where Class A and Class C criteria were exceeded, the PCB concentrations were normalized to the TOC content and the result compared to the carbon-normalized SGVs.

- Concentrations of total PCBs at F-1 (0 to 6 inches and 18 to 24 inches) exceed the EqP sediment guidance values indicating a probable adverse effect to the benthic community in the area of F-1. Further risk management action is required for sediments in the area of F-1.
- Concentrations of total PCBs at all other locations where the Class A screening value was exceeded did not exceed the EqP sediment guidance values indicating that risk to the benthic community at those sites is acceptable and no further action is necessary to protect benthic communities from PCB exposure.

Volatile Organic Compounds: Samples were analyzed using US EPA method SW8260C for VOCs. The VOCs were screened individually against NYSDEC Class A criteria and the results are presented in **Table 3**. Thirteen VOCs detected in sediment have no NYSDEC Class A criteria. Using the EqP method provided in State guidance (NYSDEC 2013), the missing criteria were developed for 10 of the 13 (**Appendix A**). Chloroform is the only VOC that exceeds a Class A screening criterion. Chloroform was detected at 0.00077 mg/kg at C-2 which slightly exceeds the screening criterion of 0.0007 mg/kg. The relatively small exceedance and low frequency of detection indicate that chloroform exposure is not likely to cause unacceptable adverse effects to benthic communities. Therefore, no VOCs are expected to cause adverse effects to benthic communities and no further action is required regarding VOCs in sediment at the AOC G site.

Semi-Volatile Organic Compounds: SVOCs, except PAHs, were analyzed using US EPA method SW8270D. The SVOCs were screened individually against NYSDEC Class A criteria and the results are presented in **Table 4**. Five SVOCs detected in sediment have no NYSDEC Class A criteria. Using the EqP method provided in State guidance (NYSDEC 2013), the 5 missing criteria were developed (**Appendix A**). No SVOCs exceed Class A screening criteria. Therefore, SVOCs are not expected to cause adverse effects to benthic communities and no further action is required regarding SVOCs in sediment at the AOC G site.

Polycyclic Aromatic Hydrocarbons: PAHs were analyzed using US EPA method SW8270C SIM for 34 PAHs (18 specific non-alkylated compounds and 16 generic alkylated forms). The PAH

concentrations were screened individually against NYSDEC Class A criteria and the results are presented in **Table 5**. Because PAHs represent a family of compounds with a common mode of toxicity, PAH toxicity is also assessed on a combined basis. NYSDEC proposed the following approach to assess the potential toxic effect expected from exposure to combined PAH concentrations:

- Concentrations of all 34 PAHs and TOC are measured in a sediment sample as micrograms per kilogram ($\mu\text{g/kg}$) of sediment.
- The concentration of each PAH detected is normalized to the percent of TOC in the sediment to produce a concentration of each PAH detected in units of $\mu\text{g PAH /gram (g) TOC}$.
- The concentration of each individual PAH present is divided by its corresponding SGV (Table 2, Column 5 in NYSDEC 2013). This quotient is described as a Toxic Unit (TU). In this context, a TU is essentially the same as a SGV quotient.
- The resulting TUs for each individual PAH are summed to produce a total TU for the mixture. If the total TU is greater than 1.0, the sediment is considered to be potentially toxic. The PAH concentrations at all locations and depths were screened as TUs and are presented in **Table 5**.
- The total TU for the 34-compound PAH mixture did not exceed 1 at any sample location, indicating that combined PAHs at the AOC G landfill site are not expected to cause adverse effects to benthic communities.
- No further action is required regarding PAHs in sediment at the AOC G landfill site.

2.3 Data Usability Assessment

The laboratory data collected during this project was reviewed by a third party chemist to provide an independent verification of its validity and usability. The Data Usability Summary Reports (DUSRs) for this project's Sample Delivery Groups are attached as **Appendix B**. In the opinion of the data validator, the tabulated data attached to this report is acceptable for its intended purpose, as qualified. A few non-detectable analysis results were rejected, as discussed below:

- The values for 2,4-Dinitrophenol (an SVOC) in two samples collected on November 6, 2013 were rejected due to low matrix spike/matrix spike duplicate (MS/MSD) recoveries.
- The non-detect SVOC results for one sample collected on November 7, 2013 were rejected due to exceeded holding times. The PCB results for another sample on this date (equipment blank) were rejected due to low surrogate recoveries.
- Several VOC results for two samples collected on November 8, 2013 were rejected due to low MS/MSD recoveries. The 2,4-Dinitrophenol result for one of these samples was also rejected due to low MS/MSD recoveries.

In AECOM's opinion, these deficiencies do not impact the assessment of sediment quality presented in this report for the following reasons:

- The compound 2,4-Dinitrophenol was not detected in any of the samples collected during the field event, so the rejection of its reported non-detect result for the two samples discussed above does not affect the assessment of this compound.
- Although the non-detect SVOC results for the November 7 sample were rejected, the compounds detected in this sample were at low concentrations, well below the Class A criteria. The rejected non-detect PCB results for the equipment blank on November 7 were not a concern, as PCBs were not detected in this or any of the other equipment blanks analyzed during the sampling event.
- Similarly, the rejected VOC and 2,4-Dinitrophenol non-detect results on November 8 do not affect the assessment of these compounds, as the specific compounds for which the data was rejected were not detected in any other samples during the sampling event, with the exception

of one VOC in a single sample. This detection was at a low concentration, well below the Class A criterion for the compound.

3.0 Summary of the AOC G November 2013 Wetland Investigation

The wetland delineation and sampling of the wetland area was completed during the week of November 4, 2013 as reported in this memorandum and summarized below.

- AECOM delineated the jurisdictional boundary between the upland portions of AOC G and the adjacent wetlands using the method documented in the Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1, 1987), as modified by Supplement V2 (ERDC/EL TR-12-1, 2012), based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.
- Sediment samples were collected from three depth intervals (0-6 inches, 6-12 inches, and 18-24 inches) from forty-three sediment sample locations.
- Each sediment sample was analyzed for VOCs, TOC, SVOCs, PCBs, Metals, percent moisture, and T34 PAHs.

Concentrations of analytes detected in the samples were compared to Class A screening values from Table 1a in the draft NYSDEC sediment guidance document (*Screening and Assessment of Contaminated Sediment*, NYSDEC, DFWMR, Bureau of Habitat, January 24, 2013).

- Metals exceeding the Class A criteria included arsenic, cadmium, chromium, copper, lead, nickel, mercury, and zinc. No metals exceeded NYSDEC Class C criteria at any depth. Therefore, all metals that exceed Class A criteria are considered Class B metals. Site-specific background concentration ranges for metals may be developed from the existing data set or, alternatively, sediment samples from locations considered to be similar to the geological environment of the site, but not impacted by metal contamination, could be sampled and analyzed to establish background ranges for site metals.
- PCBs were detected at the transect sample locations closest to the toe of the landfill, except at the location (SDC1) in the wetland-upland complex. Exceedances of NYSDEC Class A criteria were found at locations SDA4, SDB1, SDF1, SDH1, SDJ1, and SDK1. The distribution of these exceedances suggests a landfill source of PCBs.
- PCBs were also detected in excess of the Class A criteria at 2 locations within the floodplain of Sanders Creek, S-8 and S-9. Because no PCBs were detected in the swale between the AOC G landfill and Sanders Creek, the source of PCBs in the floodplain is assumed to be sediments from Sanders Creek deposited in the floodplain during flooding events that overtopped the creek banks.
- PCBs exceeded the Class C criteria at only one location: SDF1.
- Chloroform, detected at 0.00077 mg/kg at SDC2, was the only VOC that exceeded a Class A screening criterion. Although slightly exceeding the screening criterion, due to its minimal exceedance and low frequency of detection, chloroform exposure is not likely to cause unacceptable adverse effects to benthic communities. Therefore, no VOCs are expected to cause adverse effects to benthic communities and no further action is required regarding VOCs in sediment at the site.
- No SVOCs exceed Class A screening criteria. Therefore, SVOCs are not expected to cause adverse effects to benthic communities and no further action is required regarding SVOCs in sediment at the AOC G site.
- The evaluation of PAHs indicates that PAHs at the site are not expected to cause adverse effects to benthic communities. No further action is required regarding PAHs in sediment at the AOC G landfill site.

4.0 Closing

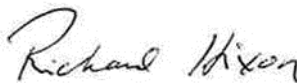
AECOM looks forward to your comments and questions regarding this report. Please feel free to contact Daniel Servetas at (518) 951-2378.

Sincerely,

AECOM USA, Inc.



Daniel Servetas, P.E.
Project Manager
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Rich Hixon, PG
Task Manager
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cc: K. Anders (NYSDOH)
M. Sergott (NYSDOH)
J. Wolski (UTC)
K. McFadden (UTC)
J. Alberg (AECOM)
T. Schwendeman (AECOM)

Enc: Figure 1, Site Plan
Figure 2, Field Activity Summary (D-size)
Figure 3, Distribution of Metals in Sediments at AOC G
Figure 4, NYSDEC PCB Sediment Criteria Exceedances at AOC G

Table 1, Screening of Metals in Sediment by Depth
Table 2, Distribution of PCBs in Sediment by Depth
Table 3, VOC Screening Table
Table 4, SVOC Screening Table
Table 5, PAH Screening Table with Calculated Toxicity Units

Appendix A - Use of Equilibrium Partitioning Theory to Develop Sediment Guidance Values for Nonpolar Organic Compounds

Appendix B - Data Usability Summary Reports

Figures





02



Map Reference:
Photo from NYS GIS Orthos Online.

SAMPLE KEYS

SAMPLE DEPTH

SAMPLE NAME

0" - 6"

6" - 12"

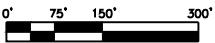
18" - 24"

SAMPLE DEPTH

SAMPLE CONCENTRATION

NO EXCEEDANCE AT INTERVAL

2 EXCEEDANCE WITH NUMBER OF METALS EXCEEDING CLASS "A" CRITERIA



LEGEND

APPROXIMATE PROPERTY BOUNDARY (TAX MAP)

CREEK

DRAINAGE PATH AND DIRECTION

WETLAND LINE

SAMPLE LOCATION (SEE NOTE)

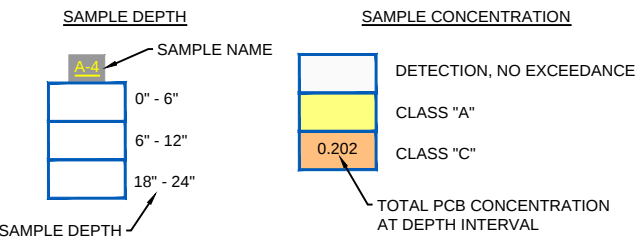
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NO DETECTIONS UNLESS IDENTIFIED IN ASSOCIATED CALL-OUT BOX.

Issue Status: Final

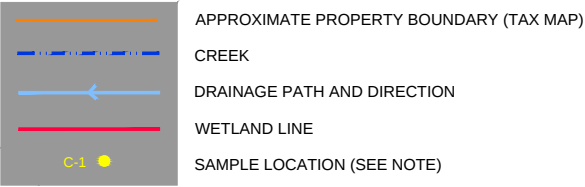


Map Reference:
Photo from NYS GIS Orthos Online.

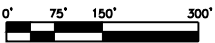
SAMPLE KEYS



LEGEND



NOTE:
NO DETECTIONS UNLESS IDENTIFIED IN ASSOCIATED CALL-OUT BOX.



Issue Status: Final

Tables

Table 1
Screening of Metals in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect A				Transect B				Transect C					Transect D			Transect E				Transect F				
Sample ID	CLASS A	CLASS C	SDA1	SDA2	SDA3	SDA4	SDB1	SDB2 (Dup)	SDB2	SDB4	SDC1	SDC2	SDC3	SDC4	SDC5	SDD1	SDD2	SDD3	SDE1	SDE2	SDE3	SDE4	SDF1	SDF2	SDF3	SDF4	
Sample Date			11/6/2013	11/6/2013	11/7/2013	11/8/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/7/2013	11/6/2013	11/7/2013	11/8/2013	11/6/2013	11/6/2013	11/8/2013	11/8/2013	11/4/2013	11/7/2013	11/8/2013	11/8/2013	
Chemical Name	CLASS A	CLASS C	11/6/2013	11/6/2013	11/7/2013	11/8/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/7/2013	11/6/2013	11/7/2013	11/8/2013	11/6/2013	11/6/2013	11/8/2013	11/8/2013	11/4/2013	11/7/2013	11/8/2013	11/8/2013	
Depths: 0-6 inches																											
ALUMINUM	--	--	13200 J	12900 J	12400 J	9020 J	15000 J	12900	13400	8800 J	9890 J	10900 J	11100 J	15100	12500 J	11800 J	12800	12400	12300 J	8180 J	10600	6310	14300 J	12200	11600	11000	
ANTIMONY	--	--	< 1.1 UJ	< 0.92 UJ	< 0.94 UJ	< 1.2 UJ	< 1.2 UJ	0.20 J	0.20 J	< 1.1 UJ	< 0.68 UJ	< 0.74 UJ	< 0.90 UJ	< 1.0 UJ	0.23 J	< 0.83 UJ	< 1.0 UJ	< 0.97 UJ	< 0.83 UJ	< 0.81 UJ	< 1.0 UJ	0.26 J	< 1.1 UJ	< 1.1 UJ	0.29 J	0.25 J	
ARSENIC	<10	<33	4.3	4.2	6.5	8.8	10.3	4.5	4.7	3.1	2.5	3.2	4.4	6.3	4.3	5.0	4.9	4.8	4.8	3.9	6.6	5.2	7.4	5.6	4.3	3.4	
BARIUM	--	--	119 J	87.9 J	88.7 J	90.5 J	134 J	85.4 J	86.8 J	70.2 J	71.5 J	76.5 J	71.5 J	103	89.0 J	85.4 J	82.1 J	82.3	82.0 J	71.8 J	73.9	68.7	113 J	95.3 J	99.0	90.6	
BERYLLIUM	--	--	0.57 J	0.53 J	0.58 J	0.62 J	0.74 J	0.59 J	0.62 J	0.41 J	0.45 J	0.48 J	0.49 J	0.69	0.54 J	0.53 J	0.53 J	0.52	0.52 J	0.40 J	0.54	0.42	0.69 J	0.58 J	0.56	0.53	
CADMIUM	<1	<5	< 0.44 U	< 0.37 U	0.066 J	1.5	0.17 J	0.13 J	0.21 J	0.13 J	0.48	0.21 J	0.25 J	0.18 J	0.24 J	0.43	0.094 J	0.17 J	0.041 J	0.33	0.29 J	0.13 J	0.10 J	0.12 J	0.16 J	0.20 J	
CALCIUM	Nutrient		86400 J	21500 J	26400 J	163000 J	50400 J	4330	3890	4780 J	3760 J	3290 J	8800 J	4590	3260 J	4840 J	2970	2740	78500 J	4810 J	3310	3890	16900 J	22100	13700	5950	
CHROMIUM, TOTAL	<43	<110	18.9 J	17.9 J	15.8 J	18.8 J	21.3 J	18.3 J	18.6 J	12.1 J	14.9 J	15.7 J	16.2 J	19.0 J	16.6 J	17.7 J	16.6 J	15.7 J	18.5 J	13.3 J	15.2 J	10.4 J	36.3 J	17.4 J	16.3 J	16.1 J	
COBALT	--	--	9.8 J	6.6 J	11.3	8.3	13.9 J	6.8 J	6.9 J	5.6 J	5.7 J	5.7 J	6.6 J	8.5 J	6.7	7.5 J	5.8 J	8.4 J	7.8 J	5.6 J	8.8 J	4.5 J	12.1 J	8.3 J	8.3 J	6.9 J	
COPPER	<32	<150	22.7	19.4	25.7	39.6	29.5	20.3	20.4	20.1	18.9 J	17.4 J	16.8 J	14.8	22.5	17.1 J	10.7	13.2	22.8 J	20.9 J	22.2	24.3	28.7 J	21.3	18.2	19.4	
IRON	--	--	20000	18000	20700 J	15200 J	24800	17700 J	18400 J	13400 J	12700 J	13500 J	16600 J	29500 J	17400 J	17500 J	18100 J	17400 J	17800 J	12400 J	17900 J	11700 J	24100	19000 J	16900 J	15100 J	
LEAD	<36	<130	9.1 J	14.3 J	12.0	45.4	21.9 J	27.3 J	28.0 J	22.6	27.0 J	28.9 J	21.1 J	25.2	30.2	28.4 J	20.1 J	20.5	13.3 J	25.4 J	25.6	28.9	25.0 J	23.2 J	20.4	20.3	
MAGNESIUM	Nutrient		31300	11400	16700 J	14700 J	23700	4200 J	4340 J	3830 J	3100 J	3680 J	7030 J	4360	3950 J	4670 J	3760 J	3740	32200 J	3470 J	3500	2120	10500 J	14000 J	9710	5360	
MANGANESE	--	--	417 J	216 J	672 J	562 J	1270 J	288 J	249 J	157 J	105 J	154 J	232 J	541 J	180 J	301 J	156 J	290 J	330 J	188 J	264 J	143 J	434 J	359 J	331 J	201 J	
MERCURY	<0.2	<1	0.070	0.060	0.035 J	0.17	0.19	0.11	0.10	0.071	0.085	0.12	0.078	0.12	0.086	0.098	0.089	0.083	0.069	0.095	0.083	0.076	0.28	0.074	0.066	0.084	
NICKEL	<23	<49	25.6 J	21.3 J	25.4 J	23.2 J	33.4 J	16.1 J	16.9 J	13.4 J	14.5 J	14.7 J	17.1 J	17.4 J	16.1 J	18.2 J	14.4 J	15.5 J	23.0 J	15.4 J	18.1 J	12.2 J	32.8 J	21.0 J	18.9 J	18.4 J	
POTASSIUM	Nutrient		1780 J	1180 J	1150 J	1610 J	1680 J	1400 J	1320 J	851 J	1070 J	1100 J	1090 J	1350 J	1130 J	1240 J	1230 J	1180 J	1320 J	1080 J	1250 J	663 J	1990 J	1370 J	1150 J	1200 J	
SELENIUM	--	--	< 1.1 U	< 0.92 U	< 0.94 U	< 1.2 U	< 1.2 U	0.80 J	0.89 J	0.54 J	0.44 J	0.44 J	< 0.90 U	< 1.0 U	0.43 J	0.52 J	0.85 J	0.40 J	< 0.83 U	0.50 J	0.35 J	1.0	< 1.1 U	0.39 J	0.56 J	0.56 J	
SILVER	<1	<2.2	< 0.55 U	< 0.46 U	< 0.47 U	0.21 J	< 0.60 U	< 0.53 U	< 0.50 U	< 0.57 U	< 0.34 U	< 0.37 U	< 0.45 U	< 0.51 U	0.13 J	< 0.41 U	< 0.52 U	< 0.49 U	< 0.41 U	< 0.40 U	< 0.50 U	< 0.43 U	< 0.56 U	< 0.53 U	< 0.53 U	< 0.46 U	
SODIUM	Nutrient		< 550 U	< 460 U	< 470 U	< 620 U	< 600 U	< 530 U	< 500 U	< 570 U	< 340 U	< 370 U	< 450 U	< 510 U	< 500 U	< 410 U	< 520 U	< 490 U	< 410 U	< 400 U	< 500 U	< 430 U	68.1 J	< 530 U	< 530 U	< 460 U	
THALLIUM	--	--	0.38 J	0.45 J	< 0.94 U	< 1.2 U	0.55 J	< 1.1 U	< 1.0 U	< 1.1 U	0.28 J	0.23 J	0.50 J	0.27 J	< 0.99 U	0.16 J	< 1.0 U	< 0.97 U	0.14 J	< 0.81 U	< 1.0 U	0.28 J	0.37 J	< 1.1 U	0.22 J	< 0.93 U	
VANADIUM	--	--	21.2 J	20.6 J	20.0	29.2	28.1 J	24.5 J	25.8 J	18.2	20.0 J	19.7 J	19.5 J	24.9 J	25.5	22.0 J	21.2 J	21.7 J	20.4 J	16.2 J	21.0 J	17.0 J	29.3 J	21.8 J	20.4 J	18.9 J	
ZINC	<120	<460	47.1 J	58.5 J	46.5 J	171 J	65.8 J	78.0 J	78.2 J	51.1 J	61.6 J	55.7 J	58.0 J	81.8 J	71.3 J	77.7 J	60.3 J	64.2 J	50.0 J	58.7 J	63.4 J	32.5 J	60.9 J	58.4 J	61.2 J	60.7 J	
Depths: 6-12 inches																											
ALUMINUM	--	--	9590 J	13700 J	16200 J	10700	12900 J	Not Sampled	15300	10600 J	12300 J	10600 J	11900 J	16400	12600 J	12100 J	12300	11700	13600 J	14000 J	11900	7670	13700 J	13500	13400	13500	
ANTIMONY	--	--	< 0.95 UJ	< 0.95 UJ	< 0.92 UJ	0.41 J	< 0.98 UJ		< 1.0 UJ	< 1.0 UJ	< 0.79 UJ	< 0.82 UJ	< 1.1 UJ	< 0.91 UJ	< 1.1 UJ	< 0.74 UJ	< 0.91 UJ	< 0.73 UJ	< 0.75 UJ	< 0.82 UJ	< 0.89 UJ	0.44 J	< 0.98 UJ	< 1.1 UJ	0.29 J	0.37 J	
ARSENIC	<10	<33	6.4	4.2	5.7	9.5	3.3		8.1	4.7	4.9	3.5	9.5	9.7	5.7	8.8	5.9	11.0	2.4	3.8	4.3	11.9	2.4	2.6	6.5	6.3	
BARIUM	--	--	88.8 J	94.2 J	147 J	93.6	80.1 J		122 J	75.7 J	88.7 J	68.7 J	81.5 J	132	111 J	150 J	133 J	90.6	169 J	103 J	84.6	93.3	82.2 J	172 J	104	127	
BERYLLIUM	--	--	0.44 J	0.56 J	0.63 J	0.69	0.52 J		0.72 J	0.45 J	0.55 J	0.45 J	0.53 J	0.77	0.55 J	0.54 J	0.53 J	0.55	0.56 J	0.59 J	0.53	0.55	0.59 J	0.59 J	0.61	0.60	
CADMIUM	<1	<5	< 0.38 U	< 0.38 U	< 0.37 U	0.68	< 0.39 U		0.073 J	0.11 J	0.22 J	0.14 J	< 0.45 U	< 0.36 U	0.21 J	< 0.30 U	0.19 J	0.12 J	< 0.30 U	0.20 J	0.20 J	0.092 J	0.049 J	< 0.43 U	< 0.36 U	0.10 J	
CALCIUM	Nutrient		67900 J	27000 J	48500 J	31200	46700 J		22300	3510 J	2450 J	11200 J	62000 J	5090	6450 J	70500 J	2710	27900	86300 J	4180 J	3130	4220	78000 J	130000	50400	21000	
CHROMIUM, TOTAL	<43	<110	14.0 J	18.9 J	20.5 J	18.1 J	18.5 J		20.9 J	13.4 J	17.4 J	14.7 J	17.3 J	22.6 J	16.1 J	17.5 J	15.1 J	15.5 J	18.4 J	18.1 J	14.3 J	12.1 J	19.4 J	17.7 J	18.0 J	18.0 J	
COBALT	--	--	9.6 J	6.5 J	12.2	8.4 J	6.2 J		15.0 J	7.5	9.2 J	5.8 J	13.4 J	15.1 J	13.3	12.4 J	20.0 J	13.6 J	7.2 J	7.1 J	7.2 J	8.0 J	8.4 J	9.4 J	10.4 J		
COPPER	<32	<150	20.8	16.8	24.9	32.0	14.2		23.7	15.4	14.5 J	11.7 J	23.3 J	26.8	16.8	24.3 J	7.5	23.1	20.6 J	14.9 J	12.4	40.2	19.0 J	17.3	23.5	17.7	
IRON	--	--	18900	19100	23700 J	16700 J	17800		33700 J	17100 J	26300 J	15000 J	21400 J	39900 J													

Table 1
Screening of Metals in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect G		Transect H			Transect I				Transect K		North Swale to Sanders Creek							Sanders Creek		
SDG1			SDG2	SDH1	SDH2	SDH3	SDI1 (Dup)	SDI1	SDI2	SDI3	SDK1	SDK2	SDS1	SDS2	SDS3	SDS4	SDS5	SDS6	SDS7	SDS8 (Dup)	SDS8	SDS9	
Sample ID			11/6/2013	11/7/2013	11/6/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/7/2013	11/5/2013	11/5/2013	11/5/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	
Sample Date																							
Chemical Name	CLASS A	CLASS C																					
Depths: 0-6 inches																							
ALUMINUM	--	--	14400 J	11600	1870 J	12500	18800	16000 J	12800 J	2420	16300	4480	8840	13700 J	4210 J	14000 J	9680 J	7830 J	11400 J	7090 J	8250 J	7360 J	8420 J
ANTIMONY	--	--	<1.0 UJ	<1.1 UJ	0.49 J	<1.2 UJ	<1.0 UJ	<1.1 UJ	<1.1 UJ	7.7 J	<1.1 UJ	0.32 J	<1.1 UJ	0.44 J	<1.0 UJ	<1.1 UJ	<1.2 UJ	<1.2 UJ	0.27 J	<1.0 UJ	<0.96 UJ	0.15 J	<0.98 UJ
ARSENIC	<10	<33	8.2	9.4	2.3	4.2	4.8	6.1	5.3	<8.2 U	4.3	2.8	3.5	7.0	3.4	12.0	5.6	6.0	4.4	4.7	9.0	5.6	12.0
BARIUM	--	--	116 J	100 J	34.0 J	80.6 J	125 J	110 J	94.6 J	56.8 J	91.2 J	46.9 J	72.0 J	101 J	44.2 J	92.1 J	91.0 J	61.3 J	105 J	52.3 J	64.0 J	58.2 J	90.8 J
BERYLLIUM	--	--	0.71 J	0.54 J	0.094 J	0.52 J	0.72 J	0.75 J	0.62 J	<3.3 U	0.79	0.28 J	0.42 J	0.67 J	0.21 J	0.56 J	0.46 J	0.38 J	0.54 J	0.33 J	0.38 J	0.39 J	0.49 J
CADMIUM	<1	<5	<0.41 U	0.063 J	0.67	0.081 J	0.41	<0.46 U	<0.46 U	0.90 J	<0.44 U	0.41 J	0.21 J	0.56	0.30 J	0.069 J	0.26 J	0.30 J	0.17 J	<0.42 U	<0.38 U	0.23 J	0.80
CALCIUM	Nutrient		30700 J	2630	14000 J	2710	4170	13500 J	5130 J	21900 J	2730 J	44900 J	4370 J	2730 J	3200 J	10600 J	5770 J	5140 J	2990 J	53100 J	34000 J	26400 J	23600 J
CHROMIUM, TOTAL	<43	<110	20.7 J	15.8 J	8.8 J	18.0 J	25.0 J	22.5 J	19.2 J	6.4 J	25.6 J	47.4 J	13.1 J	20.3 J	7.2 J	18.0 J	14.4 J	10.3 J	15.0 J	10.1 J	13.1 J	14.6 J	44.1 J
COBALT	--	--	13.8 J	15.1 J	1.5 J	8.8 J	10.4 J	11.1 J	10.1 J	1.1 J	12.1 J	2.6 J	5.8 J	13.6 J	3.5 J	8.2 J	6.3 J	3.9 J	6.9	5.5	6.2	6.2	9.6
COPPER	<32	<150	26.8	12.1	16.9	14.8	22.4	23.1	19.2	16.6 J	23.2	14.6	17.3	18.1 J	17.8 J	18.1 J	20.8 J	15.9 J	15.9	22.1	18.7	24.0	46.0
IRON	--	--	22800	27500 J	4410	19600 J	20300 J	30600	22200	4880 J	30200 J	7960 J	14000 J	22900	11500	19800	14700	11700	15800 J	12800 J	16000 J	13600 J	17000 J
LEAD	<36	<130	17.5 J	24.5 J	32.8 J	29.8 J	35.7 J	13.0 J	16.1 J	13.1 J	20.2	31.4	17.8	12.9 J	17.8 J	16.6 J	28.6 J	22.4 J	26.5 J	16.9 J	9.5 J	27.4 J	54.7 J
MAGNESIUM	Nutrient		20800	3250 J	1890	3640 J	4790 J	11100	5020	2250 J	5450 J	11000 J	3110 J	4880 J	1920 J	7220 J	3030 J	2080 J	3150 J	32800 J	15600 J	12900 J	13400 J
MANGANESE	--	--	754 J	539 J	160 J	231 J	188 J	1010 J	389 J	240 J	219 J	202 J	298 J	1210 J	281 J	523 J	1420 J	243 J	226 J	475 J	276 J	298 J	841 J
MERCURY	<0.2	<1	0.075	0.10	0.33	0.089	0.16	0.090	0.057	0.072 J	0.069	0.26	0.085	0.045	0.039	0.10	0.12	0.085	0.091	0.054	0.048	0.081	0.086
NICKEL	<23	<49	31.5 J	15.0 J	13.1 J	17.2 J	21.3 J	28.7 J	24.1 J	4.2 J	29.8 J	13.6 J	14.8 J	25.6 J	8.2 J	17.4 J	14.3 J	10.6 J	16.2 J	12.5 J	14.7 J	15.3 J	21.8 J
POTASSIUM	Nutrient		1360 J	1040 J	415 J	1330 J	1700 J	1500 J	1100 J	1100 J	1910 J	587 J	976 J	1920 J	624 J	1650 J	1050 J	994 J	977 J	1070 J	1090 J	1070 J	981 J
SELENIUM	--	--	<1.0 U	0.77 J	1.6	0.49 J	0.81 J	<1.1 U	<1.1 U	<8.2 U	<1.1 U	1.6	0.40 J	3.2	1.7	<1.1 U	0.56 J	0.64 J	0.60 J	<1.0 U	<0.96 U	<1.0 U	<0.98 U
SILVER	<1	<2.2	<0.51 U	<0.53 U	<0.58 U	<0.58 U	<0.51 U	<0.57 U	<0.57 U	<4.1 U	<0.55 U	<0.59 U	<0.53 U	<0.51 U	<0.50 U	<0.57 U	<0.59 U	<0.61 U	<0.53 U	<0.52 U	<0.48 U	0.15 J	0.86
SODIUM	Nutrient		<510 U	<530 U	<580 U	<580 U	<510 U	<570 U	<570 U	<4100 U	<550 U	<590 U	<530 U	72.8 J	82.5 J	124 J	220 J	40.2 J	<530 U	<520 U	<480 U	<500 U	<490 U
THALLIUM	--	--	0.27 J	<1.1 U	<1.2 U	<1.2 U	<1.0 U	0.47 J	0.46 J	<8.2 U	0.38 J	0.28 J	0.33 J	1.0	0.55 J	0.39 J	0.66 J	0.30 J	0.61 J	0.67 J	0.52 J	0.51 J	0.56 J
VANADIUM	--	--	27.1 J	24.3 J	8.3 J	23.4 J	34.8 J	28.2 J	24.7 J	6.9 J	30.8 J	67.3 J	17.5 J	25.3 J	9.9 J	23.2 J	17.9 J	15.3 J	20.9 J	15.0 J	15.8 J	16.7 J	22.1 J
ZINC	<120	<460	57.4 J	53.7 J	34.1 J	62.7 J	97.7 J	55.9 J	53.9 J	89.3 J	73.1 J	153 J	71.5 J	62.6 J	29.9 J	66.6 J	69.3 J	54.2 J	60.8 J	36.9 J	36.1 J	64.1 J	147 J
Depths: 6-12 inches																							
ALUMINUM	--	--	11000 J	10400	9830 J	11600	11300	10600 J	13200 J	9260	14000	14400	17100	12700 J	6040 J	15600 J	13100 J	13800 J	11200 J	7980 J	8170 J	8440 J	10500
ANTIMONY	--	--	<0.86 UJ	<1.1 U	<0.96 UJ	<1.0 UJ	<1.0 UJ	<0.97 UJ	<1.0 UJ	1.3 J	<1.0 UJ	<1.0 UJ	<0.94 UJ	0.41 J	0.15 J	<1.1 UJ	<1.1 UJ	<1.2 UJ	0.26 J	<0.83 UJ	<1.0 UJ	<1.1 UJ	<1.1 UJ
ARSENIC	<10	<33	4.3	3.8	2.9	2.9	3.4	3.9	5.1	3.3 J	3.9	4.8	7.9	6.3	3.9	5.6	8.8	5.1	4.3	5.6	5.5	6.4	13.9
BARIUM	--	--	93.8 J	71.5 J	64.8 J	83.8 J	77.1 J	87.5 J	96.1 J	81.7 J	87.0 J	128 J	154 J	89.5 J	46.4 J	82.0 J	93.9 J	83.2 J	106 J	63.9 J	62.9 J	67.0 J	77.8 J
BERYLLIUM	--	--	0.50 J	0.42 J	0.45 J	0.46 J	0.46 J	0.46 J	0.58 J	0.46 J	0.63	0.63	0.82	0.64 J	0.29 J	0.60 J	0.65 J	0.63 J	0.53 J	0.38 J	0.43 J	0.44 J	0.52
CADMIUM	<1	<5	<0.34 U	<0.43 U	<0.39 U	<0.40 U	<0.42 U	0.087 J	<0.41 U	0.99 J	0.073 J	<0.41 U	<0.38 U	0.46	0.14 J	<0.45 U	0.078 J	0.21 J	0.11 J	<0.33 U	0.21 J	0.24 J	0.56
CALCIUM	Nutrient		39500 J	2350	4300 J	2130	2030	6690 J	4160 J	12500 J	2410 J	3710 J	3150 J	4550 J	4070 J	2600 J	4310 J	4190 J	2520 J	25000 J	25400 J	28500 J	29100 J
CHROMIUM, TOTAL	<43	<110	16.1 J	13.5 J	21.1 J	15.3 J	15.0 J	15.7 J	18.5 J	21.9 J	19.4 J	18.7 J	25.1 J	19.5 J	8.5 J	20.1 J	16.6 J	16.3 J	14.0 J	11.3 J	16.4 J	16.5 J	37.7 J
COBALT	--	--	7.8 J	6.6 J	6.8 J	9.9 J	8.4 J	8.0 J	9.3 J	4.5 J	10.6 J	8.3 J	20.8 J	9.8 J	5.6 J	9.2 J	7.1 J	6.1 J	6.7	6.9	6.6	7.0	8.0 J
COPPER	<32	<150	18.8 J	8.0	14.6	9.2	9.8	14.8	13.0	32.1	16.7	11.7	21.5	23.2 J	18.9 J	17.1 J	16.2 J	17.5 J	15.1	20.7	26.1	28.0	42.9
IRON	--	--	17400 J	15900 J	14200	16800 J	16400 J	18100	21100	9210 J	19300 J	21800 J	32300 J	20000	13700	21300	20600	16700	14900 J	13900 J	13900 J	14200 J	19400 J
LEAD	<36	<130	9.8 J	13.4 J	21.6 J	13.5 J	14.8 J	12.3 J	11.0 J	68.1 J	12.8	10.9	13.0	29.5 J	8.4 J	15.9 J	11.8 J	18.7 J	25.7 J	13.0 J	29.9 J	26.8 J	44.0
MAGNESIUM	Nutrient		24300 J	2900 J	3720	3160 J	3090 J	5580	5030	3210	4140 J	3800 J	6360 J	4450 J	3600 J	4570 J	3730 J	3450 J	2990 J	11200 J	12500 J	14000 J	14900 J
MANGANESE	--	--	344 J	260 J	110 J	238 J	114 J	328 J	433 J	189 J	353 J	242 J	2490 J	1130 J	365 J	363 J	394 J	229 J	170 J	338 J	259 J	259 J	544 J
MERCURY	<0.2	<1	0.030 J	0.062	0.078	0.046	0.086	0.038	0.041	0.19	0.044	0.11	0.066	0.094	0.020 J	0.099	0.095	0.12	0.088	0.042	0.079	0.072	0.32
NICKEL	<23	<49	21.3 J	11.6 J	20.0 J	14.2 J	13.5 J	19.4 J	20.6 J	15.5 J	23.2 J	17.8 J	39.0 J	22.0 J	10.5 J	19.2 J	15.3 J	16.9 J	15.6 J	14.3 J	16.8 J	16.9 J	22.3 J
POTASSIUM	Nutrient		1020 J	853 J	888 J	1070 J	1030 J	740 J	1100 J	1090 J	1070 J	1040 J	1690 J	1480 J	810 J	1510 J	1410 J	1210 J	964 J	1070 J	1180 J	1240 J	1190 J
SELENIUM	--	--	<0.86 U	0.61 J	0.56 J	0.42 J	0.68 J	<0.97 U	<1.0 U	1.7 J	<1.0 U	<1.0 U	<1.9 U	3.1	1.8	<1.1 U	0.50 J	0.44 J	0.58 J	<0.83 U	<1.0 U		

Table 2
Distribution of PCBs in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	Screening Criteria			Transect A						Transect B					Transect C					Transect D					
Sample ID				SDA1	SDA2	SDA3	SDA4			SDB1			SDB2 (Dup)	SDB2	SDB4	SDC1	SDC2	SDC3	SDC4	SDC5	SDD1			SDD2	SDD3
Sample Date				11/6/2013	11/6/2013	11/7/2013	11/8/2013			11/6/2013			11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/7/2013	11/6/2013			11/7/2013	11/8/2013
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	NYSDEC Sediment CLASS C	mg/kg	mg/kg	mg/kg	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/gOC	TU	mg/kg	mg/kg
Depths: 0-6 inches																									
PCB-1016 (AROCOR 1016)	--	--	--	< 0.048 U	< 0.041 U	< 0.043 U	< 0.054 U	--	--	< 0.051 U	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1221 (AROCOR 1221)	--	--	--	< 0.048 U	< 0.041 U	< 0.043 U	< 0.054 U	--	--	< 0.051 U	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1232 (AROCOR 1232)	--	--	--	< 0.048 U	< 0.041 U	< 0.043 U	< 0.054 U	--	--	< 0.051 U	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1242 (AROCOR 1242)	--	--	--	< 0.048 U	< 0.041 U	< 0.043 U	< 0.054 U	--	--	< 0.051 U	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1248 (AROCOR 1248)	--	--	--	< 0.048 U	< 0.041 U	< 0.043 U	< 0.054 U	--	--	< 0.051 U	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1254 (AROCOR 1254)	56.5	--	--	< 0.048 U	< 0.041 U	< 0.043 U	0.0754 J	1.6982	0.0301	0.0620 J	1.2277	0.0217	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	< 0.051 U	--	--	< 0.047 U	< 0.044 U
PCB-1260 (AROCOR 1260)	86.9	--	--	< 0.048 U	< 0.041 U	< 0.043 U	0.238 J	5.3604	0.0617	0.106	2.0990	0.0242	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	0.0260 J	0.5394	0.0062	< 0.047 U	< 0.044 U
Total PCBs	70.9	0.1	1	< 0.048 U	< 0.041 U	< 0.043 U	0.313	--	--	0.168	--	--	< 0.053 U	< 0.052 U	< 0.052 U	< 0.056 U	< 0.048 U	< 0.043 U	< 0.054 U	< 0.054 U	0.0260	--	--	< 0.047 U	< 0.044 U
TOC	--	--	--	27700	9850	7500	44400	--	--	50500	--	--	37300	31300	40300	34600	21800	19700	41200	35600	48200	--	--	28900	22600
Toxicity Units (total)	--	--	--	--	--	--	--	--	0.0917	--	--	0.0459	--	--	--	--	--	--	--	--	--	--	0.0062	--	--
Depths: 6-12 inches																									
PCB-1016 (AROCOR 1016)	--	--	--	< 0.04 U	< 0.041 U	< 0.042 U	< 0.047 U	--	--	< 0.043 U	--	--	Not Sampled	< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1221 (AROCOR 1221)	--	--	--	< 0.04 U	< 0.041 U	< 0.042 U	< 0.047 U	--	--	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1232 (AROCOR 1232)	--	--	--	< 0.04 U	< 0.041 U	< 0.042 U	< 0.047 U	--	--	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1242 (AROCOR 1242)	--	--	--	< 0.04 U	< 0.041 U	< 0.042 U	< 0.047 U	--	--	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1248 (AROCOR 1248)	--	--	--	< 0.04 U	< 0.041 U	< 0.042 U	< 0.047 U	--	--	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1254 (AROCOR 1254)	56.5	--	--	< 0.04 U	< 0.041 U	< 0.042 U	0.0551 J	1.4424	0.0255	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
PCB-1260 (AROCOR 1260)	86.9	--	--	< 0.04 U	< 0.041 U	< 0.042 U	0.147	3.8482	0.0443	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
Total PCBs	70.9	0.1	1	< 0.04 U	< 0.041 U	< 0.042 U	0.202	--	--	< 0.043 U	--	--		< 0.046 U	< 0.046 U	< 0.047 U	< 0.042 U	< 0.04 U	< 0.042 U	< 0.05 U	< 0.043 U	--	--	< 0.04 U	< 0.04 U
TOC	--	--	--	13000	16300	5130	38200	--	--	18900	--	--	--	17200	23100	20100	6620	9950	5580	20500	17200	--	--	10500	2750
Toxicity Units (total)	--	--	--	--	--	--	--	--	0.0698	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Depths: 18-24 inches																									
PCB-1016 (AROCOR 1016)	--	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--	Not Sampled	< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1221 (AROCOR 1221)	--	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1232 (AROCOR 1232)	--	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1242 (AROCOR 1242)	--	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1248 (AROCOR 1248)	--	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1254 (AROCOR 1254)	56.5	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
PCB-1260 (AROCOR 1260)	86.9	--	--	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
Total PCBs	70.9	0.1	1	< 0.038 U	< 0.043 U	< 0.04 U	< 0.048 U	--	--	< 0.04 U	--	--		< 0.041 U	< 0.042 U	< 0.045 U	< 0.039 U	< 0.039 U	< 0.042 U	< 0.041 U	< 0.04 U	--	--	< 0.043 U	< 0.04 U
TOC	--	--	--	9340	6330	3880	27400	--	--	10300	--	--	--	10800	4990	12800	4530	6820	3100	1900	17600	--	--	9070	3910
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
U or < - Polychlorinated biphenyl (PCB) was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
Total PCBs values are calculated by summing the detected concentrations. If there are no detected concentrations, total PCBs is reported at the highest non-detect result.
TOC - Total Organic Carbon.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of NYSDEC Class A criteria are highlighted yellow and presented with **Bold** text.
Exceedances of NYSDEC Class C criteria are highlighted orange and presented with **Bold** text.
mg/kg - milligrams per kilogram.
µg/gOC - microgram per gram of Organic Carbon.
TU - Toxicity Unit.



Table 2
Distribution of PCBs in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	Screening Criteria			Transect E												Transect F							Transect G			
Sample ID				SDE1			SDE2			SDE3			SDE4			SDF1			SDF2	SDF3	SDF4	SDG1		SDG2		
Sample Date				11/6/2013			11/6/2013			11/8/2013			11/8/2013			11/4/2013			11/7/2013	11/8/2013	11/8/2013	11/6/2013		11/7/2013		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	NYSDEC Sediment CLASS C	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	mg/kg	mg/kg	mg/kg	µg/gOC	TU	mg/kg	
				Depths: 0-6 inches																						
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	< 0.045 U	--	--	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	< 0.045 U	--	--	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	< 0.045 U	--	--	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	< 0.045 U	--	--	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	< 0.045 U	--	--	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.05 U	--	--	< 0.048 U	--	--	< 0.047 U	--	--	< 0.049 U	--	--	4.31	581.87	10.30	< 0.047 U	< 0.045 U	< 0.055 U	< 0.047 U	--	--	< 0.046 U	
PCB-1260 (AROCLOR 1260)	86.9	--	--	0.0807	2.5619	0.0295	0.0260 J	0.7879	0.0091	0.0245 J	0.8333	0.0096	0.0359 J	0.5753	0.0066	1.99 J	269.28	3.10	< 0.047 U	< 0.045 U	< 0.055 U	0.0397 J	1.5095	0.0174	< 0.046 U	
Total PCBs	70.9	0.1	1	0.0807	--	--	0.0260	--	--	0.0245	--	--	0.0359	--	--	6.3	--	--	< 0.047 U	< 0.045 U	< 0.055 U	0.0397	--	--	< 0.046 U	
TOC	--	--	--	31500	--	--	33000	--	--	29400	--	--	62400	--	--	7390	--	--	21300	20800	20600	26300	--	--	19300	
Toxicity Units (total)	--	--	--	--	--	0.0295	--	--	0.0091	--	--	0.0096	--	--	0.0066	--	--	13.40	--	--	--	--	--	0.0174	--	
				Depths: 6-12 inches																						
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	< 0.04 U	--	--	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	< 0.04 U	--	--	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	< 0.04 U	--	--	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	< 0.04 U	--	--	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	< 0.04 U	--	--	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	0.122	7.13	0.13	< 0.046 U	< 0.041 U	< 0.043 U	< 0.042 U	--	--	< 0.046 U	
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	0.0644 J	3.77	0.04	< 0.046 U	< 0.041 U	< 0.043 U	0.0327 J	1.2433	0.0143	< 0.046 U	
Total PCBs	70.9	0.1	1	< 0.042 U	--	--	< 0.043 U	--	--	< 0.041 U	--	--	< 0.055 U	--	--	0.186	--	--	< 0.046 U	< 0.041 U	< 0.043 U	0.0327	--	--	< 0.046 U	
TOC	--	--	--	23900	--	--	16400	--	--	19700	--	--	69800	--	--	17100	--	--	15000	2420	9060	13100	--	--	13000	
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	0.0143	--	
				Depths: 18-24 inches																						
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	< 0.043 U	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	< 0.043 U	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	< 0.043 U	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	< 0.043 U	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	< 0.043 U	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	1.16	53.95	0.95	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	0.455 J	21.16	0.24	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
Total PCBs	70.9	0.1	1	< 0.038 U	--	--	< 0.041 U	--	--	< 0.041 U	--	--	< 0.062 U	--	--	1.62	--	--	< 0.041 U	< 0.047 U	< 0.041 U	< 0.039 U	--	--	< 0.041 U	
TOC	--	--	--	7530	--	--	3750	--	--	3020	--	--	58500	--	--	21500	--	--	8070	2890	2510	3120	--	--	3990	
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.20	--	--	--	--	--	--	--	

Notes:
U or < - Polychlorinated biphenyl (PCB) was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
Total PCBs values are calculated by summing the detected concentrations. If there are no detected concentrations, total PCBs is reported at the highest non-detect result.
TOC - Total Organic Carbon.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of NYSDEC Class A criteria are highlighted yellow and presented with **Bold** text.
Exceedances of NYSDEC Class C criteria are highlighted orange and presented with **Bold** text.
mg/kg - milligrams per kilogram.
µg/gOC - microgram per gram of Organic Carbon.
TU - Toxicity Unit.



Table 2
Distribution of PCBs in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	Screening Criteria			Transect H						Transect I								
Sample ID				SDH1			SDH2	SDH3		SDI1 (Dup)			SDI1			SDI2	SDI3	
Sample Date				11/6/2013			11/7/2013	11/7/2013		11/6/2013			11/6/2013			11/7/2013	11/5/2013	
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	NYSDEC Sediment CLASS C	mg/kg	µg/gOC	TU	mg/kg	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	mg/kg
				Depths: 0-6 inches														
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.12 U			< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.12 U			< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.12 U			< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.12 U			< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.12 U			< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1254 (AROCLOR 1254)	56.5	--	--	0.195 J	1.3732	0.0243	< 0.049 U	< 0.096 U	--	--	< 0.048 U	--	--	< 0.049 U	--	--	< 0.31 U	< 0.056 U
PCB-1260 (AROCLOR 1260)	86.9	--	--	0.343	2.4155	0.0278	< 0.049 U	0.0506 J	0.4217	0.0049	0.0468 J	1.8	0.0207	0.0522	1.8316	0.0211	< 0.31 U	< 0.056 U
Total PCBs	70.9	0.1	1	0.538	--	--	< 0.049 U	0.0506	--	--	0.0468	--	--	0.0522	--	--	< 0.31 U	< 0.056 U
TOC	--	--	--	142000	--	--	37400	120000	--	--	26000	--	--	28500	--	--	413000	32900
Toxicity Units (total)	--	--	--	--	--	0.0521	--	--	--	0.0049	--	--	0.0207	--	--	0.0211	--	--
				Depths: 6-12 inches														
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
Total PCBs	70.9	0.1	1	< 0.044 U	--	--	< 0.044 U	< 0.046 U	--	--	< 0.043 U	--	--	< 0.046 U	--	--	< 0.14 U	< 0.045 U
TOC	--	--	--	11800	--	--	14500	17400	--	--	9710	--	--	17500	--	--	223000	5270
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				Depths: 18-24 inches														
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	< 0.062 U	< 0.044 U
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	0.0649	< 0.044 U
Total PCBs	70.9	0.1	1	< 0.041 U	--	--	< 0.044 U	< 0.041 U	--	--	< 0.042 U	--	--	< 0.043 U	--	--	0.0649	< 0.044 U
TOC	--	--	--	4730	--	--	3370	3550	--	--	7990	--	--	6910	--	--	54400	3830
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
U or < - Polychlorinated biphenyl (PCB) was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
Total PCBs values are calculated by summing the detected concentrations. If there are no detected concentrations, total PCBs is reported at the highest non-detect result.
TOC - Total Organic Carbon.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of NYSDEC Class A criteria are highlighted yellow and presented with **Bold** text.
Exceedances of NYSDEC Class C criteria are highlighted orange and presented with **Bold** text.
mg/kg - milligrams per kilogram.
µg/gOC - microgram per gram of Organic Carbon.
TU - Toxicity Unit.



Table 2
Distribution of PCBs in Sediment by Depth
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	Screening Criteria			Transect K			North Swale to Sanders Creek								Sanders Creek								
Sample ID				SDK1			SDK2	SDS1	SDS2	SDS3	SDS4	SDS5	SDS6	SDS7	SDS8 (Dup)			SDS8			SDS9		
Sample Date				11/5/2013			11/5/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/5/2013	11/5/2013	11/5/2013			11/5/2013			11/5/2013		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	NYSDEC Sediment CLASS C	mg/kg	µg/gOC	TU	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
Depths: 0-6 inches																							
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.08 U	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	< 0.045 U	--	--
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.08 U	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	< 0.045 U	--	--
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.08 U	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	< 0.045 U	--	--
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.08 U	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	< 0.045 U	--	--
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.08 U	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	< 0.045 U	--	--
PCB-1254 (AROCLOR 1254)	56.5	--	--	0.0777 J	0.7194	0.0127	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	< 0.042 U	--	--	< 0.051 U	--	--	0.0491 J	--	--
PCB-1260 (AROCLOR 1260)	86.9	--	--	0.171	1.5833	0.0182	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	0.0654	5.23	0.0602	0.0366 J	1	0.0115	0.231	13.05	0.1502
Total PCBs	70.9	0.1	1	0.249	--	--	< 0.049 U	< 0.042 U	< 0.048 U	< 0.048 U	< 0.065 U	< 0.062 U	< 0.051 U	< 0.05 U	0.0654	--	--	0.0366	--	--	0.28	--	--
TOC	--	--	--	108000	--	--	24500	7430	23900	13600	51100	52900	36500	30300	12500	--	--	36600	--	--	17700	--	--
Toxicity Units (total)	--	--	--	--	--	0.0310	--	--	--	--	--	--	--	--	--	--	0.0602	--	--	0.0115	--	--	0.1502
Depths: 6-12 inches																							
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	< 0.051 U	--	--	< 0.058 U	--	--
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	< 0.051 U	--	--	< 0.058 U	--	--
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	< 0.051 U	--	--	< 0.058 U	--	--
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	< 0.051 U	--	--	< 0.058 U	--	--
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	< 0.051 U	--	--	< 0.058 U	--	--
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	< 0.051 U	--	--	0.0372 J	1.248322	0.0221	0.185 J	5.51	0.0975
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	0.0752	2.07	0.0238	0.113	3.791946	0.0436	0.536	15.95	0.1836
Total PCBs	70.9	0.1	1	< 0.046 U	--	--	< 0.042 U	< 0.052 U	< 0.045 U	< 0.047 U	< 0.046 U	< 0.051 U	< 0.052 U	< 0.04 U	0.0752	--	--	0.15	--	--	0.721	--	--
TOC	--	--	--	22700	--	--	6200	34500	6520	14500	29200	33100	26200	13400	36400	--	--	29800	--	--	33600	--	--
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0238	--	--	0.0657	--	--	0.2810
Depths: 18-24 inches																							
PCB-1016 (AROCLOR 1016)	--	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	< 0.041 U	--	--	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1221 (AROCLOR 1221)	--	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	< 0.041 U	--	--	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1232 (AROCLOR 1232)	--	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	< 0.041 U	--	--	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1242 (AROCLOR 1242)	--	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	< 0.041 U	--	--	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1248 (AROCLOR 1248)	--	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	< 0.041 U	--	--	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1254 (AROCLOR 1254)	56.5	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	0.0358 J	1.54	0.0273	< 0.041 U	--	--	< 0.042 U	--	--
PCB-1260 (AROCLOR 1260)	86.9	--	--	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	0.233	10.04	0.1156	0.0837	--	--	0.232	36.48	0.4198
Total PCBs	70.9	0.1	1	< 0.045 U	--	--	< 0.043 U	< 0.04 U	< 0.052 U	< 0.049 U	< 0.044 U	< 0.046 U	< 0.047 U	< 0.038 U	0.269	--	--	0.0837	--	--	0.232	--	--
TOC	--	--	--	13000	--	--	3770	5080	19200	16600	10100	21300	29700	9670	23200	--	--	12200	--	--	6360	--	--
Toxicity Units (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1429	--	--	--	--	--	0.4198

Notes:
U or < - Polychlorinated biphenyl (PCB) was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
Total PCBs values are calculated by summing the detected concentrations. If there are no detected concentrations, total PCBs is reported at the highest non-detect result.
TOC - Total Organic Carbon.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of NYSDEC Class A criteria are highlighted yellow and presented with **Bold** text.
Exceedances of NYSDEC Class C criteria are highlighted orange and presented with **Bold** text.
mg/kg - milligrams per kilogram.
µg/gOC - microgram per gram of Organic Carbon.
TU - Toxicity Unit.



Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		Transect A												Transect B										
Sample ID	NYSDEC Screening Criteria - Class A	SDA1	SDA1	SDA1	SDA2	SDA2	SDA2	SDA2	SDA3	SDA3	SDA3	SDA4	SDA4	SDA4	SDB1	SDB1	SDB1	SDB2	SDB2 (Dup)	SDB2	SDB2	SDB4	SDB4	SDB4
Sample Interval (inches)		11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013	11/8/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013
Chemical Name		0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	0 - 6	6 - 12	18 - 24	0 - 6	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24
1.1.1.2-TETRACHLOROETHANE	--	< 0.0071 U	< 0.0055 U	< 0.0045 U	< 0.0060 U	< 0.0049 U	< 0.0065 U	< 0.0076 U	< 0.0080 U	< 0.0051 U	< 0.013 UJ	< 0.0074 UJ	< 0.0063 U	< 0.0067 U	< 0.0053 U	< 0.0053 U	< 0.0087 U	< 0.64 U	< 0.0059 U	< 0.0051 U	< 0.0082 U	< 0.0067 U	< 0.0050 U	
1.1.1-TRICHLOROETHANE	0.06*	< 0.0028 U	< 0.0022 U	< 0.0018 U	< 0.0024 U	< 0.0020 U	< 0.0026 U	< 0.0030 U	< 0.0032 U	< 0.0020 U	< 0.0053 UJ	< 0.0030 UJ	< 0.0025 U	< 0.0027 U	< 0.0021 U	< 0.0021 U	< 0.0035 U	< 0.25 U	< 0.0024 U	< 0.0020 U	< 0.0033 UJ	< 0.0027 U	< 0.0020 U	
1.1.2.2-TETRACHLOROETHANE	--	< 0.0028 U	< 0.0022 U	< 0.0018 U	< 0.0024 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0030 UJ	< 0.0032 UJ	< 0.0020 U	< 0.0053 UJ	< 0.0030 UJ	< 0.0025 U	< 0.0027 UJ	< 0.0021 UJ	< 0.0021 UJ	< 0.0035 U	< 0.25 U	< 0.0024 U	< 0.0020 U	< 0.0033 UJ	< 0.0027 UJ	< 0.0020 UJ	
1.1.2-TRICHLOROETHANE	--	< 0.0028 U	< 0.0022 U	< 0.0018 U	< 0.0024 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0030 UJ	< 0.0032 UJ	< 0.0020 UJ	< 0.0053 UJ	< 0.0030 UJ	< 0.0025 U	< 0.0027 UJ	< 0.0021 UJ	< 0.0021 UJ	< 0.0035 U	< 0.25 U	< 0.0024 U	< 0.0020 U	< 0.0033 UJ	< 0.0027 UJ	< 0.0020 UJ	
1.1-DICHLOROETHANE	0.0541*	< 0.0028 U	< 0.0022 U	< 0.0018 U	< 0.0024 U	< 0.0020 U	< 0.0026 U	< 0.0030 U	< 0.0032 U	< 0.0020 U	< 0.0053 UJ	< 0.0030 UJ	< 0.0025 U	< 0.0027 U	< 0.0021 U	< 0.0021 U	< 0.0035 U	< 0.25 U	< 0.0024 U	< 0.0020 U	< 0.0033 UJ	< 0.0027 U	< 0.0020 U	
1.1-DICHLOROETHANE	0.52	< 0.0028 U	< 0.0022 U	< 0.0018 U	< 0.0024 U	< 0.0020 U	< 0.0026 U	< 0.0030 U	< 0.0032 U	< 0.0020 UJ	< 0.0053 UJ	< 0.0030 UJ	< 0.0025 U	< 0.0027 U	< 0.0021 U	< 0.0021 U	< 0.0035 UJ	< 0.25 UJ	< 0.0024 UJ	< 0.0020 UJ	< 0.0033 UJ	< 0.0027 U	< 0.0020 U	
1.1-DICHLOROPROPENE	--	< 0.0071 U	< 0.0055 U	< 0.0045 U	< 0.0060 U	< 0.0049 U	< 0.0065 U	< 0.0076 U	< 0.0080 U	< 0.0051 U	< 0.013 UJ	< 0.0074 UJ	< 0.0063 U	< 0.0067 U	< 0.0053 U	< 0.0053 U	< 0.0087 U	< 0.64 U	< 0.0059 U	< 0.0051 U	< 0.0082 U	< 0.0067 U	< 0.0050 U	
1.2.3-TRICHLOROBENZENE	1.72*	< 0.0071 U	< 0.0055 U	< 0.0045 U	< 0.0060 U	< 0.0049 U	< 0.0065 U	< 0.0076 U	< 0.0080 U	< 0.0051 UJ	R	R	< 0.0063 U	< 0.0067 UJ	< 0.0053 U	< 0.0053 U	< 0.0087 U	< 0.64 UJ	< 0.0059 U	< 0.0051 U	< 0.0082 U	< 0.0067 U	< 0.0050 U	
1.2.3-TRICHLOROPROPANE	--	< 0.0071 U	< 0.0055 U	< 0.0045 U	< 0.0060 UJ	< 0.0049 UJ	< 0.0065 UJ	< 0.0076 UJ	< 0.0080 UJ	< 0.0051 U	< 0.013 UJ	< 0.0074 UJ	< 0.0063 U	< 0.0067 UJ	< 0.0053 UJ	< 0.0053 UJ	< 0.0087 U	< 0.64 U	< 0.0059 U	< 0.0051 U	< 0.0082 UJ	< 0.0067 UJ	< 0.0050 UJ	
1.2.4-TRICHLOROBENZENE																								

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Exceedances of UTC-Developed criteria are highlighted orange and presented with **Bold text**.

Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		Transect C															TransectD									
Sample ID	NYSDEC	SDC1	SDC1	SDC1	SDC2	SDC2	SDC2	SDC3	SDC3	SDC4	SDC4	SDC4	SDC5	SDC5	SDC5	SDD1	SDD1	SDD1	SDD2	SDD2	SDD2	SDD3	SDD3			
Sample Date	Screening	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013			
Sample Interval (inches)	Criteria -																									
Chemical Name	Class A	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6			
1.1,1,2-2TETRACHLOROETHANE	--	< 0.0094 UJ	< 0.0072 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0048 UJ	< 0.0054 UJ	< 0.0055 UJ	< 0.0049 UJ	< 0.0090 UJ	< 0.0051 UJ	< 0.0053 UJ	< 0.0096 UJ	< 0.0089 UJ	< 0.0053 UJ	< 0.0081 UJ	< 0.0062 UJ	< 0.0047 UJ	< 0.0071 UJ	< 0.0053 UJ	< 0.0054 UJ	< 0.0068 UJ	< 0.0046 UJ	< 0.0057 UJ	
1.1,1-TRICHLOROETHANE	0.6*	< 0.0037 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0019 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0020 UJ	< 0.0036 UJ	< 0.0020 UJ	< 0.0021 UJ	< 0.0038 UJ	< 0.0035 UJ	< 0.0021 UJ	< 0.0033 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0028 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.0023 UJ	
1.1,2,2-2TETRACHLOROETHANE	--	< 0.0037 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0019 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0020 UJ	< 0.0036 UJ	< 0.0020 UJ	< 0.0021 UJ	< 0.0038 UJ	< 0.0035 UJ	< 0.0021 UJ	< 0.0033 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0028 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.0023 UJ	
1.1,2-TRICHLOROETHANE	--	< 0.0037 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0019 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0020 UJ	< 0.0036 UJ	< 0.0020 UJ	< 0.0021 UJ	< 0.0038 UJ	< 0.0035 UJ	< 0.0021 UJ	< 0.0033 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0028 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.0023 UJ	
1.1-DICHLOROETHANE	0.0541*	< 0.0037 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0019 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0020 UJ	< 0.0036 UJ	< 0.0020 UJ	< 0.0021 UJ	< 0.0038 UJ	< 0.0035 UJ	< 0.0021 UJ	< 0.0033 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0028 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.0023 UJ	
1.1-DICHLOROETHANE	0.52	< 0.0037 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0024 UJ	< 0.0019 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0020 UJ	< 0.0036 UJ	< 0.0020 UJ	< 0.0021 UJ	< 0.0038 UJ	< 0.0035 UJ	< 0.0021 UJ	< 0.0033 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0028 UJ	< 0.0021 UJ	< 0.0022 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.0023 UJ	
1.1-DICHLOROPROPENE	--	< 0.0094 UJ	< 0.0072 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0048 UJ	< 0.0054 UJ	< 0.0055 UJ	< 0.0049 UJ	< 0.0090 UJ	< 0.0051 UJ	< 0.0053 UJ	< 0.0096 UJ	< 0.0089 UJ	< 0.0053 UJ	< 0.0081 UJ	< 0.0062 UJ	< 0.0047 UJ	< 0.0071 UJ	< 0.0053 UJ	< 0.0054 UJ	< 0.0068 UJ	< 0.0046 UJ	< 0.0057 UJ	
1.2,3-TRICHLOROBENZENE	1.72*	< 0.0094 UJ	< 0.0072 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0059 UJ	< 0.0048 UJ	< 0.0054 UJ	< 0.0055 UJ	< 0.0049 UJ	< 0.0090 UJ	< 0.0051 UJ	< 0.0053 UJ	< 0.0096 UJ	< 0.0089 UJ	< 0.0053 UJ	< 0.0081 UJ	< 0.0062 UJ								

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Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect Sample ID Sample Date Sample Interval (inches) Chemical Name	NYSDEC Screening Criteria - Class A	Transect E												Transect F											
		SDE1	SDE1	SDE1	SDE2	SDE2	SDE2	SDE3	SDE3	SDE3	SDE4	SDE4	SDE4	SDF1	SDF1	SDF1	SDF2	SDF2	SDF2	SDF3	SDF3	SDF3	SDF4	SDF4	SDF4
		11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/4/2013	11/4/2013	11/4/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013
		0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24
1.1,1,2-TRACHLOROETHANE	--	< 0.069 UJ	< 0.0660 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0660 UJ	< 0.0445 UJ	< 0.0666 UJ	< 0.0662 UJ	< 0.048 UJ	< 0.0667 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.046 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.046 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.0662 UJ
1.1.1-TRICHLOROETHANE	0.06*	0.0019 J	0.00088 J	0.0011 J	--	< 0.0027 UJ	< 0.0024 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0018 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0020 UJ	< 0.0027 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.0039 UJ	< 0.0022 UJ	< 0.0021 UJ
1.1,2,2-TRACHLOROETHANE	--	< 0.0028 UJ	< 0.0024 UJ	< 0.0018 UJ	< 0.0027 UJ	< 0.0024 UJ	< 0.0018 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0018 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0020 UJ	< 0.0027 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.0039 UJ	< 0.0022 UJ	< 0.0021 UJ
1.1,2-TRICHLOROETHANE	--	< 0.0028 UJ	< 0.0024 UJ	< 0.0018 UJ	< 0.0027 UJ	< 0.0024 UJ	< 0.0018 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0018 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0020 UJ	< 0.0027 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.0039 UJ	< 0.0022 UJ	< 0.0021 UJ
1.1-DICHLOROETHANE	0.0541*	0.0045	0.0027	0.0034	0.0054	0.0132	0.0126	< 0.0026 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0018 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0020 UJ	< 0.0027 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.0039 UJ	< 0.0022 UJ	< 0.0021 UJ
1.1-DICHLOROETHENE	0.52	< 0.0028 UJ	< 0.0024 UJ	< 0.0018 UJ	0.0011 J	0.0016 J	0.0013 J	< 0.0026 UJ	< 0.0025 UJ	< 0.0019 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0018 UJ	< 0.0020 UJ	< 0.0026 UJ	< 0.0025 UJ	< 0.0020 UJ	< 0.0027 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.0039 UJ	< 0.0022 UJ	< 0.0021 UJ
1.1-CHLOROPROPENE	--	< 0.0069 UJ	< 0.0660 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0660 UJ	< 0.0445 UJ	< 0.0666 UJ	< 0.0662 UJ	< 0.048 UJ	< 0.0667 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.048 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ
1.2,3-TRICHLOROBENZENE	1.72*	< 0.0069 UJ	< 0.0660 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0660 UJ	< 0.0445 UJ	< 0.0666 UJ	< 0.0662 UJ	< 0.048 UJ	< 0.0667 UJ	< 0.0662 UJ	< 0.0662 UJ	< 0.048 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.046 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ	< 0.0667 UJ
1.2,3-TRICHLOROPROPANE	--	< 0.0069 UJ	<																						

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Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		NYSDEC	Transect G						Transect H									Transect I										
Sample ID	Screening	Criteria - Class A	SDG1	SDG1	SDG1	SDG2	SDG2	SDG2	SDH1	SDH1	SDH1	SDH2	SDH2	SDH2	SDH3	SDH3	SDH3	SDI1	SDI1 (Dup)	SDI1	SDI1 (Dup)	SDI1	SDI1 (Dup)	SDI2	SDI2	SDI3	SDI3	SDI3
Sample Date	11/6/2013		11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/5/2013	11/5/2013	11/5/2013
Sample Interval (inches)			0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	0 - 6	6 - 12	6 - 12	18 - 24	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12
Chemical Name																												
1.1.1.2-TETRACHLOROETHANE	--	< 0.0070 UJ	< 0.0064 UJ	< 0.0090 UJ	< 0.0089 UJ	< 0.0068 UJ	< 0.0047 UJ	< 0.027 UJ	< 0.0063 UJ	< 0.0045 UJ	< 0.0088 UJ	< 0.0058 UJ	< 0.0054 UJ	< 0.014 UJ	< 0.0061 UJ	< 0.0062 UJ	< 0.0070 UJ	< 0.0059 UJ	< 0.0058 UJ	< 0.0052 UJ	< 0.0062 UJ	< 0.0056 UJ	< 0.074 UJ	< 0.033 UJ	< 0.0095 UJ	< 0.0073 UJ	< 0.0060 UJ	< 0.0061 UJ
1.1.1-TRICHLOROETHANE	0.06*	< 0.0028 UJ	< 0.0025 UJ	< 0.0036 UJ	< 0.0027 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.011 UJ	< 0.0025 UJ	< 0.0045 UJ	< 0.0035 UJ	< 0.0023 UJ	< 0.0022 UJ	< 0.0058 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0028 UJ	< 0.0024 UJ	< 0.0023 UJ	< 0.0021 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.03 UJ	< 0.013 UJ	< 0.0038 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0025 UJ
1.1.2.2-TETRACHLOROETHANE	--	< 0.0028 UJ	< 0.0025 UJ	< 0.0036 UJ	< 0.0036 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.011 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0035 UJ	< 0.0023 UJ	< 0.0022 UJ	< 0.0058 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0028 UJ	< 0.0024 UJ	< 0.0023 UJ	< 0.0021 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.03 UJ	< 0.013 UJ	< 0.0038 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0025 UJ
1.1.2-TRICHLOROETHANE	--	< 0.0028 UJ	< 0.0025 UJ	< 0.0036 UJ	< 0.0036 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.011 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0035 UJ	< 0.0023 UJ	< 0.0022 UJ	< 0.0058 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0028 UJ	< 0.0024 UJ	< 0.0023 UJ	< 0.0021 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.03 UJ	< 0.013 UJ	< 0.0038 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0025 UJ
1.1-DICHLOROETHANE	0.0541*	< 0.0028 UJ	< 0.0025 UJ	< 0.0036 UJ	< 0.0036 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.011 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0035 UJ	< 0.0023 UJ	< 0.0022 UJ	< 0.0058 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0028 UJ	< 0.0024 UJ	< 0.0023 UJ	< 0.0021 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.03 UJ	< 0.013 UJ	< 0.0038 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0025 UJ
1.1-DICHLOROETHENE	0.52	< 0.0028 UJ	< 0.0025 UJ	< 0.0036 UJ	< 0.0036 UJ	< 0.0027 UJ	< 0.0019 UJ	< 0.011 UJ	< 0.0025 UJ	< 0.0018 UJ	< 0.0035 UJ	< 0.0023 UJ	< 0.0022 UJ	< 0.0058 UJ	< 0.0025 UJ	< 0.0025 UJ	< 0.0028 UJ	< 0.0024 UJ	< 0.0023 UJ	< 0.0021 UJ	< 0.0025 UJ	< 0.0022 UJ	< 0.03 UJ	< 0.013 UJ	< 0.0038 UJ	< 0.0029 UJ	< 0.0024 UJ	< 0.0025 UJ
1.1-DICHLOROPROPENE	--	< 0.0070 UJ	< 0.0064 UJ	< 0.0090 UJ	< 0.0089 UJ	< 0.0068 UJ	< 0.0047 UJ	< 0.027 UJ	< 0.0063 UJ	< 0.0045 UJ	< 0.0088 UJ	< 0.0058 UJ	< 0.0054 UJ	< 0.014 UJ	< 0.0061 UJ	< 0												

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Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		NYSDEC	Transect K															North Swale to Sanders Creek														
Sample ID	Screening Criteria - Class A	SDK1	SDK1	SDK1	SDK2	SDK2	SDK2	SDS1	SDS1	SDS1	SDS2	SDS2	SDS2	SDS3	SDS3	SDS3	SDS4	SDS4	SDS4	SDS5	SDS5	SDS5	SDS6	SDS6	SDS6	SDS7	SDS7	SDS7				
Sample Date		11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013						
Sample Interval (inches) Chemical Name		0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24				
1.1.1.2-TETRACHLOROETHANE	--	< 0.013 U	< 0.0070 U	< 0.0057 U	< 0.0064 UJ	< 0.0052 UJ	< 0.0052 U	< 0.0063 UJ	< 0.0068 U	< 0.0050 U	< 0.0073 U	< 0.0064 U	< 0.0080 U	< 0.0072 U	< 0.0060 UJ	< 0.0065 U	< 0.01 U	< 0.0073 U	< 0.0055 U	< 0.011 U	< 0.0084 U	< 0.0061 U	< 0.0093 U	< 0.0097 U	< 0.0075 U	< 0.0078 U	< 0.0052 U	< 0.0046 U				
1.1.1-TRICHLOROETHANE	0.06*	< 0.0051 U	< 0.0028 U	< 0.0023 U	< 0.0026 UJ	< 0.0021 UJ	< 0.0021 U	< 0.0025 UJ	< 0.0027 U	< 0.0020 U	< 0.0029 U	< 0.0025 U	< 0.0032 U	< 0.0029 U	< 0.0024 U	< 0.0026 U	< 0.0041 U	< 0.0029 U	< 0.0022 U	< 0.0046 U	< 0.0034 U	< 0.0024 U	< 0.0037 U	< 0.0039 U	< 0.0030 U	< 0.0031 U	< 0.0021 U	< 0.0018 U				
1.1.2.2-TETRACHLOROETHANE	--	< 0.0051 U	< 0.0028 U	< 0.0023 U	< 0.0026 UJ	< 0.0021 UJ	< 0.0021 U	< 0.0025 UJ	< 0.0027 U	< 0.0020 U	< 0.0029 U	< 0.0025 U	< 0.0032 U	< 0.0029 U	< 0.0024 U	< 0.0026 U	< 0.0041 U	< 0.0029 U	< 0.0022 U	< 0.0046 U	< 0.0034 U	< 0.0024 U	< 0.0037 U	< 0.0039 U	< 0.0030 U	< 0.0031 U	< 0.0021 U	< 0.0018 U				
1.1.2-TRICHLOROETHANE	--	< 0.0051 U	< 0.0028 U	< 0.0023 U	< 0.0026 UJ	< 0.0021 UJ	< 0.0021 U	< 0.0025 UJ	< 0.0027 U	< 0.0020 U	< 0.0029 U	< 0.0025 U	< 0.0032 U	< 0.0029 U	< 0.0024 U	< 0.0026 U	< 0.0041 U	< 0.0029 U	< 0.0022 U	< 0.0046 U	< 0.0034 U	< 0.0024 U	< 0.0037 U	< 0.0039 U	< 0.0030 U	< 0.0031 U	< 0.0021 U	< 0.0018 U				
1.1-DICHLOROETHANE	0.0541*	< 0.0051 U	< 0.0028 U	< 0.0023 U	< 0.0026 UJ	< 0.0021 UJ	< 0.0021 U	< 0.0025 UJ	< 0.0027 U	< 0.0020 U	< 0.0029 U	< 0.0025 U	< 0.0032 U	< 0.0029 U	< 0.0024 U	< 0.0026 U	< 0.0041 U	< 0.0029 U	< 0.0022 U	< 0.0046 U	< 0.0034 U	< 0.0024 U	< 0.0037 U	< 0.0039 U	< 0.0030 U	< 0.0031 U	< 0.0021 U	< 0.0018 U				
1.1-DICHLOROETHENE	0.52	< 0.0051 U	< 0.0028 U	< 0.0023 U	< 0.0026 UJ	< 0.0021 UJ	< 0.0021 U	< 0.0025 UJ	< 0.0027 U	< 0.0020 U	< 0.0029 U	< 0.0025 U	< 0.0032 U	< 0.0029 U	< 0.0024 U	< 0.0026 U	< 0.0041 U	< 0.0029 U	< 0.0022 U	< 0.0046 U	< 0.0034 U	< 0.0024 U	< 0.0037 U	< 0.0039 U	< 0.0030 U	< 0.0031 U	< 0.0021 U	< 0.0018 U				
1.1-DICHLOROPROPENE	--	< 0.013 U	< 0.0070 U	< 0.0057 U	< 0.0064 UJ	< 0.0052 UJ	< 0.0052 U	< 0.0063 UJ	< 0.0068 U	< 0.0050 U	< 0.0073 U	< 0.0064 U	< 0.0080 U	< 0.0072 U	< 0.0060 U	< 0.0065 U	< 0.01 U	< 0.0073 U	< 0.0055 U	< 0.011 U	< 0.0084 U	< 0.0061 U	< 0.0093 U	< 0.0097 U	< 0.0075 U	< 0.0078 U	< 0.0052 U	< 0.0046 U				
1.2.3-TRICHLOROBENZENE	1.72*	< 0.013 U	< 0.0070 U	< 0.0057 U	< 0.0064 UJ	< 0.0052 UJ																										

Notes:
VOC - Volatile Organic Compound.
All units are in milligrams per kilogram (mg/kg).
* - UTC-Developed criteria.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
R - Concentration rejected during validation.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of UTC-Developed criteria are highlighted orange and presented with **Bold** text.

Table 3
VOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria - Class A	Sanders Creek								
Sample ID		SDS8	SDS8 (Dup)	SDS8	SDS8 (Dup)	SDS8	SDS8 (Dup)	SDS9	SDS9	SDS9
Sample Date		11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013
Sample Interval (inches)		0 - 6	0 - 6	6 - 12	6 - 12	18 - 24	18 - 24	0 - 6	6 - 12	18 - 24
Chemical Name										
1,1,1,2-TETRACHLOROETHANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,1,1-TRICHLOROETHANE	0.06*	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,1,2,2-TETRACHLOROETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,1,2-TRICHLOROETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,1-DICHLOROETHANE	0.0541*	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,1-DICHLOROETHENE	0.52	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,1-DICHLOROPROPENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,2,3-TRICHLOROBENZENE	1.72*	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,2,3-TRICHLOROPROPANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,2,4-TRICHLOROBENZENE	2.14*	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,2,4-TRIMETHYLBENZENE	3.4	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	0.00027 J	< 0.0055 U	0.00046 J	< 0.0083 U	< 0.0072 U
1,2-DIBROMO-3-CHLOROPROPANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,2-DICHLOROBENZENE	0.28	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,2-DICHLOROETHANE	1.7	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,2-DICHLOROPROPANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.832*	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	0.00057 J	< 0.0083 U	< 0.0072 U
1,3-DICHLOROBENZENE	1.8	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
1,3-DICHLOROPROPANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
1,4-DICHLOROBENZENE	0.72	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
2,2-DICHLOROPROPANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
2-CHLOROTOLUENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
4-CHLOROTOLUENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
BENZENE	0.53	0.00070	0.00073	0.0014	0.0011	0.0011	0.00091	0.00090	0.00092	0.00094
BROMOBENZENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
BROMOCHLOROMETHANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
BROMODICHLOROMETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
BROMOFORM	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
BROMOMETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
CARBON TETRACHLORIDE	1.07	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
CHLOROBENZENE	0.2	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
CHLOROETHANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
CHLOROFORM	0.000715*	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
CHLOROMETHANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
CIS-1,2-DICHLOROETHYLENE	0.79*	< 0.0026 U	0.00086 J	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	0.0044	0.0033	0.0011 J
CYMENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
DIBROMOCHLOROMETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
DIBROMOMETHANE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
DICHLORODIFLUOROMETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
ETHYLBENZENE	0.43	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
HEXACHLOROBUTADIENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
ISOPROPYLBENZENE (CUMENE)	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
M,P-XYLENE (SUM OF ISOMERS)	0.05	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
METHYLENE CHLORIDE	0.041	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
NAPHTHALENE	7.7	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
N-BUTYLBENZENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
N-PROPYLBENZENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
O-XYLENE (1,2-DIMETHYLBENZENE)	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
SEC-BUTYLBENZENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
STYRENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
T-BUTYLBENZENE	--	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
TERT-BUTYL METHYL ETHER	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
TETRACHLOROETHYLENE(PCE)	16	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
TOLUENE	0.93	< 0.0066 U	< 0.0058 U	< 0.0079 U	< 0.0066 U	< 0.0053 U	< 0.0055 U	< 0.0070 U	< 0.0083 U	< 0.0072 U
TRANS-1,2-DICHLOROETHENE	1.2	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
TRICHLOROETHYLENE (TCE)	1.8	0.0014 J	0.0017 J	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	0.0150	0.0090	0.0024 J
TRICHLOROFLUOROMETHANE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U
VINYL CHLORIDE	--	< 0.0026 U	< 0.0023 U	< 0.0032 U	< 0.0026 U	< 0.0021 U	< 0.0022 U	< 0.0028 U	< 0.0033 U	< 0.0029 U

Notes:
VOC - Volatile Organic Compound.
All units are in milligrams per kilogram (mg/kg).
* - UTC-Developed criteria.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
R - Concentration rejected during validation.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).
Exceedances of UTC-Developed criteria are highlighted orange and presented with **Bold** text.

Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect			Transect A												Transect B											
Sample ID	NYSDEC	SDA1	SDA1	SDA1	SDA2	SDA2	SDA2	SDA3	SDA3	SDA3	SDA4	SDA4	SDA4	SDB1	SDB1	SDB1	SDB2	SDB2 (Dup)	SDB2	SDB2	SDB4	SDB4	SDB4			
Sample Date	Screening	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013	11/8/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013			
Sample Interval (inches)	Criteria -	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24			
Chemical Name	Class A																									
1,2,4-TRICHLOROBENZENE	2.14	<0.35 U	<0.3 U	<0.29 U	<0.3 U	<0.31 U	<0.32 U	<0.33 U	<0.32 U	<0.3 U	<2.1 U	<0.36 U	<0.35 U	<0.38 U	<0.32 U	<0.31 U	<0.39 U	<0.39 U	<0.35 U	<0.32 U	<0.4 U	<0.35 U	<0.31 U			
1,2-DICHLOROBENZENE	0.28	<0.35 U	<0.3 U	<0.29 U	<0.3 U	<0.31 U	<0.32 U	<0.33 U	<0.32 U	<0.3 U	<2.1 U	<0.36 U	<0.35 U	<0.38 U	<0.32 U	<0.31 U	<0.39 U	<0.39 U	<0.35 U	<0.32 U	<0.4 U	<0.35 U	<0.31 U			
1,3-DICHLOROBENZENE	1.8	<0.35 U	<0.3 U	<0.29 U	<0.3 U	<0.31 U	<0.32 U	<0.33 U	<0.32 U	<0.3 U	<2.1 U	<0.36 U	<0.35 U	<0.38 U	<0.32 U	<0.31 U	<0.39 U	<0.39 U	<0.35 U	<0.32 U	<0.4 U	<0.35 U	<0.31 U			
1,4-DICHLOROBENZENE	0.72	<0.35 U	<0.3 U	<0.29 U	<0.3 U	<0.31 U	<0.32 U	<0.33 U	<0.32 U	<0.3 U	<2.1 U	<0.36 U	<0.35 U	<0.38 U	<0.32 U	<0.31 U	<0.39 U	<0.39 U	<0.35 U	<0.32 U	<0.4 U	<0.35 U	<0.31 U			
2,4,5-TRICHLOROPHENOL	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2,4,6-TRICHLOROPHENOL	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2,4-DICHLOROPHENOL	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2,4-DIMETHYLPHENOL	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2,4-DINITROPHENOL	--	<1.4 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	R	<1.5 U	<1.4 U	<1.5 U	<1.4 U	<1.5 U	<1.5 U	<1.6 U	<1.4 U	<1.3 U	<1.6 U	<1.4 U	<1.3 U			
2,4-DINITROTOLUENE	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2,6-DINITROTOLUENE	--	<0.7 U	<0.61 U	<0.58 U	<0.61 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.6 U	<4.1 U	<0.73 U	<0.71 U	<0.76 U	<0.64 U	<0.62 U	<0.77 U	<0.79 U	<0.7 U	<0.64 U	<0.8 U	<0.71 U	<0.63 U			
2-CHLORONAPHTHALENE	--	<0.35 U	<0.3 U	<0.29 U	<0.3 U																					

Notes:
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U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
R - Concentration rejected during validation.
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Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect			Transect C															Transect D									
Sample ID			SDC1	SDC1	SDC1	SDC2	SDC2	SDC2	SDC3	SDC3	SDC4	SDC4	SDC4	SDC5	SDC5	SDC5	SDD1	SDD1	SDD1	SDD2	SDD2	SDD3	SDD3	SDD3			
Sample Date		NYSDEC Screening	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/8/2013	11/8/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013	11/8/2013			
Sample Interval (inches)		Criteria - Class A	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	18 - 24			
Chemical Name																											
1,2,4-TRICHLOROENZENE	2.14	--	< 0.42 U	< 0.36 U	< 0.34 U	< 0.36 U	< 0.31 U	< 0.3 U	< 0.32 U	< 0.29 U	< 0.29 U	< 0.4 U	< 0.33 U	< 0.33 U	< 0.42 U	< 0.38 U	< 0.3 U	< 0.38 U	< 0.32 U	< 0.3 U	< 0.36 U	< 0.31 U	< 0.34 U	< 0.33 U	< 0.31 U	< 0.31 U	
1,2-DICHLOROENZENE	0.28	--	< 0.42 U	< 0.36 U	< 0.34 U	< 0.36 U	< 0.31 U	< 0.3 U	< 0.32 U	< 0.29 U	< 0.29 U	< 0.4 U	< 0.33 U	< 0.33 U	< 0.42 U	< 0.38 U	< 0.3 U	< 0.38 U	< 0.32 U	< 0.3 U	< 0.36 U	< 0.31 U	< 0.34 U	< 0.33 U	< 0.31 U	< 0.31 U	
1,3-DICHLOROENZENE	1.8	--	< 0.42 U	< 0.36 U	< 0.34 U	< 0.36 U	< 0.31 U	< 0.3 U	< 0.32 U	< 0.29 U	< 0.29 U	< 0.4 U	< 0.33 U	< 0.33 U	< 0.42 U	< 0.38 U	< 0.3 U	< 0.38 U	< 0.32 U	< 0.3 U	< 0.36 U	< 0.31 U	< 0.34 U	< 0.33 U	< 0.31 U	< 0.31 U	
1,4-DICHLOROENZENE	0.72	--	< 0.42 U	< 0.36 U	< 0.34 U	< 0.36 U	< 0.31 U	< 0.3 U	< 0.32 U	< 0.29 U	< 0.29 U	< 0.4 U	< 0.33 U	< 0.33 U	< 0.42 U	< 0.38 U	< 0.3 U	< 0.38 U	< 0.32 U	< 0.3 U	< 0.36 U	< 0.31 U	< 0.34 U	< 0.33 U	< 0.31 U	< 0.31 U	
2,4,5-TRICHLOROPHENOL	--	--	< 0.83 U	< 0.72 U	< 0.69 U	< 0.72 U	< 0.61 U	< 0.59 U	< 0.64 U	< 0.59 U	< 0.59 U	< 0.8 U	< 0.66 U	< 0.65 U	< 0.85 U	< 0.76 U	< 0.61 U	< 0.77 U	< 0.64 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.68 U	< 0.67 U	< 0.61 U	< 0.61 U	
2,4,6-TRICHLOROPHENOL	--	--	< 0.83 U	< 0.72 U	< 0.69 U	< 0.72 U	< 0.61 U	< 0.59 U	< 0.64 U	< 0.59 U	< 0.59 U	< 0.8 U	< 0.66 U	< 0.65 U	< 0.85 U	< 0.76 U	< 0.61 U	< 0.77 U	< 0.64 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.68 U	< 0.67 U	< 0.61 U	< 0.61 U	
2,4-DICHLOROPHENOL	--	--	< 0.83 U	< 0.72 U	< 0.69 U	< 0.72 U	< 0.61 U	< 0.59 U	< 0.64 U	< 0.59 U	< 0.59 U	< 0.8 U	< 0.66 U	< 0.65 U	< 0.85 U	< 0.76 U	< 0.61 U	< 0.77 U	< 0.64 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.68 U	< 0.67 U	< 0.61 U	< 0.61 U	
2,4-DIMETHYLPHENOL	--	--	< 0.83 U	< 0.72 U	< 0.69 U	< 0.72 U	< 0.61 U	< 0.59 U	< 0.64 U	< 0.59 U	< 0.59 U	< 0.8 U	< 0.66 U	< 0.65 U	< 0.85 U	< 0.76 U	< 0.61 U	< 0.77 U	< 0.64 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.68 U	< 0.67 U	< 0.61 U	< 0.61 U	
2,4-DINITROPHENOL	--	--	< 1.7 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.6 U	< 1.3 U	< 1.3 U	< 1.7 U	< 1.5 U	< 1.2 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.4 U	< 1.3 U	< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	
2,4-DINITROTOLUENE	--	--	< 0.83 U	< 0.72 U	< 0.69 U	< 0.72 U	< 0.61 U	< 0.59 U	< 0.64 U	< 0.59 U	<																

Notes:
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Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		Transect E												Transect F											
Sample ID	NYSDEC Screening	SDE1	SDE1	SDE1	SDE2	SDE2	SDE2	SDE3	SDE3	SDE3	SDE4	SDE4	SDE4	SDF1	SDF1	SDF1	SDF2	SDF2	SDF2	SDF3	SDF3	SDF3	SDF4	SDF4	SDF4
Sample Date	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/4/2013	11/4/2013	11/4/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013
Sample Interval (inches)																									
Chemical Name	Criteria - Class A	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24
1,2,4-TRICHLOROENZENE	2.14	< 0.37 U	< 0.32 U	< 0.29 U	< 0.38 U	< 0.33 U	< 0.3 U	< 0.35 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.43 U	< 0.47 U	< 1.7 U	< 0.3 U	< 0.33 U	< 0.37 U	< 0.35 U	< 0.3 U	< 0.34 U	< 0.31 U	< 0.36 U	< 0.41 U	< 0.32 U	< 0.31 U
1,2-DICHLOROENZENE	0.28	< 0.37 U	< 0.32 U	< 0.29 U	< 0.38 U	< 0.33 U	< 0.3 U	< 0.35 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.43 U	< 0.47 U	< 1.7 U	< 0.3 U	< 0.33 U	< 0.37 U	< 0.35 U	< 0.3 U	< 0.34 U	< 0.31 U	< 0.36 U	< 0.41 U	< 0.32 U	< 0.31 U
1,3-DICHLOROENZENE	1.8	< 0.37 U	< 0.32 U	< 0.29 U	< 0.38 U	< 0.33 U	< 0.3 U	< 0.35 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.43 U	< 0.47 U	< 1.7 U	< 0.3 U	< 0.33 U	< 0.37 U	< 0.35 U	< 0.3 U	< 0.34 U	< 0.31 U	< 0.36 U	< 0.41 U	< 0.32 U	< 0.31 U
1,4-DICHLOROENZENE	0.72	< 0.37 U	< 0.32 U	< 0.29 U	< 0.38 U	< 0.33 U	< 0.3 U	< 0.35 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.43 U	< 0.47 U	< 1.7 U	< 0.3 U	< 0.33 U	< 0.37 U	< 0.35 U	< 0.3 U	< 0.34 U	< 0.31 U	< 0.36 U	< 0.41 U	< 0.32 U	< 0.31 U
2,4,5-TRICHLOROPHENOL	--	< 0.75 U	< 0.63 U	< 0.58 U	< 0.75 U	< 0.66 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.61 U	< 0.76 U	< 0.86 U	< 0.94 U	< 3.4 U	< 0.59 U	< 0.66 U	< 0.73 U	< 0.7 U	< 0.59 U	< 0.68 U	< 0.62 U	< 0.71 U	< 0.81 U	< 0.64 U	< 0.62 U
2,4,6-TRICHLOROPHENOL	--	< 0.75 U	< 0.63 U	< 0.58 U	< 0.75 U	< 0.66 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.61 U	< 0.76 U	< 0.86 U	< 0.94 U	< 3.4 U	< 0.59 U	< 0.66 U	< 0.73 U	< 0.7 U	< 0.59 U	< 0.68 U	< 0.62 U	< 0.71 U	< 0.81 U	< 0.64 U	< 0.62 U
2,4-DICHLOROPHENOL	--	< 0.75 U	< 0.63 U	< 0.58 U	< 0.75 U	< 0.66 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.61 U	< 0.76 U	< 0.86 U	< 0.94 U	< 3.4 U	< 0.59 U	< 0.66 U	< 0.73 U	< 0.7 U	< 0.59 U	< 0.68 U	< 0.62 U	< 0.71 U	< 0.81 U	< 0.64 U	< 0.62 U
2,4-DIMETHYLPHENOL	--	< 0.75 U	< 0.63 U	< 0.58 U	< 0.75 U	< 0.66 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.61 U	< 0.76 U	< 0.86 U	< 0.94 U	< 3.4 U	< 0.59 U	< 0.66 U	< 0.73 U	< 0.7 U	< 0.59 U	< 0.68 U	< 0.62 U	< 0.71 U	< 0.81 U	< 0.64 U	< 0.62 U
2,4-DINITROPHENOL	--	< 1.5 U	< 1.3 U	< 1.2 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.4 U	< 1.3 U	< 1.2 U	< 1.5 U	< 1.7 U	< 1.9 U	< 6.7 U	< 1.2 U	< 1.3 U	< 1.5 U	< 1.4 U	< 1.2 U	< 1.4 U	< 1.2 U	< 1.4 U	< 1.6 U	< 1.3 U	< 1.2 U
2,4-DINITROTOLUENE	--	< 0.75 U	< 0.63 U	< 0.58 U	< 0.75 U	< 0.66 U	< 0.6 U	< 0.71 U	< 0.63 U	< 0.61 U															

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Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		Transect G						Transect H									Transect I											
Sample ID	NYSDEC	SDG1	SDG1	SDG1	SDG2	SDG2	SDG2	SDH1	SDH1	SDH1	SDH2	SDH2	SDH3	SDH3	SDH3	SDI1	SDI1 (Dup)	SDI1	SDI1 (Dup)	SDI1	SDI1 (Dup)	SDI1	SDI2	SDI2	SDI2	SDI3	SDI3	SDI3
Sample Date	Screening	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013	11/5/2013	11/5/2013	11/5/2013
Sample Interval (inches)	Criteria -																											
Chemical Name	Class A	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	0 - 6	6 - 12	6 - 12	18 - 24	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24
1,2,4-TRICHLOROBENZENE	2.14	< 0.36 U	< 0.31 U	< 0.31 U	< 0.36 U	< 0.35 U	< 0.3 U	< 0.87 U	< 0.32 U	< 0.3 U	< 0.38 U	< 0.33 U	< 0.32 U	< 0.72 U	< 0.35 U	< 0.31 U	< 0.37 U	< 0.37 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.32 U	< 2.4 U	< 1.1 U	R	< 0.43 U	< 0.34 U	< 0.33 U
1,2-DICHLOROBENZENE	0.28	< 0.36 U	< 0.31 U	< 0.31 U	< 0.36 U	< 0.35 U	< 0.3 U	< 0.87 U	< 0.32 U	< 0.3 U	< 0.38 U	< 0.33 U	< 0.32 U	< 0.72 U	< 0.35 U	< 0.31 U	< 0.37 U	< 0.37 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.32 U	< 2.4 U	< 1.1 U	R	< 0.43 U	< 0.34 U	< 0.33 U
1,3-DICHLOROBENZENE	1.8	< 0.36 U	< 0.31 U	< 0.31 U	< 0.36 U	< 0.35 U	< 0.3 U	< 0.87 U	< 0.32 U	< 0.3 U	< 0.38 U	< 0.33 U	< 0.32 U	< 0.72 U	< 0.35 U	< 0.31 U	< 0.37 U	< 0.37 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.32 U	< 2.4 U	< 1.1 U	R	< 0.43 U	< 0.34 U	< 0.33 U
1,4-DICHLOROBENZENE	0.72	< 0.36 U	< 0.31 U	< 0.31 U	< 0.36 U	< 0.35 U	< 0.3 U	< 0.87 U	< 0.32 U	< 0.3 U	< 0.38 U	< 0.33 U	< 0.32 U	< 0.72 U	< 0.35 U	< 0.31 U	< 0.37 U	< 0.37 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.32 U	< 2.4 U	< 1.1 U	R	< 0.43 U	< 0.34 U	< 0.33 U
2,4,5-TRICHLOROPHENOL	--	< 0.72 U	< 0.62 U	< 0.62 U	< 0.71 U	< 0.7 U	< 0.59 U	< 1.7 U	< 0.64 U	< 0.6 U	< 0.77 U	< 0.66 U	< 0.64 U	< 1.4 U	< 0.69 U	< 0.63 U	< 0.75 U	< 0.74 U	< 0.67 U	< 0.65 U	< 0.65 U	< 0.63 U	< 4.8 U	< 2.2 U	R	< 0.86 U	< 0.69 U	< 0.66 U
2,4,6-TRICHLOROPHENOL	--	< 0.72 U	< 0.62 U	< 0.62 U	< 0.71 U	< 0.7 U	< 0.59 U	< 1.7 U	< 0.64 U	< 0.6 U	< 0.77 U	< 0.66 U	< 0.64 U	< 1.4 U	< 0.69 U	< 0.63 U	< 0.75 U	< 0.74 U	< 0.67 U	< 0.65 U	< 0.65 U	< 0.63 U	< 4.8 U	< 2.2 U	R	< 0.86 U	< 0.69 U	< 0.66 U
2,6-DICHLOROPHENOL	--	< 0.72 U	< 0.62 U	< 0.62 U	< 0.71 U	< 0.7 U	< 0.59 U	< 1.7 U	< 0.64 U	< 0.6 U	< 0.77 U	< 0.66 U	< 0.64 U	< 1.4 U	< 0.69 U	< 0.63 U	< 0.75 U	< 0.74 U	< 0.67 U	< 0.65 U	< 0.65 U	< 0.63 U	< 4.8 U	< 2.2 U	R	< 0.86 U	< 0.69 U	< 0.66 U
2,4-DIMETHYLPHENOL	--	< 0.72 U	< 0.62 U	< 0.62 U	< 0.71 U	< 0.7 U	< 0.59 U	< 1.7 U	< 0.64 U	< 0.6 U	< 0.77 U	< 0.66 U	< 0.64 U	< 1.4 U	< 0.69 U	< 0.63 U	< 0.75 U	< 0.74 U	< 0.67 U	< 0.65 U	< 0.65 U	< 0.63 U	< 4.8 U	< 2.2 U	R	< 0.86 U	< 0.69 U	< 0.66 U
2,4-DINITROPHENOL	--	R	< 1.2 UJ	R	< 1.4 U	< 1.4 U																						

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Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect		Transect K						North Swale to Sanders Creek																					
Sample ID	NYSDEC	SDK1	SDK1	SDK1	SDK2	SDK2	SDK2	SDS1	SDS1	SDS1	SDS2	SDS2	SDS2	SDS3	SDS3	SDS3	SDS4	SDS4	SDS4	SDS5	SDS5	SDS5	SDS6	SDS6	SDS6	SDS7	SDS7	SDS7	
Sample Date	Screening	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013			
Sample Interval (inches)	Criteria -																												
Chemical Name	Class A	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	0 - 6	6 - 12	18 - 24	
1,2,4-TRICHLOROENZENE	2.14	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
1,2-DICHLOROENZENE	0.28	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
1,4-DICHLOROENZENE	1.8	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
1,4-DICHLOROENZENE	0.72	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
2,4,5-TRICHLOROPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2,4,6-TRICHLOROPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2,4-DICHLOROPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2,4-DIMETHYLPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2,4-DINITROPHENOL	--	<2.4 U	<1.4 U	<1.4 U	<1.5 U	<1.3 U	<1.3 U	<1.3 U	<1.5 U	<1.2 U	<1.4 U	<1.3 U	<1.5 U	<1.4 U	<1.5 U	<1.4 U	<1.9 U	<1.5 U	<1.3 U	<2 U	<1.6 U	<1.6 U	<1.4 U	<1.6 U	<1.5 U	<1.4 U	<1.5 U	<1.2 U	<1.1 U
2,4-DINITROTOLUENE	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2,6-DINITROTOLUENE	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2-CHLORONAPHTHALENE	--	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
2-CHLOROPHENOL	--	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
2-METHYLNAPHTHALENE	0.586*	<0.24 U	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	<0.19 U	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	<0.16 U	<0.15 U	<0.14 U	<0.15 U	<0.12 U	<0.11 U	<0.11 U	
2-METHYLPHENOL (O-CRESOL)	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2-NITROANILINE	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
2-NITROPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
3,3'-DICHLOROENZIDINE	--	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
3-NITROANILINE	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4,6-DINITRO-2-METHYLPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4-BROMOPHENYL PHENYL ETHER	--	<0.61 U	<0.34 U	<0.34 U	<0.37 U	<0.31 U	<0.32 U	<0.31 U	<0.38 U	<0.29 U	<0.36 U	<0.33 U	<0.38 U	<0.35 U	<0.35 U	<0.37 U	<0.48 U	<0.36 U	<0.32 U	<0.49 U	<0.39 U	<0.35 U	<0.39 U	<0.39 U	<0.36 U	<0.38 U	<0.29 U	<0.29 U	
4-CHLORO-3-METHYLPHENOL	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4-CHLOROPHENYL PHENYL ETHER	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4-METHYLPHENOL (P-CRESOL)	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4-NITROANILINE	--	<1.2 U	<0.69 U	<0.69 U	<0.75 U	<0.63 U	<0.65 U	<0.63 U	<0.75 U	<0.58 U	<0.71 U	<0.65 U	<0.77 U	<0.71 U	<0.69 U	<0.74 U	<0.96 U	<0.72 U	<0.64 U	<0.98 U	<0.79 U	<0.7 U	<0.79 U	<0.77 U	<0.71 U	<0.75 U	<0.59 U	<0.57 U	
4-NITROPHENOL	--	<2.4 U	<1.4 U	<1.4 U	<1.5 U	<1.3 U	<1.3 U	<1.3 U	<1.5 U	<1.2 U	<1.4 U	<1.3 U	<1.5 U	<1.4 U	<1.5 U	<1.4 U	<1.9 U	<1.5 U	<1.3 U	<2 U	<1.6 U	<1.6 U	<1.4 U	<1.6 U	<1.5 U	<1.4 U	<1.5 U	<1.2 U	<1.1 U
ACENAPHTHENE	9.82	<0.24 U	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	<0.19 U	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	<0.16 U	<0.15 U	<0.14 U	<0.15 U	<0.12 U	<0.11 U	<0.11 U	
ACENAPHTHYLENE	9.04	0.0244 J	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	<0.19 U	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	<0.16 U	<0.15 U	<0.14 U	<0.15 U	<0.12 U	<0.11 U	<0.11 U	
ANTHRACENE	11.88	0.0322 J	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	<0.12 U	<0.14 U	<0.13 U	<0.15 U	0.0193 J	<0.14 U	<0.15 U	<0.19 U	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	<0.16 U	<0.15 U	<0.14 U	<0.15 U	<0.12 U	<0.11 U	
BENZO(A)ANTHRACENE	16.82	0.132 J	<0.14 U	<0.14 U	0.0271 J	<0.13 U	<0.13 U	<0.13 U	<0.15 U	0.0440 J	<0.12 U	<0.14 U	<0.13 U	0.0244 J	<0.14 U	<0.15 U	0.0552 J	<0.14 U	<0.13 U	0.0436 J	0.0408 J	<0.14 U	0.0487 J	0.0556 J	0.0271 J	0.0692 J	0.0442 J	<0.11 U	<0.11 U
BENZO(A)PYRENE	19.28	0.143 J	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	0.0417 J	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	0.0559 J	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	0.0543 J	0.0617 J	0.0239 J	0.0649 J	0.0410 J	0.0216 J	
BENZO(B)FLUORANTHENE	19.58	0.148 J	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	0.0406 J	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	0.0540 J	<0.14 U	<0.13 U	<0.2 U	<0.16 U	<0.14 U	0.0428 J	0.0616 J	<0.14 U	0.0882 J	0.0443 J	<0.11 U	<0.11 U
BENZO(G,H,I)PERYLENE	21.9	0.0958 J	<0.14 U	<0.14 U	<0.15 U	<0.13 U	<0.13 U	<0.13 U	<0.15 U	<0.12 U	<0.14 U	<0.13 U	<0.15 U	<0.14 U	<0.15 U	<0.19 U	<0.14 U	&											

Notes:
SVOC - Semi-Volatile Organic Compound.
All units are in milligrams per kilogram (mg/kg).
* - UTC-Developed criteria.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
R - Concentration rejected during validation.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 4
SVOC Screening Table
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria - Class A	Sanders Creek									
		SDS8	SDS8 (Dup)	SDS8	SDS8 (Dup)	SDS8	SDS8 (Dup)	SDS9	SDS9	SDS9	
		11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013	11/5/2013
		0 - 6	0 - 6	6 - 12	6 - 12	18 - 24	18 - 24	0 - 6	6 - 12	18 - 24	
Sample ID											
Sample Date											
Sample Interval (inches)											
Chemical Name											
1,2,4-TRICHLOROBENZENE	2.14	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
1,2-DICHLOROBENZENE	0.28	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
1,3-DICHLOROBENZENE	1.8	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
1,4-DICHLOROBENZENE	0.72	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
2,4,5-TRICHLOROPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2,4,6-TRICHLOROPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2,4-DICHLOROPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2,4-DIMETHYLPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2,4-DINITROPHENOL	--	< 1.5 U	< 1.3 U	< 1.6 U	< 1.5 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.8 U	< 1.3 U	
2,4-DINITROTOLUENE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2,6-DINITROTOLUENE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2-CHLORONAPHTHALENE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
2-CHLOROPHENOL	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
2-METHYLNAPHTHALENE	0.586*	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	< 0.13 U	< 0.13 U	0.0240 J	< 0.13 U	
2-METHYLPHENOL (O-CRESOL)	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2-NITROANILINE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
2-NITROPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
3,3'-DICHLOROBENZIDINE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
3-NITROANILINE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4,6-DINITRO-2-METHYLPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4-BROMOPHENYL PHENYL ETHER	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
4-CHLORO-3-METHYLPHENOL	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4-CHLOROANILINE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4-CHLOROPHENYL PHENYL ETHER	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
4-METHYLPHENOL (P-CRESOL)	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4-NITROANILINE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
4-NITROPHENOL	--	< 1.5 U	< 1.3 U	< 1.6 U	< 1.5 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.8 U	< 1.3 U	
ACENAPHTHENE	9.82	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	< 0.13 U	0.0182 J	0.0724 J	< 0.13 U	
ACENAPHTHYLENE	9.04	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	0.0243 J	< 0.13 U	0.0346 J	< 0.13 U	
ANTHRACENE	11.88	0.0250 J	< 0.13 U	< 0.16 U	0.0219 J	< 0.13 U	0.0327 J	0.0366 J	0.192	0.0171 J	
BENZO(A)ANTHRACENE	16.82	0.12 J	0.0319 J	0.0722 J	0.132 J	0.0239 J	0.102 J	0.164	0.913	0.0778 J	
BENZO(A)PYRENE	19.28	0.11 J	0.0273 J	0.0794 J	0.117 J	< 0.13 U	0.111 J	0.161	0.943	0.0729 J	
BENZO(B)FLUORANTHENE	19.58	0.115 J	0.0323 J	0.0789 J	0.119 J	< 0.13 U	0.11 J	0.148	1.04	0.0843 J	
BENZO(G,H,I)PERYLENE	21.9	0.0634 J	0.0191 J	0.0486 J	0.0872 J	< 0.13 U	0.0683 J	0.0971 J	0.631	0.0525 J	
BENZO(K)FLUORANTHENE	19.6	0.101 J	0.0212 J	0.0685 J	0.122 J	< 0.13 U	0.0746 J	0.149	0.773	0.0523 J	
BENZYL BUTYL PHTHALATE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
BIS(2-CHLOROETHOXY) METHANE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
BIS(2-CHLOROISOPROPYL) ETHER	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
BIS(2-ETHYLHEXYL) PHTHALATE	180*	0.0937 J	0.167 J	0.112 J	0.135 J	0.0359 J	< 0.31 U	< 0.33 U	0.123 J	0.0423 J	
CARBAZOLE	--	< 0.15 U	< 0.13 U	< 0.16 U	0.0201 J	< 0.13 U	0.0202 J	0.0310 J	0.178 J	0.0157 J	
CHRYSENE	16.86	0.133 J	0.0292 J	0.101 J	0.136 J	0.0208 J	0.11 J	0.176	1	0.0750 J	
DIBENZ(A,H)ANTHRACENE	22.44	< 0.15 U	< 0.13 U	< 0.16 U	0.0324 J	< 0.13 U	< 0.13 U	< 0.13 U	0.184	< 0.13 U	
DIBENZOFURAN	0.831*	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	< 0.13 U	< 0.13 U	0.0469 J	< 0.13 U	
DIETHYL PHTHALATE	1.21*	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
DIMETHYL PHTHALATE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
DI-N-BUTYL PHTHALATE	6.47*	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
DI-N-OCTYLPHTHALATE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
FLUORANTHENE	14.16	0.283	0.0568 J	0.191	0.275	0.0425 J	0.22	0.349	1.92	0.162	
FLUORENE	10.78	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	< 0.13 U	< 0.13 U	0.0715 J	< 0.13 U	
HEXACHLOROBENZENE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
HEXACHLOROBUTADIENE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
HEXACHLOROXYCLOPENTADIENE	--	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
HEXACHLOROETHANE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
INDENO(1,2,3-C,D)PYRENE	22.3	0.0645 J	< 0.13 U	0.0410 J	0.0756 J	< 0.13 U	0.0600 J	0.0989 J	0.586	0.0495 J	
ISOPHORONE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
NAPHTHALENE	7.7	< 0.15 U	< 0.13 U	< 0.16 U	< 0.15 U	< 0.13 U	< 0.13 U	< 0.13 U	0.0303 J	< 0.13 U	
NITROBENZENE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
N-NITROSODI-N-PROPYLAMINE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
N-NITROSODIPHENYLAMINE	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
PENTACHLOROPHENOL	14	< 0.77 U	< 0.63 U	< 0.81 U	< 0.77 U	< 0.64 U	< 0.63 U	< 0.65 U	< 0.89 U	< 0.63 U	
PHENANTHRENE	11.94	0.138 J	0.0348 J	0.0911 J	0.125 J	0.0242 J	0.125 J	0.195	1.01	0.0827 J	
PHENOL	--	< 0.39 U	< 0.32 U	< 0.41 U	< 0.38 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.44 U	< 0.31 U	
PYRENE	13.96	0.234	0.0487 J	0.162	0.229	0.0341 J	0.196	0.293	1.69	0.138	

Notes:
SVOC - Semi-Volatile Organic Compound.
All units are in milligrams per kilogram (mg/kg).
* - UTC-Developed criteria.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
R - Concentration rejected during validation.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria			Transect A																																			
Sample ID				SDA1			SDA1			SDA1			SDA2			SDA2			SDA2			SDA3			SDA3			SDA3			SDA4			SDA4			SDA4		
Sample Date				11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013			11/8/2013			11/8/2013			11/8/2013		
Sample Interval (inches)				0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU				
ACENAPHTHENE	491	9.82	0.0685	2.4729	0.0050	0.0031 J	0.2385	0.0005	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0051 U	--	--	< 0.0046 U	--	--	0.0029 J	0.5653	0.0012	< 0.0046 U	--	--	0.0529	1.1914	0.0024	0.0182	0.4764	0.0010	< 0.0058 U	--	--	
ACENAPHTHYLENE	452	9.04	0.785	28.3394	0.0627	0.0224	1.7231	0.0038	< 0.0045 U	--	--	0.0103	1.0457	0.0023	0.0055	0.3374	0.0007	0.0129	2.0379	0.0045	< 0.0046 U	--	--	0.0031 J	0.6043	0.0013	< 0.0046 U	--	--	0.456	10.2703	0.0227	0.0409	1.0707	0.0024	0.0031 J	0.1131	0.0003	
ANTHRACENE	594	11.88	0.753	27.1841	0.0458	0.0174	1.3385	0.0023	< 0.0045 U	--	--	0.0081	0.8223	0.0014	0.0045 J	0.2761	0.0005	0.0098	1.5482	0.0026	0.0035 J	0.4667	0.0008	0.0065	1.2671	0.0021	< 0.0046 U	--	--	0.44	9.9099	0.0167	0.0643	1.6832	0.0028	< 0.0058 U	--	--	
BENZO(A)ANTHRACENE	841	16.82	0.596	21.5162	0.0256	0.0238	1.8308	0.0022	< 0.0045 U	--	--	0.0139	1.4112	0.0017	0.0058	0.3558	0.0004	0.0135	2.1327	0.0025	0.0058	0.7733	0.0009	0.0128	2.4951	0.0030	< 0.0046 U	--	--	0.465	10.4730	0.0125	0.151	3.9529	0.0047	0.0043 J	0.1569	0.0002	
BENZO(A)PYRENE	964	19.28	0.895	32.3105	0.0335	0.0372	2.8615	0.0030	< 0.0045 U	--	--	0.0200	2.0305	0.0021	0.0096	0.5890	0.0006	0.0228	3.6019	0.0037	0.0105	1.4000	0.0015	0.0139	2.7096	0.0028	0.0030 J	0.7732	0.0008	0.621	13.9865	0.0145	0.173	4.5288	0.0047	0.0049 J	0.1788	0.0002	
BENZO(B)FLUORANTHENE	979	19.58	0.81	29.2419	0.0299	0.0342	2.6308	0.0027	< 0.0045 U	--	--	0.0194	1.9695	0.0020	0.0097	0.5951	0.0006	0.0223	3.5229	0.0036	0.0113	1.5067	0.0015	0.0111	2.1637	0.0022	< 0.0046 U	--	--	0.574	12.9279	0.0132	0.144	3.7696	0.0039	0.0040 J	0.1460	0.0001	
BENZO(G,H,I)PERYLENE	1095	21.9	0.838	30.2527	0.0276	0.0332	2.5538	0.0023	< 0.0045 U	--	--	0.0161	1.6345	0.0015	0.0087	0.5337	0.0005	0.0199	3.1438	0.0029	0.0064	0.8533	0.0008	0.0078	1.5205	0.0014	< 0.0046 U	--	--	0.52	11.7117	0.0107	0.115	3.0105	0.0027	0.0031 J	0.1131	0.0001	
BENZO(K)FLUORANTHENE	980	19.6	0.778	28.0866	0.0287	0.0356	2.7385	0.0028	< 0.0045 U	--	--	0.0189	1.9188	0.0020	0.0092	0.5644	0.0006	0.0214	3.3807	0.0034	0.0104	1.3867	0.0014	0.0118	2.3002	0.0023	< 0.0046 U	--	--	0.566	12.7477	0.0130	0.147	3.8482	0.0039	< 0.0058 U	--	--	
BENZO(E)PYRENE	967	19.34	0.875	31.5884	0.0327	0.0376	2.8923	0.0030	< 0.0045 U	--	--	0.0185	1.8782	0.0019	0.0101	0.6196	0.0006	0.0228	3.6019	0.0037	0.0130	1.7333	0.0018	0.0091	1.7739	0.0018	< 0.0046 U	--	--	0.54	12.1622	0.0126	0.119	3.1152	0.0032	0.0034 J	0.1241	0.0001	
C1-Benzanthracenes/Chrysenes	930	18.6	0.517	18.6643	0.0201	0.0213	1.6385	0.0018	< 0.0045 U	--	--	0.0115	1.1675	0.0013	0.0049	0.3006	0.0003	0.0122	1.9273	0.0021	0.0145	1.9333	0.0021	0.0067	1.3060	0.0014	< 0.0046 U	--	--	0.358	8.0631	0.0087	0.0693	1.8141	0.0020	0.0037 J	0.1350	0.0001	
C1-Fluoranthenes/Pyrenes	769	15.38	0.79	28.5199	0.0371	0.0278	2.1385	0.0028	< 0.0045 U	--	--	0.0162	1.6447	0.0021	0.0076	0.4663	0.0006	0.0165	2.6066	0.0034	0.0108	1.4400	0.0019	0.0126	2.4561	0.0032	0.0026 J	0.6701	0.0009	0.549	12.3649	0.0161	0.127	3.3246	0.0043	0.0063	0.2299	0.0003	
C1-Fluorenes	611	12.22	0.0806	2.9097	0.0048	0.0041 J	0.3154	0.0005	< 0.0045 U	--	--	0.0028 J	0.2843	0.0005	< 0.0046 U	--	--	0.0027 J	0.4265	0.0007	0.0024 J	0.3200	0.0005	< 0.0046 U	--	--	< 0.0046 U	--	--	0.0611	1.3761	0.0023	0.0114	0.2984	0.0005	< 0.0058 U	--	--	
C1-Naphthalenes	445	8.9	0.0950	3.4296	0.0077	0.0058	0.4462	0.0010	< 0.0045 U	--	--	0.0039 J	0.3959	0.0009	< 0.0046 U	--	--	0.0033 J	0.5213	0.0012	0.0052	0.6933	0.0016	0.0048	0.9357	0.0021	< 0.0046 U	--	--	0.13	2.9279	0.0066	0.0463	1.2120	0.0027	< 0.0058 U	--	--	
C1-Phenanthrenes/Anthracenes	670	13.4	0.507	18.3032	0.0273	0.0173	1.3308	0.0020	< 0.0045 U	--	--	0.0117	1.1878	0.0018	0.0051	0.3129	0.0005	0.0103	1.6272	0.0024	0.0082	1.0933	0.0016	0.0106	2.0663	0.0031	0.0025 J	0.6443	0.0010	0.503	11.3288	0.0169	0.103	2.6963	0.0040	0.0060	0.2190	0.0003	
C2-Benzanthracenes/Chrysenes	1009	20.18	0.261	9.4224	0.0093	0.0136	1.0462	0.0010	< 0.0045 U	--	--	0.0078	0.7919	0.0008	0.0035 J	0.2147	0.0002	0.0076	1.2006	0.0012	0.0177	2.3600	0.0023	0.0031 J	0.6043	0.0006	< 0.0046 U	--	--	0.193	4.3468	0.0043	0.0319	0.8351	0.0008	< 0.0058 U	--	--	
C2-Fluorenes	687	13.74	0.113	4.0794	0.0059	0.0063	0.4846	0.0007	< 0.0045 U	--	--	0.0032 J	0.3249	0.0005	< 0.0046 U	--	--	< 0.0051 U	--	--	0.0044 J	0.5867	0.0009	0.0029 J	0.5653	0.0008	< 0.0046 U	--	--	0.128	2.8829	0.0042	0.0217	0.5681	0.0008	0.0040 J	0.1460	0.0002	
C2-Naphthalenes	510	10.2	0.122	4.4043	0.0086	0.0063	0.4846	0.0010	< 0.0045 U	--	--	0.0040 J	0.4061	0.0008	0.0024 J	0.1472	0.0003	0.0034 J	0.5371	0.0011	0.0065	0.8667	0.0017	0.0060	1.1696	0.0023	0.0023 J	0.5928	0.0012	0.219	4.9324	0.0097	0.0610	1.5969	0.0031	< 0.0058 U	--	--	
C2-Phenanthrenes/Anthracenes	745	14.9	0.394	14.2238	0.0191	0.0125	0.9615	0.0013	< 0.0045 U	--	--	0.0069	0.7005	0.0009	0.0033 J	0.2025	0.0003	0.0056	0.8847	0.0012	0.0093	1.2400	0.0017	0.0046	0.8967	0.0012	< 0.0046 U	--	--	0.412	9.2793	0.0125	0.0722	1.8901	0.0025	0.0052 J	0.1898	0.0003	
C3-Benzanthracenes/Chrysenes	1213	24.26	0.237	8.5560	0.0071	0.0102	0.7846	0.0006	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0051 U	--	--	0.0198	2.6400	0.0022	< 0.0046 U	--	--	< 0.0046 U	--	--	0.135	3.0405	0.0025	0.0234	0.6126	0.0005	< 0.0058 U	--	--	
C3-Fluorenes	768	15.36	0.0702	2.5343	0.0033	< 0.0044 U	--	--	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0051 U	--	--	0.0037 J	0.4933	0.0006	< 0.0046 U	--	--	< 0.0046 U	--	--	0.151	3.4009	0.0044	0.0149	0.3901	0.0005	< 0.0058 U	--	--	
C3-Naphthalenes	581	11.62	0.114	4.1155	0.0071	0.0056	0.4308	0.0007	< 0.0045 U	--	--	0.0040 J	0.4061	0.0007	0.0023 J	0.1411	0.0002	0.0032 J	0.5055	0.0009	0.0060	0.8000	0.0014	0.0041 J	0.7992	0.0014	< 0.0046 U	--	--	0.238	5.3604	0.0092	0.0562	1.4712	0.0025	< 0.0058 U	--	--	
C3-Phenanthrenes/Anthracenes	830	16.6	0.186	6.7148	0.0081	0.0069	0.5308	0.0006	< 0.0045 U	--	--	0.0040 J	0.4061	0.0005	< 0.0046 U	--	--	0.0036 J	0.5687	0.0007	0.0108	1.4400	0.0017	0.0028 J	0.5458	0.0007	< 0.0046 U	--	--	0.196	4.4144	0.0053	0.0345	0.9031	0.0011	0.0029 J	0.1058	0.0001	
C4-Benzanthracenes/Chrysenes	1213	24.26	0.117	4.2238	0.0035	< 0.0044 U	--	--	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0051 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--	0.0865	1.9482	0.0016	< 0.0053 U	--	--	< 0.0058 U	--	--	
C4-Naphthalenes	657	13.14	0.0827	2.9856	0.0045	0.0073	0.5615	0.0009	< 0.0045 U	--	--	0.0034 J	0.3452	0.0005	0.0025 J	0.1534	0.0002	0.0025 J	0.3949	0.0006	0.0048	0.6400	0.0010	0.0049	0.9552	0.0015	< 0.0046 U	--	--	0.195	4.3919	0.0067	0.0400	1.0471	0.0016	< 0.0058 U	--	--	
C4-Phenanthrenes/Anthracenes	670	13.4	0.0987	3.5632	0.0053	< 0.0044 U	--	--	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0051 U	--	--	0.0067	0.8933	0.0013	< 0.0046 U	--	--	< 0.0046 U	--	--	0.0897	2.0203	0.0030	0.0169	0.4424	0.0007	< 0.0058 U	--	--	
CHRYSENE	843	16.86	0.824	29.7473	0.0353	0.0353	2.7154	0.0032	< 0.0045 U	--	--	0.0211	2.1421	0.0025	0.0095	0.5828	0.0007	0.0216	3.4123	0.0040	0.0137	1.8267	0.0022	0.0151	2.9435	0.0035	0.0028 J	0.7216	0.0009	0.643	14.4820	0.0172	0.18	4.7120	0.0056	&			

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect B																													
Sample ID			SDB1			SDB1			SDB1			SDB2			SDB2 (Dup)			SDB2			SDB2			SDB4			SDB4			SDB4		
Sample Date			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013		
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0050 J	0.0990	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	< 0.0059 U	--	--	0.0034 J	0.0912	0.0002	< 0.0052 U	--	--	< 0.0050 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0045 U	--	--
ACENAPHTHYLENE	452	9.04	0.0128	0.2535	0.0006	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0098	0.3131	0.0007	0.0125	0.3351	0.0007	0.0028 J	0.1628	0.0004	< 0.0050 U	--	--	0.0093	0.2308	0.0005	< 0.0053 U	--	--	< 0.0045 U	--	--
ANTHRACENE	594	11.88	0.0129	0.2554	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0104	0.3323	0.0006	0.0138	0.3700	0.0006	0.0028 J	0.1628	0.0003	< 0.0050 U	--	--	0.0093	0.2308	0.0004	< 0.0053 U	--	--	< 0.0045 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.0310	0.6139	0.0007	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0253	0.8083	0.0010	0.0333	0.8928	0.0011	0.0042 J	0.2442	0.0003	< 0.0050 U	--	--	0.0333	0.8263	0.0010	0.0067	0.2900	0.0003	0.0030 J	0.6012	0.0007
BENZO(A)PYRENE	964	19.28	0.0378	0.7485	0.0008	0.0031 J	0.1640	0.0002	< 0.0048 U	--	--	0.0295	0.9425	0.0010	0.0373	1.0000	0.0010	0.0048 J	0.2791	0.0003	< 0.0050 U	--	--	0.0404	1.0025	0.0010	0.0075	0.3247	0.0003	0.0033 J	0.6613	0.0007
BENZO(B)FLUORANTHENE	979	19.58	0.0320	0.6337	0.0006	0.0027 J	0.1429	0.0001	< 0.0048 U	--	--	0.0259	0.8275	0.0008	0.0349	0.9357	0.0010	0.0039 J	0.2267	0.0002	< 0.0050 U	--	--	0.0356	0.8834	0.0009	0.0064	0.2771	0.0003	0.0030 J	0.6012	0.0006
BENZO(G,H,I)PERYLENE	1095	21.9	0.0234	0.4634	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0196	0.6262	0.0006	0.0248	0.6649	0.0006	0.0030 J	0.1744	0.0002	< 0.0050 U	--	--	0.0250	0.6203	0.0006	0.0042 J	0.1818	0.0002	< 0.0045 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.0338	0.6693	0.0007	0.0025 J	0.1323	0.0001	< 0.0048 U	--	--	0.0271	0.8658	0.0009	0.0348	0.9330	0.0010	0.0042 J	0.2442	0.0002	< 0.0050 U	--	--	0.0367	0.9107	0.0009	0.0069	0.2987	0.0003	0.0031 J	0.6212	0.0006
BENZO(E)PYRENE	967	19.34	0.0271	0.5366	0.0006	0.0023 J	0.1217	0.0001	< 0.0048 U	--	--	0.0215	0.6869	0.0007	0.0284	0.7614	0.0008	0.0036 J	0.2093	0.0002	< 0.0050 U	--	--	0.0290	0.7196	0.0007	0.0051 J	0.2208	0.0002	< 0.0045 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0207	0.4099	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0160	0.5112	0.0005	0.0202	0.5416	0.0006	0.0034 J	0.1977	0.0002	< 0.0050 U	--	--	0.0184	0.4566	0.0005	0.0047 J	0.2035	0.0002	< 0.0045 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0327	0.6475	0.0008	0.0026 J	0.1376	0.0002	< 0.0048 U	--	--	0.0266	0.8498	0.0011	0.0358	0.9598	0.0012	0.0066	0.3837	0.0005	< 0.0050 U	--	--	0.0301	0.7469	0.0010	0.0077	0.3333	0.0004	0.0032 J	0.6413	0.0008
C1-Fluorenes	611	12.22	0.0049 J	0.0970	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0057 J	0.1821	0.0003	0.0066	0.1769	0.0003	0.0033 J	0.1919	0.0003	< 0.0050 U	--	--	0.0037 J	0.0918	0.0002	0.0027 J	0.1169	0.0002	< 0.0045 U	--	--
C1-Naphthalenes	445	8.9	0.0093	0.1842	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0082	0.2620	0.0006	0.0099	0.2654	0.0006	< 0.0052 U	--	--	< 0.0050 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0045 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0256	0.5069	0.0008	0.0026 J	0.1376	0.0002	< 0.0048 U	--	--	0.0265	0.8466	0.0013	0.0338	0.9062	0.0014	0.0067	0.3895	0.0006	< 0.0050 U	--	--	0.0208	0.5161	0.0008	0.0064	0.2771	0.0004	0.0026 J	0.5210	0.0008
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0125	0.2475	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0080	0.2556	0.0003	0.0081	0.2172	0.0002	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0097	0.2407	0.0002	0.0027 J	0.1169	0.0001	< 0.0045 U	--	--
C2-Fluorenes	687	13.74	0.0068	0.1347	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0062	0.1981	0.0003	0.0075	0.2011	0.0003	0.0029 J	0.1686	0.0002	< 0.0050 U	--	--	0.0042 J	0.1042	0.0002	< 0.0053 U	--	--	< 0.0045 U	--	--
C2-Naphthalenes	510	10.2	0.0093	0.1842	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0112	0.3578	0.0007	0.0132	0.3539	0.0007	0.0052	0.3023	0.0006	0.0036 J	0.3333	0.0007	0.0059 J	0.1464	0.0003	0.0029 J	0.1255	0.0002	< 0.0045 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0141	0.2792	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0134	0.4281	0.0006	0.0165	0.4424	0.0006	0.0048 J	0.2791	0.0004	< 0.0050 U	--	--	0.0113	0.2804	0.0004	0.0038 J	0.1645	0.0002	< 0.0045 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0061 U	--	--	< 0.0045 U	--	--	< 0.0048 U	--	--	< 0.0059 U	--	--	< 0.0065 U	--	--	< 0.0052 U	--	--	< 0.0050 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0045 U	--	--
C3-Fluorenes	768	15.36	< 0.0061 U	--	--	< 0.0045 U	--	--	< 0.0048 U	--	--	< 0.0059 U	--	--	< 0.0065 U	--	--	< 0.0052 U	--	--	< 0.0050 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0045 U	--	--
C3-Naphthalenes	581	11.62	0.0089	0.1762	0.0003	0.0027 J	0.1429	0.0002	< 0.0048 U	--	--	0.0136	0.4345	0.0007	0.0208	0.5576	0.0010	0.0037 J	0.2151	0.0004	0.0025 J	0.2315	0.0004	0.0060	0.1489	0.0003	0.0030 J	0.1299	0.0002	< 0.0045 U	--	--
C3-Phenanthrenes/Anthracenes	830	16.6	0.0087	0.1723	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0074	0.2364	0.0003	0.0099	0.2654	0.0003	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0067	0.1663	0.0002	< 0.0053 U	--	--	< 0.0045 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0061 U	--	--	< 0.0045 U	--	--	< 0.0048 U	--	--	< 0.0059 U	--	--	< 0.0065 U	--	--	< 0.0052 U	--	--	< 0.0050 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0045 U	--	--
C4-Naphthalenes	657	13.14	0.0103	0.2040	0.0003	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0125	0.3994	0.0006	< 0.0065 U	--	--	0.0067	0.3895	0.0006	< 0.0050 U	--	--	0.0055 J	0.1365	0.0002	0.0027 J	0.1169	0.0002	< 0.0045 U	--	--
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.0061 U	--	--	< 0.0045 U	--	--	< 0.0048 U	--	--	< 0.0059 U	--	--	< 0.0065 U	--	--	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0031 J	0.0769	0.0001	< 0.0053 U	--	--	< 0.0045 U	--	--
CHRYSENE	843	16.86	0.0410	0.8119	0.0010	0.0030 J	0.1587	0.0002	< 0.0048 U	--	--	0.0350	1.1182	0.0013	0.0470	1.2601	0.0015	0.0060	0.3488	0.0004	< 0.0050 U	--	--	0.0453	1.1241	0.0013	0.0089	0.3853	0.0005	0.0037 J	0.7415	0.0009
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0073	0.1446	0.0001	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0052 J	0.1661	0.0001	0.0065	0.1743	0.0002	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0067	0.1663	0.0001	< 0.0053 U	--	--	< 0.0045 U	--	--
FLUORANTHENE	708	14.16	0.0756	1.4970	0.0021	0.0052	0.2751	0.0004	< 0.0048 U	--	--	0.0629	2.0096	0.0028	0.0862	2.3110	0.0033	0.0101	0.5872	0.0008	< 0.0050 U	--	--	0.0789	1.9578	0.0028	0.0160	0.6926	0.0010	0.0069	1.3828	0.0020
FLUORENE	539	10.78	0.0050 J	0.0990	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0044 J	0.1406	0.0003	0.0057 J	0.1528	0.0003	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0032 J	0.0794	0.0001	< 0.0053 U	--	--	< 0.0045 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0240	0.4752	0.0004	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0192 J	0.6134	0.0006	0.0233 J	0.6247	0.0006	0.0028 J	0.1628	0.0001	< 0.0050 U	--	--	0.0270	0.6700	0.0006	0.0045 J	0.1948	0.0002	< 0.0045 U	--	--
NAPHTHALENE	385	7.7	0.0093	0.1842	0.0005	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0125	0.3994	0.0010	0.0151	0.4048	0.0011	0.0047 J	0.2733	0.0007	< 0.0050 U	--	--	0.0058 J	0.1439	0.0004	0.0027 J	0.1169	0.0003	< 0.0045 U	--	--
PERYLENE	967	19.34	0.0095	0.1881	0.0002	< 0.0045 U	--	--	< 0.0048 U	--	--	0.0076	0.2428	0.0003	0.0092	0.2466	0.0003	< 0.0052 U	--	--	< 0.0050 U	--	--	0.0102	0.2531	0.0003	< 0.0053 U	--	--	< 0.0045 U	--	--
PHENANTHRENE	597	11.94	0.0451	0.8931	0.0015	0.0034 J	0.1799	0.0003	< 0.0048 U	--	--	0.0362																				

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect C																										
Sample ID			SDC1			SDC1			SDC1			SDC2			SDC2			SDC2			SDC3			SDC3			SDC3		
Sample Date			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013					
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	< 0.0066 U	--	--	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--
ACENAPHTHYLENE	452	9.04	0.0085	0.2457	0.0005	0.0038 J	0.1891	0.0004	< 0.0050 U	--	--	0.0048 J	0.2202	0.0005	< 0.0050 U	--	--	0.0076	0.3858	0.0009	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
ANTHRACENE	594	11.88	0.0088	0.2543	0.0004	0.0040 J	0.1990	0.0003	< 0.0050 U	--	--	0.0043 J	0.1972	0.0003	< 0.0050 U	--	--	0.0077	0.3909	0.0007	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.0264	0.7630	0.0009	0.0120	0.5970	0.0007	< 0.0050 U	--	--	0.0094	0.4312	0.0005	< 0.0050 U	--	--	0.0178	0.9036	0.0011	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
BENZO(A)PYRENE	964	19.28	0.0336	0.9711	0.0010	0.0149	0.7413	0.0008	0.0029 J	0.2266	0.0002	0.0120	0.5505	0.0006	0.0030 J	0.4532	0.0005	< 0.0047 U	--	--	0.0205	1.0406	0.0011	0.0023 J	0.2312	0.0002	< 0.0046 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.0317	0.9162	0.0009	0.0134	0.6667	0.0007	0.0030 J	0.2344	0.0002	0.0108	0.4954	0.0005	0.0025 J	0.3776	0.0004	< 0.0047 U	--	--	0.0183	0.9289	0.0009	< 0.0045 U	--	--	< 0.0046 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.0224	0.6474	0.0006	0.0094	0.4677	0.0004	< 0.0050 U	--	--	0.0085	0.3899	0.0004	< 0.0050 U	--	--	0.0131	0.6650	0.0006	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.0314	0.9075	0.0009	0.0136	0.6766	0.0007	0.0028 J	0.2188	0.0002	0.0112	0.5138	0.0005	0.0026 J	0.3927	0.0004	< 0.0047 U	--	--	0.0185	0.9391	0.0010	< 0.0045 U	--	--	< 0.0046 U	--	--
BENZO(E)PYRENE	967	19.34	0.0258	0.7457	0.0008	0.0108	0.5373	0.0006	< 0.0050 U	--	--	0.0091	0.4174	0.0004	< 0.0050 U	--	--	0.0150	0.7614	0.0008	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0148	0.4277	0.0005	0.0078	0.3881	0.0004	< 0.0050 U	--	--	0.0073	0.3349	0.0004	< 0.0050 U	--	--	0.0116	0.5888	0.0006	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0236	0.6821	0.0009	0.0124	0.6169	0.0008	0.0034 J	0.2656	0.0003	0.0124	0.5688	0.0007	0.0034 J	0.5136	0.0007	< 0.0047 U	--	--	0.0202	1.0254	0.0013	0.0034 J	0.3417	0.0004	0.0024 J	0.3519	0.0005
C1-Fluorenes	611	12.22	0.0038 J	0.1098	0.0002	0.0026 J	0.1294	0.0002	< 0.0050 U	--	--	0.0031 J	0.1422	0.0002	< 0.0050 U	--	--	0.0034 J	0.1726	0.0003	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C1-Naphthalenes	445	8.9	0.0050 J	0.1445	0.0003	0.0034 J	0.1692	0.0004	< 0.0050 U	--	--	0.0057	0.2615	0.0006	< 0.0050 U	--	--	0.0056	0.2843	0.0006	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0165	0.4769	0.0007	0.0103	0.5124	0.0008	0.0038 J	0.2969	0.0004	0.0126	0.5780	0.0009	0.0034 J	0.5136	0.0008	< 0.0047 U	--	--	0.0183	0.9289	0.0014	0.0032 J	0.3216	0.0005	< 0.0046 U	--	--
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0080	0.2312	0.0002	0.0039 J	0.1940	0.0002	< 0.0050 U	--	--	0.0048 J	0.2202	0.0002	< 0.0050 U	--	--	0.0059	0.2995	0.0003	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C2-Fluorenes	687	13.74	0.0041 J	0.1185	0.0002	0.0026 J	0.1294	0.0002	< 0.0050 U	--	--	0.0038 J	0.1743	0.0003	< 0.0050 U	--	--	0.0043 J	0.2183	0.0003	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C2-Naphthalenes	510	10.2	0.0056 J	0.1618	0.0003	0.0036 J	0.1791	0.0004	< 0.0050 U	--	--	0.0080	0.3670	0.0007	0.0034 J	0.5136	0.0010	0.0024 J	0.5298	0.0010	0.0089	0.4518	0.0009	0.0032 J	0.3216	0.0006	0.0042 J	0.6158	0.0012
C2-Phenanthrenes/Anthracenes	745	14.9	0.0082	0.2370	0.0003	0.0055	0.2736	0.0004	< 0.0050 U	--	--	0.0067	0.3073	0.0004	< 0.0050 U	--	--	0.0112	0.5685	0.0008	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0066 U	--	--	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--
C3-Fluorenes	768	15.36	< 0.0066 U	--	--	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--
C3-Naphthalenes	581	11.62	0.0068	0.1965	0.0003	0.0034 J	0.1692	0.0003	< 0.0050 U	--	--	0.0066	0.3028	0.0005	0.0031 J	0.4683	0.0008	< 0.0047 U	--	--	0.0063	0.3198	0.0006	0.0030 J	0.3015	0.0005	0.0027 J	0.3959	0.0007
C3-Phenanthrenes/Anthracenes	830	16.6	0.0049 J	0.1416	0.0002	0.0026 J	0.1294	0.0002	< 0.0050 U	--	--	0.0037 J	0.1697	0.0002	< 0.0050 U	--	--	0.0059	0.2995	0.0004	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0066 U	--	--	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--
C4-Naphthalenes	657	13.14	0.0052 J	0.1503	0.0002	0.0032 J	0.1592	0.0002	< 0.0050 U	--	--	0.0063	0.2890	0.0004	0.0045 J	0.6798	0.0010	0.0038 J	0.8389	0.0013	0.0063	0.3198	0.0005	0.0043 J	0.4322	0.0007	0.0048	0.7038	0.0011
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.0066 U	--	--	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0046 U	--	--
CHRYSENE	843	16.86	0.0387	1.1185	0.0013	0.0175	0.8706	0.0010	0.0038 J	0.2969	0.0004	0.0151	0.6927	0.0008	0.0035 J	0.5287	0.0006	< 0.0047 U	--	--	0.0246	1.2487	0.0015	0.0028 J	0.2814	0.0003	< 0.0046 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0057 J	0.1647	0.0001	< 0.0051 U	--	--	< 0.0050 U	--	--	0.0036 J	0.1651	0.0001	< 0.0050 U	--	--	< 0.0047 U	--	--	0.0037 J	0.1878	0.0002	< 0.0045 U	--	--	< 0.0046 U	--	--
FLUORANTHENE	708	14.16	0.0651	1.8815	0.0027	0.0302	1.5025	0.0021	0.0068	0.5313	0.0008	0.0256	1.1743	0.0017	0.0059	0.8912	0.0013	< 0.0047 U	--	--	0.0446	2.2640	0.0032	0.0044 J	0.4422	0.0006	< 0.0046 U	--	--
FLUORENE	539	10.78	0.0034 J	0.0983	0.0002	< 0.0051 U	--	--	< 0.0050 U	--	--	< 0.0056 U	--	--	< 0.0050 U	--	--	< 0.0047 U	--	--	0.0033 J	0.1675	0.0003	< 0.0045 U	--	--	< 0.0046 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0235	0.6792	0.0006	0.0094	0.4677	0.0004	< 0.0050 U	--	--	0.0085	0.3899	0.0003	< 0.0050 U	--	--	0.0127	0.6447	0.0006	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
NAPHTHALENE	385	7.7	0.0065 J	0.1879	0.0005	0.0045 J	0.2239	0.0006	0.0027 J	0.2109	0.0005	0.0079	0.3624	0.0009	0.0033 J	0.4985	0.0013	< 0.0047 U	--	--	0.0079	0.4010	0.0010	0.0024 J	0.2412	0.0006	< 0.0046 U	--	--
PERYLENE	967	19.34	0.0084	0.2428	0.0003	0.0036 J	0.1791	0.0002	< 0.0050 U	--	--	0.0029 J	0.1330	0.0001	< 0.0050 U	--	--	0.0051	0.2589	0.0003	< 0.0045 U	--	--	< 0.0046 U	--	--	< 0.0046 U	--	--
PHENANTHRENE	597	11.94	0.0321	0.9277	0.0016	0.0170	0.8458	0.0014	0.0050	0.3906	0.0007	0.0162	0.7431	0.0012	0.0051	0.7704	0.0013	0.0027 J	0.5960	0.0010	0.0257	1.3046	0.0022	0.0034 J	0.3417	0.0006	0.0025 J	0.3666	0.0006
PYRENE	698	13.96	0.0544	1.5723	0.0023	0.0252	1.2537	0.0018	0.0055	0.4297	0.0006	0.0217	0.9954	0.0014	0.0050	0.7553	0.0011	< 0.0047 U	--	--	0.0379	1.9239	0.0028	0.0038 J	0.3819	0.0005	< 0.0046 U	--	--
TOC	--	--	34600	--	--	20100	--	--	12800	--	--	21800	--	--	6620	--	--	4530	--	--	19700	--	--	9950	--	--	6820	--	--
Total PAH Toxicity Units	--	--	--	--	0.0199	--	--	0.0165	--	--	0.0044	--	--	0.0160	--	--	0.0111	--	--	0.0033	--	--	0.0269	--	--	0.0057	--	--	0.0040

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity unit.
Black text indicates a detection (i.e

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect Sample ID Sample Date Sample Interval (inches)	NYSDEC Screening Criteria		Transect C																	
			SDC4			SDC4			SDC4			SDC5			SDC5			SDC5		
			11/8/2013			11/8/2013			11/8/2013			11/7/2013			11/7/2013			11/7/2013		
			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
ACENAPHTHYLENE	452	9.04	0.0110	0.2670	0.0006	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0087	0.2444	0.0005	0.0033 J	0.1610	0.0004	< 0.0045 U	--	--
ANTHRACENE	594	11.88	0.0113	0.2743	0.0005	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0079	0.2219	0.0004	0.0031 J	0.1512	0.0003	< 0.0045 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.0259	0.6286	0.0007	0.0037 J	0.6631	0.0008	< 0.0044 U	--	--	0.0210	0.5899	0.0007	0.0069	0.3366	0.0004	< 0.0045 U	--	--
BENZO(A)PYRENE	964	19.28	0.0295	0.7160	0.0007	0.0044 J	0.7885	0.0008	< 0.0044 U	--	--	0.0236	0.6629	0.0007	0.0079	0.3854	0.0004	< 0.0045 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.0235	0.5704	0.0006	0.0035 J	0.6272	0.0006	< 0.0044 U	--	--	0.0202	0.5674	0.0006	0.0066	0.3220	0.0003	< 0.0045 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.0178	0.4320	0.0004	0.0026 J	0.4659	0.0004	< 0.0044 U	--	--	0.0135	0.3792	0.0003	0.0047 J	0.2293	0.0002	< 0.0045 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.0268	0.6505	0.0007	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0209	0.5871	0.0006	0.0067	0.3268	0.0003	< 0.0045 U	--	--
BENZO[E]PYRENE	967	19.34	0.0196	0.4757	0.0005	0.0029 J	0.5197	0.0005	< 0.0044 U	--	--	0.0161	0.4522	0.0005	0.0053 J	0.2585	0.0003	< 0.0045 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0168	0.4078	0.0004	0.0024 J	0.4301	0.0005	< 0.0044 U	--	--	0.0128	0.3596	0.0004	0.0051 J	0.2488	0.0003	< 0.0045 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0287	0.6966	0.0009	0.0043 J	0.7706	0.0010	< 0.0044 U	--	--	0.0222	0.6236	0.0008	0.0083	0.4049	0.0005	< 0.0045 U	--	--
C1-Fluorenes	611	12.22	0.0039 J	0.0947	0.0002	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C1-Naphthalenes	445	8.9	0.0063	0.1529	0.0003	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0256	0.6214	0.0009	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0175	0.4916	0.0007	0.0075	0.3659	0.0005	< 0.0045 U	--	--
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0078	0.1893	0.0002	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0069	0.1938	0.0002	< 0.0060 U	--	--	< 0.0045 U	--	--
C2-Fluorenes	687	13.74	0.0078	0.1893	0.0003	0.0023 J	0.4122	0.0006	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C2-Naphthalenes	510	10.2	0.0098	0.2379	0.0005	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0045 J	0.1264	0.0002	0.0034 J	0.1659	0.0003	< 0.0045 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0188	0.4563	0.0006	0.0032 J	0.5735	0.0008	< 0.0044 U	--	--	0.0097	0.2725	0.0004	0.0040 J	0.1951	0.0003	< 0.0045 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C3-Fluorenes	768	15.36	0.0054 J	0.1311	0.0002	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C3-Naphthalenes	581	11.62	0.0108	0.2621	0.0005	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0057 J	0.1601	0.0003	0.0035 J	0.1707	0.0003	< 0.0045 U	--	--
C3-Phenanthrenes/Anthracenes	830	16.6	0.0096	0.2330	0.0003	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0050 J	0.1404	0.0002	< 0.0060 U	--	--	< 0.0045 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C4-Naphthalenes	657	13.14	0.0125	0.3034	0.0005	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
C4-Phenanthrenes/Anthracenes	670	13.4	0.0033 J	0.0801	0.0001	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
CHRYSENE	843	16.86	0.0334	0.8107	0.0010	0.0046	0.8244	0.0010	< 0.0044 U	--	--	0.0278	0.7809	0.0009	0.0092	0.4488	0.0005	< 0.0045 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0038 J	0.1067	0.0001	< 0.0060 U	--	--	< 0.0045 U	--	--
FLUORANTHENE	708	14.16	0.0598	1.4515	0.0021	0.0078	1.3978	0.0020	< 0.0044 U	--	--	0.0514	1.4438	0.0020	0.0173	0.8439	0.0012	< 0.0045 U	--	--
FLUORENE	539	10.78	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	< 0.0067 U	--	--	< 0.0060 U	--	--	< 0.0045 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0183	0.4442	0.0004	0.0026 J	0.4659	0.0004	< 0.0044 U	--	--	0.0143	0.4017	0.0004	0.0046 J	0.2244	0.0002	< 0.0045 U	--	--
NAPHTHALENE	385	7.7	< 0.0063 U	--	--	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0051 J	0.1433	0.0004	0.0032 J	0.1561	0.0004	< 0.0045 U	--	--
PERYLENE	967	19.34	0.0070	0.1699	0.0002	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0061 J	0.1713	0.0002	< 0.0060 U	--	--	< 0.0045 U	--	--
PHENANTHRENE	597	11.94	0.0325	0.7888	0.0013	< 0.0046 U	--	--	< 0.0044 U	--	--	0.0256	0.7191	0.0012	0.0109	0.5317	0.0009	< 0.0045 U	--	--
PYRENE	698	13.96	0.0515	1.2500	0.0018	0.0067	1.2007	0.0017	< 0.0044 U	--	--	0.0432	1.2135	0.0017	0.0144	0.7024	0.0010	< 0.0045 U	--	--
TOC	--	--	41200	--	--	5580	--	--	3100	--	--	35600	--	--	20500	--	--	1900	--	--
Total PAH Toxicity Units	--	--	--	--	0.0172	--	--	0.0111	--	--	0.0000	--	--	0.0144	--	--	0.0090	--	--	0.0000

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity unit.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect Sample ID Sample Date Sample Interval (inches)	NYSDEC Screening Criteria		Transect D																										
			SDD1			SDD1			SDD1			SDD2			SDD2			SDD2			SDD3			SDD3			SDD3		
			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013			11/8/2013			11/8/2013			11/8/2013		
			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	< 0.0062 U	--	--	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
ACENAPHTHYLENE	452	9.04	0.0114	0.2365	0.0005	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0107	0.3702	0.0008	0.0028 J	0.2667	0.0006	< 0.0049 U	--	--	0.0080	0.3540	0.0008	< 0.0043 U	--	--	< 0.0042 U	--	--
ANTHRACENE	594	11.88	0.0110	0.2282	0.0004	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0108	0.3737	0.0006	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0090	0.3982	0.0007	< 0.0043 U	--	--	< 0.0042 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.0337	0.6992	0.0008	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0252	0.8720	0.0010	0.0048 J	0.4571	0.0005	0.0031 J	0.3418	0.0004	0.0244	1.0796	0.0013	0.0024 J	0.8727	0.0010	< 0.0042 U	--	--
BENZO(A)PYRENE	964	19.28	0.0429	0.8900	0.0009	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0295	1.0208	0.0011	0.0057	0.5429	0.0006	0.0037 J	0.4079	0.0004	0.0267	1.1814	0.0012	0.0030 J	1.0909	0.0011	< 0.0042 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.0387	0.8029	0.0008	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0264	0.9135	0.0009	0.0049 J	0.4667	0.0005	0.0032 J	0.3528	0.0004	0.0212	0.9381	0.0010	0.0026 J	0.9455	0.0010	< 0.0042 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.0273	0.5664	0.0005	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0194	0.6713	0.0006	0.0036 J	0.3429	0.0003	< 0.0049 U	--	--	0.0160	0.7080	0.0006	< 0.0043 U	--	--	< 0.0042 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.0395	0.8195	0.0008	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0270	0.9343	0.0010	0.0050	0.4762	0.0005	0.0033 J	0.3638	0.0004	0.0223	0.9867	0.0010	< 0.0043 U	--	--	< 0.0042 U	--	--
BENZO(E)PYRENE	967	19.34	0.0311	0.6452	0.0007	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0218	0.7543	0.0008	0.0041 J	0.3905	0.0004	0.0027 J	0.2977	0.0003	0.0179	0.7920	0.0008	< 0.0043 U	--	--	< 0.0042 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0223	0.4627	0.0005	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0166	0.5744	0.0006	0.0036 J	0.3429	0.0004	< 0.0049 U	--	--	0.0141	0.6239	0.0007	< 0.0043 U	--	--	< 0.0042 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0350	0.7261	0.0009	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0286	0.9896	0.0013	0.0076	0.7238	0.0009	0.0054	0.5954	0.0008	0.0258	1.1416	0.0015	0.0035 J	1.2727	0.0017	< 0.0042 U	--	--
C1-Fluorenes	611	12.22	0.0050 J	0.1037	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0050 J	0.1730	0.0003	0.0035 J	0.3333	0.0005	0.0029 J	0.3197	0.0005	0.0032 J	0.1416	0.0002	< 0.0043 U	--	--	0.0025 J	0.6394	0.0010
C1-Naphthalenes	445	8.9	0.0066	0.1369	0.0003	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0082	0.2837	0.0006	< 0.0050 U	--	--	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0279	0.5788	0.0009	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0261	0.9031	0.0013	0.0081	0.7714	0.0012	0.0055	0.6064	0.0009	0.0229	1.0133	0.0015	< 0.0043 U	--	--	0.0065	1.6624	0.0025
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0109	0.2261	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0095	0.3287	0.0003	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0046 J	0.2035	0.0002	< 0.0043 U	--	--	< 0.0042 U	--	--
C2-Fluorenes	687	13.74	0.0061 J	0.1266	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0063	0.2180	0.0003	< 0.0050 U	--	--	0.0025 J	0.2756	0.0004	0.0054	0.2389	0.0003	0.0025 J	0.9091	0.0013	0.0046	1.1765	0.0017
C2-Naphthalenes	510	10.2	0.0085	0.1763	0.0003	< 0.0050 U	--	--	0.0025 J	0.1420	0.0003	0.0170	0.5882	0.0012	0.0197	1.8762	0.0037	0.0083	0.9151	0.0018	0.0074	0.3274	0.0006	< 0.0043 U	--	--	< 0.0042 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0155	0.3216	0.0004	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0143	0.4948	0.0007	< 0.0050 U	--	--	0.0030 J	0.3308	0.0004	0.0162	0.7168	0.0010	0.0046	1.6727	0.0022	0.0071	1.8159	0.0024
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0062 U	--	--	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
C3-Fluorenes	768	15.36	< 0.0062 U	--	--	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0043 J	0.1903	0.0002	< 0.0043 U	--	--	0.0041 J	1.0486	0.0014
C3-Naphthalenes	581	11.62	0.0077	0.1598	0.0003	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0175	0.6055	0.0010	0.0088	0.8381	0.0014	0.0057	0.6284	0.0011	0.0067	0.2965	0.0005	0.0045	1.6364	0.0028	0.0056	1.4322	0.0025
C3-Phenanthrenes/Anthracenes	830	16.6	0.0079	0.1639	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0084	0.2907	0.0004	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0070	0.3097	0.0004	0.0025 J	0.9091	0.0011	0.0032 J	0.8184	0.0010
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0062 U	--	--	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
C4-Naphthalenes	657	13.14	0.0066	0.1369	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0070	0.3097	0.0005	0.0062	2.2545	0.0034	0.0096	2.4552	0.0037
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.0062 U	--	--	< 0.0050 U	--	--	< 0.0048 U	--	--	< 0.0054 U	--	--	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0033 J	0.1460	0.0002	< 0.0043 U	--	--	< 0.0042 U	--	--
CHRYSENE	843	16.86	0.0495	1.0270	0.0012	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0360	1.2457	0.0015	0.0071	0.6762	0.0008	0.0045 J	0.4961	0.0006	0.0307	1.3584	0.0016	< 0.0043 U	--	--	< 0.0042 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0070	0.1452	0.0001	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0047 J	0.1626	0.0001	< 0.0050 U	--	--	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
FLUORANTHENE	708	14.16	0.0855	1.7739	0.0025	0.0031 J	0.1802	0.0003	0.0028 J	0.1591	0.0002	0.0634	2.1938	0.0031	0.0118	1.1238	0.0016	0.0076	0.8379	0.0012	0.0552	2.4425	0.0034	0.0055	2.0000	0.0028	< 0.0042 U	--	--
FLUORENE	539	10.78	0.0040 J	0.0830	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0044 J	0.1522	0.0003	0.0026 J	0.2476	0.0005	< 0.0049 U	--	--	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0288	0.5975	0.0005	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0194 J	0.6713	0.0006	0.0034 J	0.3238	0.0003	< 0.0049 U	--	--	0.0163	0.7212	0.0006	< 0.0043 U	--	--	< 0.0042 U	--	--
NAPHTHALENE	385	7.7	0.0075	0.1556	0.0004	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0106	0.3668	0.0010	0.0047 J	0.4476	0.0012	0.0044 J	0.4851	0.0013	< 0.0050 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--
PERYLENE	967	19.34	0.0099	0.2054	0.0002	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0071	0.2457	0.0003	< 0.0050 U	--	--	< 0.0049 U	--	--	0.0065	0.2876	0.0003	< 0.0043 U	--	--	< 0.0042 U	--	--
PHENANTHRENE	597	11.94	0.0435	0.9025	0.0015	< 0.0050 U	--	--	< 0.0048 U	--	--	0.0349	1.2076	0.0020	0.0085	0.8095	0.0014	0.0065	0.7166	0.0012	0.0306	1.3540	0.0023	< 0.0043 U	--	--	< 0.0042 U	--	--
PYRENE	698	13.96	0.0725	1.5041	0.0022	0.0030 J	0.1744	0.0002	0.0024 J	0.1364	0.0002	0.0536	1.8547	0.0027	0.0101	0.9619	0.0014	0.0066	0.7277	0.0010	0.0502	2.2212	0.0032	0.0049	1.7818	0.0026	< 0.0042 U	--	--
TOC	--	--	48200	--	--	17200	--	--	17600	--	--	28900	--	--	10500	--	--	9070	--	--	22600	--	--	2750	--	--	3910	--	--
Total PAH Toxicity Units	--	--	--	--	0.0190	--	--	0.0005	--	--	0.0007	--	--	0.0263	--	--	0.0185	--	--	0.0131	--	--	0.0267	--	--	0.0211	--	--	0.0162

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity unit.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria			Transect E																																			
Sample ID				SDE1			SDE1			SDE1			SDE2			SDE2			SDE2			SDE3			SDE3			SDE3			SDE4			SDE4			SDE4		
Sample Date				11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/8/2013			11/8/2013			11/8/2013			11/8/2013			11/8/2013			11/8/2013		
Sample Interval (inches)				0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	
ACENAPHTHENE	491	9.82	0.0058 J	0.1841	0.0004	< 0.0045 U	--	--	< 0.0044 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0044 U	--	--	< 0.0049 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--	< 0.0058 U	--	--	< 0.0070 U	--	--	< 0.0067 U	--	--	
ACENAPHTHYLENE	452	9.04	0.0216	0.6857	0.0015	0.0060	0.2510	0.0006	< 0.0044 U	--	--	0.0066	0.2000	0.0004	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0093	0.3163	0.0007	0.0042 J	0.2132	0.0005	< 0.0042 U	--	--	0.0133	0.2131	0.0005	0.0143	0.2049	0.0005	0.0140	0.2393	0.0005	
ANTHRACENE	594	11.88	0.0203	0.6444	0.0011	0.0054	0.2259	0.0004	< 0.0044 U	--	--	0.0075	0.2273	0.0004	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0107	0.3639	0.0006	0.0038 J	0.1929	0.0003	< 0.0042 U	--	--	0.0151	0.2420	0.0004	0.0146	0.2092	0.0004	0.0149	0.2547	0.0004	
BENZO(A)ANTHRACENE	841	16.82	0.0659	2.0921	0.0025	0.0144	0.6025	0.0007	< 0.0044 U	--	--	0.0276	0.8364	0.0010	< 0.0053 U	--	--	0.0031 J	0.8267	0.0010	0.0268	0.9116	0.0011	0.0085	0.4315	0.0005	< 0.0042 U	--	--	0.0386	0.6186	0.0007	0.0300	0.4298	0.0005	0.0320	0.5470	0.0007	
BENZO(A)PYRENE	964	19.28	0.0835	2.6508	0.0027	0.0178	0.7448	0.0008	< 0.0044 U	--	--	0.0326	0.9879	0.0010	0.0032 J	0.1951	0.0002	0.0033 J	0.8800	0.0009	0.0306	1.0408	0.0011	0.0096	0.4873	0.0005	< 0.0042 U	--	--	0.0440	0.7051	0.0007	0.0348	0.4986	0.0005	0.0369	0.6308	0.0007	
BENZO(B)FLUORANTHENE	979	19.58	0.0747	2.3714	0.0024	0.0153	0.6402	0.0007	< 0.0044 U	--	--	0.0316	0.9576	0.0010	0.0030 J	0.1829	0.0002	0.0035 J	0.9333	0.0010	0.0254	0.8639	0.0009	0.0078	0.3959	0.0004	< 0.0042 U	--	--	0.0376	0.6026	0.0006	0.0290	0.4155	0.0004	0.0307	0.5248	0.0005	
BENZO(G,H,I)PERYLENE	1095	21.9	0.0524	1.6635	0.0015	0.0112	0.4686	0.0004	< 0.0044 U	--	--	0.0268	0.8121	0.0007	< 0.0053 U	--	--	0.0033 J	0.8800	0.0008	0.0186	0.6327	0.0006	0.0058	0.2944	0.0003	< 0.0042 U	--	--	0.0284	0.4551	0.0004	0.0233	0.3338	0.0003	0.0239	0.4085	0.0004	
BENZO(K)FLUORANTHENE	980	19.6	0.0752	2.3873	0.0024	0.0167	0.6987	0.0007	< 0.0044 U	--	--	0.0325	0.9848	0.0010	0.0029 J	0.1768	0.0002	0.0034 J	0.9067	0.0009	0.0281	0.9558	0.0010	0.0085	0.4315	0.0004	< 0.0042 U	--	--	0.0397	0.6362	0.0006	0.0315	0.4513	0.0005	0.0333	0.5692	0.0006	
BENZO(E)PYRENE	967	19.34	0.0594	1.8857	0.0020	0.0126	0.5272	0.0005	< 0.0044 U	--	--	0.0159	0.4818	0.0005	< 0.0053 U	--	--	0.0031 J	0.8267	0.0009	0.0211	0.7177	0.0007	0.0064	0.3249	0.0003	< 0.0042 U	--	--	0.0319	0.5112	0.0005	0.0263	0.3768	0.0004	0.0269	0.4598	0.0005	
C1-Benzanthracenes/Chrysenes	930	18.6	0.0409	1.2984	0.0014	0.0107	0.4477	0.0005	< 0.0044 U	--	--	0.0135	0.4091	0.0004	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0159	0.5408	0.0006	0.0059	0.2995	0.0003	< 0.0042 U	--	--	0.0297	0.4760	0.0005	0.0292	0.4183	0.0004	0.0318	0.5436	0.0006	
C1-Fluoranthenes/Pyrenes	769	15.38	0.0646	2.0508	0.0027	0.0162	0.6778	0.0009	< 0.0044 U	--	--	0.0205	0.6212	0.0008	0.0032 J	0.1951	0.0003	0.0025 J	0.6667	0.0009	0.0269	0.9150	0.0012	0.0099	0.5025	0.0007	< 0.0042 U	--	--	0.0457	0.7324	0.0010	0.0418	0.5989	0.0008	0.0454	0.7761	0.0010	
C1-Fluorenes	611	12.22	0.0062	0.1968	0.0003	0.0025 J	0.1046	0.0002	< 0.0044 U	--	--	0.0039 J	0.1182	0.0002	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0032 J	0.1088	0.0002	< 0.0043 U	--	--	< 0.0042 U	--	--	0.0067	0.1074	0.0002	0.0069 J	0.0989	0.0002	0.0090	0.1538	0.0003	
C1-Naphthalenes	445	8.9	0.0091	0.2889	0.0006	0.0034 J	0.1423	0.0003	< 0.0044 U	--	--	0.0112	0.3394	0.0008	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0154	0.5238	0.0012	< 0.0043 U	--	--	< 0.0042 U	--	--	0.0820	1.3141	0.0030	0.0788	1.1289	0.0025	0.0920	1.5726	0.0035	
C1-Phenanthrenes/Anthracenes	670	13.4	0.0476	1.5111	0.0023	0.0137	0.5732	0.0009	< 0.0044 U	--	--	0.0193	0.5848	0.0009	0.0038 J	0.2317	0.0003	0.0027 J	0.7200	0.0011	0.0259	0.8810	0.0013	0.0094	0.4772	0.0007	< 0.0042 U	--	--	0.0696	1.1154	0.0017	0.0699	1.0014	0.0015	0.0843	1.4410	0.0022	
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0187	0.5937	0.0006	0.0057	0.2385	0.0002	< 0.0044 U	--	--	0.0073	0.2212	0.0002	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0076	0.2585	0.0003	0.0035 J	0.1777	0.0002	< 0.0042 U	--	--	0.0166	0.2660	0.0003	0.0205	0.2937	0.0003	0.0188	0.3214	0.0003	
C2-Fluorenes	687	13.74	0.0086	0.2730	0.0004	0.0030 J	0.1255	0.0002	< 0.0044 U	--	--	0.0048 J	0.1455	0.0002	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0060	0.2041	0.0003	0.0029 J	0.1472	0.0002	< 0.0042 U	--	--	0.0148	0.2372	0.0003	0.0166	0.2378	0.0003	0.0217	0.3709	0.0005	
C2-Naphthalenes	510	10.2	0.0112	0.3556	0.0007	0.0043 J	0.1799	0.0004	< 0.0044 U	--	--	0.0110	0.3333	0.0007	0.0030 J	0.1829	0.0004	0.0026 J	0.6933	0.0014	0.0214	0.7279	0.0014	0.0051	0.2589	0.0005	< 0.0042 U	--	--	0.0914	1.4647	0.0029	0.0991	1.4198	0.0028	0.114	1.9487	0.0038	
C2-Phenanthrenes/Anthracenes	745	14.9	0.0252	0.8000	0.0011	0.0076	0.3180	0.0004	< 0.0044 U	--	--	0.0106	0.3212	0.0004	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0188	0.6395	0.0009	0.0073	0.3706	0.0005	< 0.0042 U	--	--	0.139	2.2276	0.0030	0.0618	0.8854	0.0012	0.0754	1.2889	0.0017	
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0044 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0053	0.1803	0.0001	< 0.0043 U	--	--	< 0.0042 U	--	--	0.0116	0.1859	0.0002	0.0181	0.2593	0.0002	0.0143	0.2444	0.0002	
C3-Fluorenes	768	15.36	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0044 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0046 J	0.1565	0.0002	< 0.0043 U	--	--	< 0.0042 U	--	--	0.0112	0.1795	0.0002	0.0111	0.1590	0.0002	0.0158	0.2701	0.0004	
C3-Naphthalenes	581	11.62	0.0125	0.3968	0.0007	0.0040 J	0.1674	0.0003	< 0.0044 U	--	--	0.0085	0.2576	0.0004	0.0028 J	0.1707	0.0003	0.0022 J	0.5867	0.0010	0.0200	0.6803	0.0012	0.0056	0.2843	0.0005	< 0.0042 U	--	--	0.0759	1.2163	0.0021	0.0820	1.1748	0.0020	0.0949	1.6222	0.0028	
C3-Phenanthrenes/Anthracenes	830	16.6	0.0129	0.4095	0.0005	0.0038 J	0.1590	0.0002	< 0.0044 U	--	--	0.0054 J	0.1636	0.0002	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0086	0.2925	0.0004	0.0033 J	0.1675	0.0002	< 0.0042 U	--	--	0.0236	0.3782	0.0005	0.0297	0.4255	0.0005	0.0363	0.6205	0.0007	
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0044 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0044 U	--	--	< 0.0049 U	--	--	< 0.0043 U	--	--	< 0.0042 U	--	--	< 0.0058 U	--	--	< 0.0070 U	--	--	< 0.0067 U	--	--	
C4-Naphthalenes	657	13.14	0.0088	0.2794	0.0004	0.0036 J	0.1506	0.0002	< 0.0044 U	--	--	0.0065	0.1970	0.0003	< 0.0053 U	--	--	0.0037 J	0.9867	0.0015	0.0110	0.3741	0.0006	0.0068	0.3452	0.0005	0.0035 J	1.1589	0.0018	0.0359	0.5753	0.0009	0.0475	0.6805	0.0010	0.0583	0.9966	0.0015	
C4-Phenanthrenes/Anthracenes	670	13.4	0.0063	0.2000	0.0003	< 0.0045 U	--	--	< 0.0044 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0044 U	--	--	0.0037 J	0.1259	0.0002	< 0.0043 U	--	--	< 0.0042 U	--	--	0.0122	0.1955	0.0003	0.0162	0.2321	0.0003	0.0186	0.3179	0.0005	
CHRYSENE	843	16.86	0.0941	2.9873	0.0035	0.0207	0.8661	0.0010	< 0.0044 U	--	--	0.0376	1.1394	0.0014	0.0038 J	0.2317	0.0003	0.0040 J	1.0667	0.0013	0.0350	1.1905	0.0014	0.0107	0.5431	0.0006	< 0.0042 U	--	--	0.0543	0.8702	0.0010	0.0422	0.6046	0.0007	0.0460	0.7863	0.0009	
DIBENZ(A,H)ANTHRACENE	1122	22.44																																					

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect F																																																															
Sample ID			SDF1						SDF2						SDF2						SDF3						SDF3						SDF3						SDF4						SDF4																					
Sample Date			SDF1						SDF2						SDF2						SDF3						SDF3						SDF3						SDF4						SDF4																					
Sample Interval (inches)			11/4/2013						11/4/2013						11/4/2013						11/7/2013						11/7/2013						11/7/2013						11/8/2013						11/8/2013						11/8/2013						11/8/2013						11/8/2013			
	0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24		0 - 6		6 - 12		18 - 24																									
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU																									
ACENAPHTHENE	491	9.82	0.0028 J	0.3789	0.0008	< 0.0048 U	--	--	< 0.0053 U	--	--	< 0.0058 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0045 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--	< 0.0043 U	--	--																									
ACENAPHTHYLENE	452	9.04	0.0159	2.1516	0.0048	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0115	0.5399	0.0012	< 0.0055 U	--	--	0.0057	0.2740	0.0006	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0080	0.3883	0.0009	< 0.0045 U	--	--	< 0.0043 U	--	--	< 0.0043 U	--	--																												
ANTHRACENE	594	11.88	0.0171	2.3139	0.0039	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0105	0.4930	0.0008	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0056	0.2692	0.0005	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0097	0.4709	0.0008	< 0.0045 U	--	--	< 0.0043 U	--	--																												
BENZO(A)ANTHRACENE	841	16.82	0.0135 J	1.8268	0.0022	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0224	1.0516	0.0013	0.0031 J	0.2067	0.0002	< 0.0047 U	--	--	0.0138	0.6635	0.0008	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0295	1.4320	0.0017	< 0.0045 U	--	--	0.0031 J	1.2351	0.0015																												
BENZO(A)PYRENE	964	19.28	0.0157 J	2.1245	0.0022	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0270	1.2676	0.0013	0.0036 J	0.2400	0.0002	< 0.0047 U	--	--	0.0165	0.7933	0.0008	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0339	1.6456	0.0017	< 0.0045 U	--	--	0.0037 J	1.4741	0.0015																												
BENZO(B)FLUORANTHENE	979	19.58	0.0143 J	1.9350	0.0020	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0226	1.0610	0.0011	0.0031 J	0.2067	0.0002	< 0.0047 U	--	--	0.0143	0.6875	0.0007	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0298	1.4466	0.0015	< 0.0045 U	--	--	0.0031 J	1.2351	0.0013																												
BENZO(G,H,I)PERYLENE	1095	21.9	0.0147 J	1.9892	0.0018	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0170	0.7981	0.0007	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0099	0.4760	0.0004	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0208	1.0097	0.0009	< 0.0045 U	--	--	0.0022 J	0.8765	0.0008																												
BENZO(K)FLUORANTHENE	980	19.6	0.0132 J	1.7862	0.0018	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0249	1.1690	0.0012	0.0032 J	0.2133	0.0002	< 0.0047 U	--	--	0.0150	0.7212	0.0007	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0297	1.4417	0.0015	< 0.0045 U	--	--	< 0.0043 U	--	--																												
BENZO(E)PYRENE	967	19.34	0.0161 J	2.1786	0.0023	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0194	0.9108	0.0009	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0118	0.5673	0.0006	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0235	1.1408	0.0012	< 0.0045 U	--	--	0.0026 J	1.0359	0.0011																												
C1-Benzanthracenes/Chrysenes	930	18.6	0.0254	3.4371	0.0037	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0152	0.7136	0.0008	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0079	0.3798	0.0004	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0157	0.7621	0.0008	< 0.0045 U	--	--	0.0022 J	0.8765	0.0009																												
C1-Fluoranthenes/Pyrenes	769	15.38	0.0253	3.4235	0.0045	0.0054	0.3158	0.0004	0.0052 J	0.2419	0.0003	0.0264	1.2394	0.0016	0.0047 J	0.3133	0.0004	< 0.0047 U	--	--	0.0151	0.7260	0.0009	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0272	1.3204	0.0017	< 0.0045 U	--	--	0.0041 J	1.6335	0.0021																												
C1-Fluorenes	611	12.22	0.0135	1.8268	0.0030	0.0046 J	0.2690	0.0004	0.0046 J	0.2140	0.0004	0.0045 J	0.2113	0.0003	0.0031 J	0.2067	0.0003	< 0.0047 U	--	--	0.0028 J	0.1346	0.0002	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0034 J	0.1650	0.0003	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C1-Naphthalenes	445	8.9	0.0249	3.3694	0.0076	0.0058	0.3392	0.0008	0.0063	0.2930	0.0007	0.0065	0.3052	0.0007	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C1-Phenanthrenes/Anthracenes	670	13.4	0.0459	6.2111	0.0093	0.0096	0.5614	0.0008	0.0074	0.3442	0.0005	0.0229	1.0751	0.0016	0.0047 J	0.3133	0.0005	< 0.0047 U	--	--	0.0116	0.5577	0.0008	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0195	0.9466	0.0014	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0254	3.4371	0.0034	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0070	0.3286	0.0003	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0039 J	0.1875	0.0002	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0073	0.3544	0.0004	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C2-Fluorenes	687	13.74	0.0286	3.8701	0.0056	0.0126	0.7368	0.0011	0.0079	0.3674	0.0005	0.0053 J	0.2488	0.0004	0.0036 J	0.2400	0.0003	< 0.0047 U	--	--	0.0041 J	0.1971	0.0003	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0050 J	0.2427	0.0004	0.0024 J	0.2649	0.0004	0.0027 J	1.0757	0.0016																												
C2-Naphthalenes	510	10.2	0.0407	5.5074	0.0108	0.0125	0.7310	0.0014	0.0142	0.6605	0.0013	0.0070	0.3286	0.0006	0.0043 J	0.2867	0.0006	0.0030 J	0.3717	0.0007	0.0059	0.2837	0.0006	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0070	0.3398	0.0007	< 0.0045 U	--	--	0.0045	1.7928	0.0035																												
C2-Phenanthrenes/Anthracenes	745	14.9	0.0473	6.4005	0.0086	0.0098	0.5731	0.0008	0.0069	0.3209	0.0004	0.0124	0.5822	0.0008	0.0031 J	0.2067	0.0003	< 0.0047 U	--	--	0.0087	0.4183	0.0006	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0311	1.5097	0.0020	0.0033 J	0.3642	0.0005	0.0136	5.4183	0.0073																												
C3-Benzanthracenes/Chrysenes	1213	24.26	0.0532	7.1989	0.0059	< 0.0048 U	--	--	< 0.0053 U	--	--	< 0.0058 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C3-Fluorenes	768	15.36	0.0538	7.2801	0.0095	< 0.0048 U	--	--	0.0094	0.4372	0.0006	< 0.0058 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C3-Naphthalenes	581	11.62	0.0566	7.6590	0.0132	0.0205	1.1988	0.0021	0.0179	0.8326	0.0014	0.0090	0.4225	0.0007	0.0050 J	0.3333	0.0006	0.0031 J	0.3841	0.0007	--	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0070	0.3398	0.0006	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C3-Phenanthrenes/Anthracenes	830	16.6	0.0655	8.8633	0.0107	0.0132	0.7719	0.0009	0.0086	0.4000	0.0005	0.0066	0.3099	0.0004	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0041 J	0.1971	0.0002	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0060 J	0.2913	0.0004	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0052 U	--	--	< 0.0048 U	--	--	< 0.0053 U	--	--	< 0.0058 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
C4-Naphthalenes	657	13.14	0.0480	6.4953	0.0099	0.0185	1.0819	0.0016	< 0.0053 U	--	--	0.0080	0.3756	0.0006	0.0062	0.4133	0.0006	< 0.0047 U	--	--	0.0054	0.2596	0.0004	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0076	0.3689	0.0006	0.0058	0.6402	0.0010	0.0045	1.7928	0.0027																												
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.0052 U	--	--	< 0.0048 U	--	--	< 0.0053 U	--	--	< 0.0058 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
CHRYSENE	843	16.86	0.0227 J	3.0717	0.0036	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0312	1.4648	0.0017	0.0043 J	0.2867	0.0003	< 0.0047 U	--	--	0.0191	0.9183	0.0011	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0393	1.9078	0.0023	< 0.0045 U	--	--	0.0043	1.7131	0.0020																												
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0034 J	0.4601	0.0004	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0039 J	0.1831	0.0002	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0191	0.9183	0.0011	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
FLUORANTHENE	708	14.16	0.0367 J	4.9662	0.0070	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0555	2.6056	0.0037	0.0072	0.4800	0.0007	< 0.0047 U	--	--	0.0334	1.6058	0.0023	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0700	3.3981	0.0048	0.0023 J	0.2539	0.0004	0.0071	2.8287	0.0040																												
FLUORENE	539	10.78	0.0058	0.7848	0.0015	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0040 J	0.1878	0.0003	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--	< 0.0049 U	--	--	< 0.0065 U	--	--	< 0.0045 U	--	--	< 0.0043 U	--	--																												
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0124 J	1.6779	0.0015	< 0.0048 U	--	--	< 0.0053 U	--	--	0.0161 J	0.7559	0.0007	< 0.0055 U	--	--	< 0.0047 U	--	--	0.0096	0.4615	0.0004	< 0.0046 U	--	--	< 0.0049 U	--	--	0.0207	1.0049	0.0009	< 0.0045 U	--	--	< 0.0043 U	--	--																												
NAPHTHALENE	385	7.7																																																																

Notes:

- PAH - Polycyclic Aromatic Hydrocarbon.
- U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
- J - Estimated.
- mg/kg - milligrams per kilogram.
- µg/gOC - micrograms per gram of Organic Carbon.
- TOC - Total Organic Carbon.
- TU - Toxicity unit.

Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect G																	
Sample ID			SDG1			SDG1			SDG1			SDG2			SDG2			SDG2		
Sample Date			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013		
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0045 J	0.1711	0.0003	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0037 J	0.1917	0.0004	< 0.0055 U	--	--	< 0.0044 U	--	--
ACENAPHTHYLENE	452	9.04	0.0167	0.6350	0.0014	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0116	0.6010	0.0013	< 0.0055 U	--	--	< 0.0044 U	--	--
ANTHRACENE	594	11.88	0.0176	0.6692	0.0011	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0121	0.6269	0.0011	< 0.0055 U	--	--	< 0.0044 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.0419	1.5932	0.0019	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0230	1.1917	0.0014	0.0045 J	0.3462	0.0004	< 0.0044 U	--	--
BENZO(A)PYRENE	964	19.28	0.0495	1.8821	0.0020	0.0025 J	0.1908	0.0002	< 0.0048 U	--	--	0.0252	1.3057	0.0014	0.0050 J	0.3846	0.0004	< 0.0044 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.0420	1.5970	0.0016	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0216	1.1192	0.0011	0.0045 J	0.3462	0.0004	< 0.0044 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.0336	1.2776	0.0012	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0151	0.7824	0.0007	0.0035 J	0.2692	0.0002	< 0.0044 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.0460	1.7490	0.0018	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0235	1.2176	0.0012	0.0048 J	0.3692	0.0004	< 0.0044 U	--	--
BENZO(E)PYRENE	967	19.34	0.0352	1.3384	0.0014	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0180	0.9326	0.0010	0.0038 J	0.2923	0.0003	< 0.0044 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0236	0.8973	0.0010	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0159	0.8238	0.0009	0.0032 J	0.2462	0.0003	< 0.0044 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0425	1.6160	0.0021	< 0.0047 U	--	--	0.0029 J	0.9295	0.0012	0.0289	1.4974	0.0019	0.0066	0.5077	0.0007	< 0.0044 U	--	--
C1-Fluorenes	611	12.22	0.0046 J	0.1749	0.0003	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0045 J	0.2332	0.0004	0.0031 J	0.2385	0.0004	< 0.0044 U	--	--
C1-Naphthalenes	445	8.9	0.0079	0.3004	0.0007	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0076	0.3938	0.0009	< 0.0055 U	--	--	< 0.0044 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0334	1.2700	0.0019	< 0.0047 U	--	--	0.0034 J	1.0897	0.0016	0.0262	1.3575	0.0020	0.0062	0.4769	0.0007	< 0.0044 U	--	--
C2-Benzanthracenes/Chrysenes	1009	20.18	0.01	0.3802	0.0004	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0083	0.4301	0.0004	< 0.0055 U	--	--	< 0.0044 U	--	--
C2-Fluorenes	687	13.74	0.0067	0.2548	0.0004	< 0.0047 U	--	--	0.0059	1.8910	0.0028	0.0068	0.3523	0.0005	0.0029 J	0.2231	0.0003	< 0.0044 U	--	--
C2-Naphthalenes	510	10.2	0.0088	0.3346	0.0007	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0091	0.4715	0.0009	0.0048 J	0.3692	0.0007	< 0.0044 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0185	0.7034	0.0009	< 0.0047 U	--	--	0.0097	3.1090	0.0042	0.0149	0.7720	0.0010	0.0034 J	0.2615	0.0004	< 0.0044 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	0.0060	0.2281	0.0002	< 0.0047 U	--	--	< 0.0048 U	--	--	< 0.0056 U	--	--	< 0.0055 U	--	--	< 0.0044 U	--	--
C3-Fluorenes	768	15.36	0.0061	0.2319	0.0003	< 0.0047 U	--	--	0.0081	2.5962	0.0034	< 0.0056 U	--	--	< 0.0055 U	--	--	< 0.0044 U	--	--
C3-Naphthalenes	581	11.62	0.0092	0.3498	0.0006	< 0.0047 U	--	--	0.0094	3.0128	0.0052	0.0102	0.5285	0.0009	0.0037 J	0.2846	0.0005	< 0.0044 U	--	--
C3-Phenanthrenes/Anthracenes	830	16.6	0.0109	0.4144	0.0005	< 0.0047 U	--	--	0.0096	3.0769	0.0037	0.0079	0.4093	0.0005	< 0.0055 U	--	--	< 0.0044 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0055 U	--	--	< 0.0047 U	--	--	< 0.0048 U	--	--	< 0.0056 U	--	--	< 0.0055 U	--	--	< 0.0044 U	--	--
C4-Naphthalenes	657	13.14	0.0089	0.3384	0.0005	< 0.0047 U	--	--	0.0231	7.4038	0.0113	0.0085	0.4404	0.0007	< 0.0055 U	--	--	< 0.0044 U	--	--
C4-Phenanthrenes/Anthracenes	670	13.4	0.0065	0.2471	0.0004	< 0.0047 U	--	--	0.0056	1.7949	0.0027	0.0035 J	0.1813	0.0003	< 0.0055 U	--	--	< 0.0044 U	--	--
CHRYSENE	843	16.86	0.0571	2.1711	0.0026	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0305	1.5803	0.0019	0.0064	0.4923	0.0006	< 0.0044 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0179	0.6806	0.0006	0.0057	0.4351	0.0004	< 0.0048 U	--	--	0.0039 J	0.2021	0.0002	< 0.0055 U	--	--	< 0.0044 U	--	--
FLUORANTHENE	708	14.16	0.104	3.9544	0.0056	0.0023 J	0.1756	0.0002	< 0.0048 U	--	--	0.0612	3.1710	0.0045	0.0106	0.8154	0.0012	< 0.0044 U	--	--
FLUORENE	539	10.78	0.0072	0.2738	0.0005	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0050 J	0.2591	0.0005	< 0.0055 U	--	--	< 0.0044 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0344	1.3080	0.0012	0.0034 J	0.2595	0.0002	< 0.0048 U	--	--	0.0148 J	0.7668	0.0007	0.0031 J	0.2385	0.0002	< 0.0044 U	--	--
NAPHTHALENE	385	7.7	0.0117	0.4449	0.0012	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0098	0.5078	0.0013	0.0040 J	0.3077	0.0008	< 0.0044 U	--	--
PERYLENE	967	19.34	0.0142	0.5399	0.0006	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0062	0.3212	0.0003	< 0.0055 U	--	--	< 0.0044 U	--	--
PHENANTHRENE	597	11.94	0.0585	2.2243	0.0037	< 0.0047 U	--	--	< 0.0048 U	--	--	0.0419	2.1710	0.0036	0.0075	0.5769	0.0010	< 0.0044 U	--	--
PYRENE	698	13.96	0.0875	3.3270	0.0048	< 0.0047 U	--	--	0.0025 J	0.8013	0.0011	0.0510	2.6425	0.0038	0.0090	0.6923	0.0010	< 0.0044 U	--	--
TOC	--	--	26300	--	--	13100	--	--	3120	--	--	19300	--	--	13000	--	--	3990	--	--
Total PAH Toxicity Units	--	--	--	--	0.0441	--	--	0.0011	--	--	0.0371	--	--	0.0378	--	--	0.0107	--	--	0.0000

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity unit.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect Sample ID Sample Date Sample Interval (inches)	NYSDEC Screening Criteria		Transect H																										
			SDH1			SDH1			SDH1			SDH2			SDH2			SDH2			SDH3			SDH3			SDH3		
			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013			11/7/2013		
			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0116 J	0.0817	0.0002	< 0.0049 U	--	--	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0089 J	0.0742	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
ACENAPHTHYLENE	452	9.04	0.0210	0.1479	0.0003	0.0098	0.8305	0.0018	< 0.0046 U	--	--	0.0077	0.2059	0.0005	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0389	0.3242	0.0007	0.0036 J	0.2069	0.0005	< 0.0048 U	--	--
ANTHRACENE	594	11.88	0.0351	0.2472	0.0004	0.0097	0.8220	0.0014	< 0.0046 U	--	--	0.0068	0.1818	0.0003	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0346	0.2883	0.0005	< 0.0055 U	--	--	< 0.0048 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.12	0.8451	0.0010	0.0194	1.6441	0.0020	0.0025 J	0.5285	0.0006	0.0183	0.4893	0.0006	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0837	0.6975	0.0008	0.0054 J	0.3103	0.0004	< 0.0048 U	--	--
BENZO(A)PYRENE	964	19.28	0.157	1.1056	0.0011	0.0228	1.9322	0.0020	0.0028 J	0.5920	0.0006	0.0216	0.5775	0.0006	< 0.0051 U	--	--	< 0.0048 U	--	--	0.101	0.8417	0.0009	0.0065	0.3736	0.0004	< 0.0048 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.158	1.1127	0.0011	0.0219	1.8559	0.0019	0.0028 J	0.5920	0.0006	0.0188	0.5027	0.0005	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0851	0.7092	0.0007	0.0055	0.3161	0.0003	< 0.0048 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.121	0.8521	0.0008	0.0165	1.3983	0.0013	< 0.0046 U	--	--	0.0130	0.3476	0.0003	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0582	0.4850	0.0004	0.0044 J	0.2529	0.0002	< 0.0048 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.146	1.0282	0.0010	0.0216	1.8305	0.0019	0.0026 J	0.5497	0.0006	0.0193	0.5160	0.0005	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0922	0.7683	0.0008	0.0057	0.3276	0.0003	< 0.0048 U	--	--
BENZO(E)PYRENE	967	19.34	0.128	0.9014	0.0009	0.0178	1.5085	0.0016	0.0024 J	0.5074	0.0005	0.0149	0.3984	0.0004	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0708	0.5900	0.0006	0.0044 J	0.2529	0.0003	< 0.0048 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0631	0.4444	0.0005	0.0164	1.3898	0.0015	< 0.0046 U	--	--	0.0114	0.3048	0.0003	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0541	0.4508	0.0005	0.0049 J	0.2816	0.0003	< 0.0048 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0922	0.6493	0.0008	0.0256	2.1695	0.0028	0.0046	0.9725	0.0013	0.0205	0.5481	0.0007	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0902	0.7517	0.0010	0.0078	0.4483	0.0006	< 0.0048 U	--	--
C1-Fluorenes	611	12.22	0.0182	0.1282	0.0002	0.0051	0.4322	0.0007	0.0025 J	0.5285	0.0009	0.0034 J	0.0909	0.0001	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0086 J	0.0717	0.0001	< 0.0055 U	--	--	< 0.0048 U	--	--
C1-Naphthalenes	445	8.9	0.0135 J	0.0951	0.0002	0.0061	0.5169	0.0012	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0118	0.0983	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0811	0.5711	0.0009	0.0241	2.0424	0.0030	0.0041 J	0.8668	0.0013	0.0159	0.4251	0.0006	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0689	0.5742	0.0009	0.0068	0.3908	0.0006	< 0.0048 U	--	--
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0340	0.2394	0.0002	0.0096	0.8136	0.0008	< 0.0046 U	--	--	0.0062	0.1658	0.0002	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0247	0.2058	0.0002	0.0032 J	0.1839	0.0002	< 0.0048 U	--	--
C2-Fluorenes	687	13.74	0.0319	0.2246	0.0003	0.0076	0.6441	0.0009	0.0029 J	0.6131	0.0009	0.0035 J	0.0936	0.0001	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0115	0.0958	0.0001	< 0.0055 U	--	--	< 0.0048 U	--	--
C2-Naphthalenes	510	10.2	0.0399	0.2810	0.0006	0.0101	0.8559	0.0017	0.0052	1.0994	0.0022	0.0043 J	0.1150	0.0002	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0124	0.1033	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0448	0.3155	0.0004	0.0152	1.2881	0.0017	0.0034 J	0.7188	0.0010	0.0080	0.2139	0.0003	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0384	0.3200	0.0004	0.0037 J	0.2126	0.0003	< 0.0048 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.014 U	--	--	< 0.0049 U	--	--	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0136	0.1133	0.0001	< 0.0055 U	--	--	< 0.0048 U	--	--
C3-Fluorenes	768	15.36	< 0.014 U	--	--	< 0.0049 U	--	--	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	< 0.011 U	--	--	< 0.0055 U	--	--	< 0.0048 U	--	--
C3-Naphthalenes	581	11.62	0.0407	0.2866	0.0005	0.0117	0.9915	0.0017	0.0043 J	0.9091	0.0016	0.0048 J	0.1283	0.0002	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0115	0.0958	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
C3-Phenanthrenes/Anthracenes	830	16.6	0.0193	0.1359	0.0002	0.0102	0.8644	0.0010	0.0029 J	0.6131	0.0007	0.0053 J	0.1417	0.0002	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0182	0.1517	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.014 U	--	--	< 0.0049 U	--	--	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	< 0.011 U	--	--	< 0.0055 U	--	--	< 0.0048 U	--	--
C4-Naphthalenes	657	13.14	0.0426	0.3000	0.0005	0.0107	0.9068	0.0014	0.0062	1.3108	0.0020	0.0039 J	0.1043	0.0002	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0093 J	0.0775	0.0001	0.0042 J	0.2414	0.0004	< 0.0048 U	--	--
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.014 U	--	--	0.0047 J	0.3983	0.0006	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0071 J	0.0592	0.0001	< 0.0055 U	--	--	< 0.0048 U	--	--
CHRYSENE	843	16.86	0.185	1.3028	0.0015	0.0300	2.5424	0.0030	0.0038 J	0.8034	0.0010	0.0249	0.6658	0.0008	0.0026 J	0.1793	0.0002	< 0.0048 U	--	--	0.117	0.9750	0.0012	0.0076	0.4368	0.0005	< 0.0048 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0337	0.2373	0.0002	0.0041 J	0.3475	0.0003	< 0.0046 U	--	--	0.0047 J	0.1257	0.0001	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0159	0.1325	0.0001	< 0.0055 U	--	--	< 0.0048 U	--	--
FLUORANTHENE	708	14.16	0.292	2.0563	0.0029	0.0458	3.8814	0.0055	0.0058	1.2262	0.0017	0.0455	1.2166	0.0017	0.0037 J	0.2552	0.0004	< 0.0048 U	--	--	0.216	1.8000	0.0025	0.0136	0.7816	0.0011	< 0.0048 U	--	--
FLUORENE	539	10.78	0.0145	0.1021	0.0002	0.0034 J	0.2881	0.0005	< 0.0046 U	--	--	< 0.0060 U	--	--	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0101 J	0.0842	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.115	0.8099	0.0007	0.0165	1.3983	0.0013	< 0.0046 U	--	--	0.0138	0.3690	0.0003	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0621	0.5175	0.0005	0.0045 J	0.2586	0.0002	< 0.0048 U	--	--
NAPHTHALENE	385	7.7	0.0204	0.1437	0.0004	0.0058	0.4915	0.0013	< 0.0046 U	--	--	0.0060	0.1604	0.0004	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0174	0.1450	0.0004	< 0.0055 U	--	--	< 0.0048 U	--	--
PERYLENE	967	19.34	0.0412	0.2901	0.0003	0.0137	1.1610	0.0012	0.0030 J	0.6342	0.0007	0.0054 J	0.1444	0.0001	< 0.0051 U	--	--	< 0.0048 U	--	--	0.0238	0.1983	0.0002	< 0.0055 U	--	--	< 0.0048 U	--	--
PHENANTHRENE	597	11.94	0.144	1.0141	0.0017	0.0281	2.3814	0.0040	0.0047	0.9937	0.0017	0.0250	0.6684	0.0011	0.0033 J	0.2276	0.0004	< 0.0048 U	--	--	0.117	0.9750	0.0016	0.0090	0.5172	0.0009	< 0.0048 U	--	--
PYRENE	698	13.96	0.24	1.6901	0.0024	0.0391	3.3136	0.0047	0.0049	1.0359	0.0015	0.0385	1.0294	0.0015	0.0032 J	0.2207	0.0003	< 0.0048 U	--	--	0.182	1.5167	0.0022	0.0118	0.6782	0.0010	< 0.0048 U	--	--
TOC	--	--	142000	--	--	11800	--	--	4730	--	--	37400	--	--	14500	--	--	3370	--	--	120000	--	--	17400	--	--	3550	--	--
Total PAH Toxicity Units	--	--	--	--	0.0226	--	--	0.0547	--	--	0.0212	--	--	0.0130	--	--	0.0013	--	--	0.0000	--	--	0.0187	--	--	0.0084	--	--	0.0000

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria			Transect I																																					
Sample ID				SDI1			SDI1 (Dup)			SDI1			SDI1 (Dup)			SDI1			SDI1 (Dup)			SDI2			SDI2			SDI2			SDI3			SDI3			SDI3				
Sample Date				11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/7/2013			11/7/2013			11/7/2013			11/5/2013			11/5/2013			11/5/2013				
Sample Interval (inches)				0 - 6			0 - 6			6 - 12			6 - 12			18 - 24			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24				
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU			
ACENAPHTHENE	491	9.82	< 0.0053 U	--	--	0.0039 J	0.1500	0.0003	< 0.0054 U	--	--	< 0.0048 U	--	--	< 0.0052 U	--	--	< 0.0043 U	--	--	0.0189 J	0.0458	0.0001	0.0185	0.0830	0.0002	< 0.0071 U	--	--	< 0.0067 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--			
ACENAPHTHYLENE	452	9.04	0.0046 J	0.1614	0.0004	0.0151	0.5808	0.0013	< 0.0054 U	--	--	0.0037 J	0.3811	0.0008	< 0.0052 U	--	--	< 0.0043 U	--	--	0.0305 J	0.0738	0.0002	0.0400	0.1794	0.0004	0.0167	0.3070	0.0007	0.0060 J	0.1824	0.0004	0.0090	1.7078	0.0038	< 0.0046 U	--	--			
ANTHRACENE	594	11.88	0.0055	0.1930	0.0003	0.0198	0.7615	0.0013	< 0.0054 U	--	--	0.0042 J	0.4325	0.0007	< 0.0052 U	--	--	< 0.0043 U	--	--	0.0444	0.1075	0.0002	0.0458	0.2054	0.0003	0.0136	0.2500	0.0004	0.0068	0.2067	0.0003	0.0088	1.6698	0.0028	< 0.0046 U	--	--			
BENZO(A)ANTHRACENE	841	16.82	0.0124	0.4351	0.0005	0.0476	1.8308	0.0022	0.0038 J	0.2171	0.0003	0.0116	1.1946	0.0014	0.0031 J	0.4486	0.0005	< 0.0043 U	--	--	0.155	0.3753	0.0004	0.13	0.5830	0.0007	0.0342	0.6287	0.0007	0.0177	0.5380	0.0006	0.0200	3.7951	0.0045	0.0055	1.4360	0.0017			
BENZO(A)PYRENE	964	19.28	0.0147	0.5158	0.0005	0.0570	2.1923	0.0023	0.0046 J	0.2629	0.0003	0.0138	1.4212	0.0015	0.0038 J	0.5499	0.0006	< 0.0043 U	--	--	0.193	0.4673	0.0005	0.165	0.7399	0.0008	0.0406	0.7463	0.0008	0.0220	0.6687	0.0007	0.0234	4.4402	0.0046	0.0067	1.7493	0.0018			
BENZO(B)FLUORANTHENE	979	19.58	0.0135	0.4737	0.0005	0.0530	2.0385	0.0021	0.0049 J	0.2800	0.0003	0.0140	1.4418	0.0015	0.0045 J	0.6512	0.0007	< 0.0043 U	--	--	0.178	0.4310	0.0004	0.147	0.6592	0.0007	0.0357	0.6563	0.0007	0.0218	0.6626	0.0007	0.0228	4.3264	0.0044	0.0063	1.6449	0.0017			
BENZO(G,H,I)PERYLENE	1095	21.9	0.0105	0.3684	0.0003	0.0410	1.5769	0.0014	0.0041 J	0.2343	0.0002	0.0115	1.1843	0.0011	0.0033 J	0.4776	0.0004	< 0.0043 U	--	--	0.125	0.3027	0.0003	0.103	0.4619	0.0004	0.0237	0.4357	0.0004	0.0170	0.5167	0.0005	0.0161	3.0550	0.0028	0.0049	1.2794	0.0012			
BENZO(K)FLUORANTHENE	980	19.6	0.0138	0.4842	0.0005	0.0552	2.1231	0.0022	0.0043 J	0.2457	0.0003	0.0131	1.3491	0.0014	0.0035 J	0.5065	0.0005	< 0.0043 U	--	--	0.176	0.4262	0.0004	0.15	0.6726	0.0007	0.0364	0.6691	0.0007	0.0209	0.6353	0.0006	0.0238	4.5161	0.0046	0.0065	1.6971	0.0017			
BENZO(E)PYRENE	967	19.34	0.0115	0.4035	0.0004	0.0438	1.6846	0.0017	0.0041 J	0.2343	0.0002	0.0121	1.2461	0.0013	0.0035 J	0.5065	0.0005	< 0.0043 U	--	--	0.142	0.3438	0.0004	0.118	0.5291	0.0005	0.0280	0.5147	0.0005	0.0182	0.5532	0.0006	0.0180	3.4156	0.0035	0.0053	1.3838	0.0014			
C1-Benzanthracenes/Chrysenes	930	18.6	0.0088	0.3088	0.0003	0.0301	1.1577	0.0012	0.0035 J	0.2000	0.0002	0.0102	1.0505	0.0011	0.0039 J	0.5644	0.0006	< 0.0043 U	--	--	0.0737	0.1785	0.0002	0.0714	0.3202	0.0003	0.0246	0.4522	0.0005	0.0116	0.3526	0.0004	0.0138	2.6186	0.0028	0.0041 J	1.0705	0.0012			
C1-Fluoranthenes/Pyrenes	769	15.38	0.0162	0.5684	0.0007	0.0500	1.9231	0.0025	0.0062	0.3543	0.0005	0.0138	1.4212	0.0018	0.0054	0.7815	0.0010	0.0033 J	0.4130	0.0005	0.12	0.2906	0.0004	0.119	0.5336	0.0007	0.0406	0.7463	0.0010	0.0199	0.6049	0.0008	0.0248	4.7059	0.0061	0.0073	1.9060	0.0025			
C1-Fluorenes	611	12.22	0.0041 J	0.1439	0.0002	0.0060	0.2308	0.0004	< 0.0054 U	--	--	0.0041 J	0.4222	0.0007	0.0028 J	0.4052	0.0007	< 0.0043 U	--	--	< 0.034 U	--	--	0.0162	0.0726	0.0001	0.0051 J	0.0938	0.0002	0.0041 J	0.1246	0.0002	0.0035 J	0.6641	0.0011	0.0024 J	0.6266	0.0010			
C1-Naphthalenes	445	8.9	0.0035 J	0.1228	0.0003	0.0079	0.3038	0.0007	< 0.0054 U	--	--	0.0044 J	0.4531	0.0010	< 0.0052 U	--	--	< 0.0043 U	--	--	< 0.034 U	--	--	0.0187	0.0839	0.0002	0.0072	0.1324	0.0003	< 0.0067 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--			
C1-Phenanthrenes/Anthracenes	670	13.4	0.0146	0.5123	0.0008	0.0416	1.6000	0.0024	0.0069	0.3943	0.0006	0.0143	1.4727	0.0022	0.0072	1.0420	0.0016	0.0032 J	0.4005	0.0006	0.0795	0.1925	0.0003	0.0819	0.3673	0.0005	0.0313	0.5754	0.0009	0.0163	0.4954	0.0007	0.0194	3.6812	0.0055	0.0061	1.5927	0.0024			
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0046 J	0.1614	0.0002	0.0133	0.5115	0.0005	0.0031 J	0.1771	0.0002	0.0073	0.7518	0.0007	0.0038 J	0.5499	0.0005	< 0.0043 U	--	--	0.0398	0.0964	0.0001	0.0329	0.1475	0.0001	0.0147	0.2702	0.0003	0.0116	0.3526	0.0003	0.0138	2.6186	0.0026	0.0041 J	1.0705	0.0011			
C2-Fluorenes	687	13.74	0.0048 J	0.1684	0.0002	0.0084	0.3231	0.0005	0.0035 J	0.2000	0.0003	0.0053	0.5458	0.0008	0.0034 J	0.4920	0.0007	0.0026 J	0.3254	0.0005	0.0217 J	0.0525	0.0001	0.0196	0.0879	0.0001	0.0069 J	0.1268	0.0002	0.0057 J	0.1733	0.0003	0.0052 J	0.9867	0.0014	0.0030 J	0.7833	0.0011			
C2-Naphthalenes	510	10.2	0.0052 J	0.1825	0.0004	0.0113	0.4346	0.0009	0.0041 J	0.2343	0.0005	0.0067	0.6900	0.0014	0.0045 J	0.6512	0.0013	0.0037 J	0.4631	0.0009	0.0210 J	0.0508	0.0001	0.0231	0.1036	0.0002	0.0075	0.1379	0.0003	0.0080	0.2432	0.0005	0.0072	1.3662	0.0027	0.0040 J	1.0444	0.0020			
C2-Phenanthrenes/Anthracenes	745	14.9	0.0083	0.2912	0.0004	0.0236	0.9077	0.0012	0.0051 J	0.2914	0.0004	0.0097	0.9990	0.0013	0.0054	0.7815	0.0010	0.0023 J	0.2879	0.0004	0.0364	0.0881	0.0001	0.0404	0.1812	0.0002	0.0161	0.2960	0.0004	0.0103	0.3131	0.0004	0.0117	2.2201	0.0030	0.0060	1.5666	0.0021			
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0053 U	--	--	0.0087	0.3346	0.0003	< 0.0054 U	--	--	0.0054	0.5561	0.0005	< 0.0052 U	--	--	< 0.0043 U	--	--	< 0.034 U	--	--	< 0.016 U	--	--	< 0.0071 U	--	--	< 0.0067 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--			
C3-Fluorenes	768	15.36	< 0.0053 U	--	--	0.0055	0.2115	0.0003	< 0.0054 U	--	--	< 0.0048 U	--	--	< 0.0052 U	--	--	< 0.0043 U	--	--	< 0.034 U	--	--	< 0.016 U	--	--	< 0.0071 U	--	--	< 0.0067 U	--	--	0.0036 J	0.1094	0.0001	0.0028 J	0.5313	0.0007	< 0.0046 U	--	--
C3-Naphthalenes	581	11.62	0.0064	0.2246	0.0004	0.0126	0.4846	0.0008	0.0049 J	0.2800	0.0005	0.0083	0.8548	0.0015	0.0056	0.8104	0.0014	0.0029 J	0.3630	0.0006	0.0367	0.0889	0.0002	0.0297	0.1332	0.0002	0.0091	0.1673	0.0003	0.0072	0.2188	0.0004	0.0065	1.2334	0.0021	0.0038 J	0.9922	0.0017			
C3-Phenanthrenes/Anthracenes	830	16.6	0.0048 J	0.1684	0.0002	0.0130	0.5000	0.0006	0.0033 J	0.1886	0.0002	0.0059	0.6076	0.0007	0.0030 J	0.4342	0.0005	< 0.0043 U	--	--	0.0210 J	0.0508	0.0001	0.0207	0.0928	0.0001	0.0109	0.2004	0.0002	0.0062 J	0.1884	0.0002	0.0074	1.4042	0.0017	0.0031 J	0.8094	0.0010			
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0053 U	--	--	< 0.0055 U	--	--	< 0.0054 U	--	--	< 0.0048 U	--	--	< 0.0052 U	--	--	< 0.0043 U	--	--	< 0.034 U	--	--	< 0.016 U	--	--	< 0.0071 U	--	--	< 0.0067 U	--	--	< 0.0053 U	--	--	< 0.0046 U	--	--			
C4-Naphthalenes	657	13.14	0.0075	0.2632	0.0004	0.0105	0.4038	0.0006	0.0058	0.3314	0.0005	0.0072	0.7415	0.0011	0.0062	0.8973	0.0014	0.0038 J	0.4756	0.0007	0.0219 J	0.0530	0.0001	0.0226	0.1013	0.0002	0.0082	0.1507	0.0002	0.0078	0.2371	0.0004	0.0071	1.3472	0.0021	0.0052	1.3577	0.0021			
C4-Phenanthrenes/Anthracenes	670	13.4	< 0.0053 U	--	--	0.0057	0.2192	0.0003	< 0.0054 U	--	--	0.0038 J	0.3913	0.0006	< 0.0052 U	--	--	< 0.0043 U	--	--	< 0.034 U	--	--	0.0090 J	0.0404	0.0001	0.0043 J	0.0790	0.0001	0.0037 J	0.1125	0.0002	0.0034 J	0.6452	0.0010	< 0.0046 U	--	--			
CHRYSENE	843	16.86	0.0182	0.6386	0.0008	0.0690	2.6538	0.0031	0.0063	0.3600	0.000																														

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Transect K																	
Sample ID			SDK1			SDK1			SDK1			SDK2			SDK2			SDK2		
Sample Date			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013		
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0226	0.2093	0.0004	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0047 U	--	--
ACENAPHTHYLENE	452	9.04	0.122	1.1296	0.0025	0.0048 J	0.2115	0.0005	< 0.0055 U	--	--	0.0033 J	0.1347	0.0003	0.0084	1.3548	0.0030	< 0.0047 U	--	--
ANTHRACENE	594	11.88	0.297	2.7500	0.0046	0.0038 J	0.1674	0.0003	< 0.0055 U	--	--	0.0053 J	0.2163	0.0004	0.0101	1.6290	0.0027	< 0.0047 U	--	--
BENZO(A)ANTHRACENE	841	16.82	0.256	2.3704	0.0028	0.0072	0.3172	0.0004	0.0030 J	0.2308	0.0003	0.0138	0.5633	0.0007	0.0230	3.7097	0.0044	< 0.0047 U	--	--
BENZO(A)PYRENE	964	19.28	0.259	2.3981	0.0025	0.0089	0.3921	0.0004	0.0040 J	0.3077	0.0003	0.0168	0.6857	0.0007	0.0275	4.4355	0.0046	< 0.0047 U	--	--
BENZO(B)FLUORANTHENE	979	19.58	0.258	2.3889	0.0024	0.0092	0.4053	0.0004	0.0047 J	0.3615	0.0004	0.0136	0.5551	0.0006	0.0249	4.0161	0.0041	< 0.0047 U	--	--
BENZO(G,H,I)PERYLENE	1095	21.9	0.193	1.7870	0.0016	0.0073	0.3216	0.0003	0.0035 J	0.2692	0.0002	0.0100	0.4082	0.0004	0.0202	3.2581	0.0030	< 0.0047 U	--	--
BENZO(K)FLUORANTHENE	980	19.6	0.247	2.2870	0.0023	0.0085	0.3744	0.0004	0.0038 J	0.2923	0.0003	0.0144	0.5878	0.0006	0.0252	4.0645	0.0041	< 0.0047 U	--	--
BENZO[E]PYRENE	967	19.34	0.212	1.9630	0.0020	0.0075	0.3304	0.0003	0.0038 J	0.2923	0.0003	0.0111	0.4531	0.0005	0.0210	3.3871	0.0035	< 0.0047 U	--	--
C1-Benzanthracenes/Chrysenes	930	18.6	0.0163	0.1509	0.0002	0.0064	0.2819	0.0003	0.0031 J	0.2385	0.0003	0.0070	0.2857	0.0003	0.0153	2.4677	0.0027	< 0.0047 U	--	--
C1-Fluoranthenes/Pyrenes	769	15.38	0.0683	0.6324	0.0008	0.0096	0.4229	0.0005	0.0052 J	0.4000	0.0005	0.0119	0.4857	0.0006	0.0250	4.0323	0.0052	< 0.0047 U	--	--
C1-Fluorenes	611	12.22	< 0.0093 U	--	--	0.0029 J	0.1278	0.0002	0.0032 J	0.2462	0.0004	< 0.0059 U	--	--	0.0040 J	0.6452	0.0011	< 0.0047 U	--	--
C1-Naphthalenes	445	8.9	0.0390	0.3611	0.0008	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0047 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0630	0.5833	0.0009	0.0092	0.4053	0.0006	0.0052 J	0.4000	0.0006	0.0089	0.3633	0.0005	0.0202	3.2581	0.0049	< 0.0047 U	--	--
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0163 J	0.1509	0.0001	0.0064 J	0.2819	0.0003	0.0031 J	0.2385	0.0002	0.0070 U	0.2857	0.0003	0.0153	2.4677	0.0024	< 0.0047 U	--	--
C2-Fluorenes	687	13.74	< 0.0093 U	--	--	0.0039 J	0.1718	0.0003	0.0035 J	0.2692	0.0004	< 0.0059 U	--	--	0.0047	0.7581	0.0011	< 0.0047 U	--	--
C2-Naphthalenes	510	10.2	0.0217	0.2009	0.0004	0.0059	0.2599	0.0005	0.0064	0.4923	0.0010	0.0038 J	0.1551	0.0003	0.0054	0.8710	0.0017	< 0.0047 U	--	--
C2-Phenanthrenes/Anthracenes	745	14.9	0.0228	0.2111	0.0003	0.0061	0.2687	0.0004	0.0037 J	0.2846	0.0004	0.0041 J	0.1673	0.0002	0.0122	1.9677	0.0026	< 0.0047 U	--	--
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0093 U	--	--	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	0.0044 J	0.7097	0.0006	< 0.0047 U	--	--
C3-Fluorenes	768	15.36	< 0.0093 U	--	--	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0047 U	--	--
C3-Naphthalenes	581	11.62	0.0164	0.1519	0.0003	0.0063	0.2775	0.0005	0.0050 J	0.3846	0.0007	0.0031 J	0.1265	0.0002	0.0074	1.1935	0.0021	< 0.0047 U	--	--
C3-Phenanthrenes/Anthracenes	830	16.6	0.0230	0.2130	0.0003	0.0048 J	0.2115	0.0003	0.0033 J	0.2538	0.0003	< 0.0059 U	--	--	0.0068	1.0968	0.0013	< 0.0047 U	--	--
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0093 U	--	--	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	< 0.0045 U	--	--	< 0.0047 U	--	--
C4-Naphthalenes	657	13.14	< 0.0093 U	--	--	0.0065	0.2863	0.0004	0.0067	0.5154	0.0008	0.0040 J	0.1633	0.0002	0.0073	1.1774	0.0018	< 0.0047 U	--	--
C4-Phenanthrenes/Anthracenes	670	13.4	0.0050 J	0.0463	0.0001	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	0.0044 J	0.7097	0.0011	< 0.0047 U	--	--
CHRYSENE	843	16.86	0.336	3.1111	0.0037	0.0122	0.5374	0.0006	0.0057	0.4385	0.0005	0.0177	0.7224	0.0009	0.0326	5.2581	0.0062	< 0.0047 U	--	--
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0699	0.6472	0.0006	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	0.0073	1.1774	0.0010	0.0060	1.5915	0.0014
FLUORANTHENE	708	14.16	0.507	4.6944	0.0066	0.0155	0.6828	0.0010	0.0069	0.5308	0.0007	0.0329	1.3429	0.0019	0.0517	8.3387	0.0118	< 0.0047 U	--	--
FLUORENE	539	10.78	0.0227	0.2102	0.0004	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	0.0029 J	0.4677	0.0009	< 0.0047 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.207	1.9167	0.0017	0.0074	0.3260	0.0003	0.0035 J	0.2692	0.0002	0.0103	0.4204	0.0004	0.0207	3.3387	0.0030	0.0038 J	1.0080	0.0009
NAPHTHALENE	385	7.7	0.0636	0.5889	0.0015	< 0.0051 U	--	--	< 0.0055 U	--	--	< 0.0059 U	--	--	0.0052	0.8387	0.0022	< 0.0047 U	--	--
PERYLENE	967	19.34	0.0627	0.5806	0.0006	0.0093	0.4097	0.0004	0.0077	0.5923	0.0006	0.0060	0.2449	0.0003	0.0325	5.2419	0.0054	< 0.0047 U	--	--
PHENANTHRENE	597	11.94	0.299	2.7685	0.0046	0.0094	0.4141	0.0007	0.0050 J	0.3846	0.0006	0.0192	0.7837	0.0013	0.0288	4.6452	0.0078	< 0.0047 U	--	--
PYRENE	698	13.96	0.424	3.9259	0.0056	0.0128	0.5639	0.0008	0.0056	0.4308	0.0006	0.0278	1.1347	0.0016	0.0437	7.0484	0.0101	< 0.0047 U	--	--
TOC	--	--	108000	--	--	22700	--	--	13000	--	--	24500	--	--	6200	--	--	3770	--	--
Total PAH Toxicity Units	--	--	--	--	0.0508	--	--	0.0110	--	--	0.0107	--	--	0.0131	--	--	0.1064	--	--	0.0023

Notes:
PAH - Polycyclic Aromatic Hydrocarbon.
U or < - Compound was analyzed for, but not detected (i.e., concentration less than method detection limit). Presented with Gray text.
J - Estimated.
mg/kg - milligrams per kilogram.
µg/gOC - micrograms per gram of Organic Carbon.
TOC - Total Organic Carbon.
TU - Toxicity unit.
Black text indicates a detection (i.e., a concentration greater than the method detection limit).

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		North Swale to Sanders Creek																																			
Sample ID			SDS1									SDS2			SDS2			SDS2			SDS3			SDS3			SDS3			SDS4			SDS4					
Sample Date			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013			11/4/2013								
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU			
ACENAPHTHENE	491	9.82	< 0.0047 U	--	--	< 0.0060 U	--	--	< 0.0042 U	--	--	0.0056	0.2343	0.0005	< 0.0047 U	--	--	0.0057 J	0.2969	0.0006	< 0.0049 U	--	--	< 0.0054 U	--	--	0.0086	0.5181	0.0011	0.0067 J	0.1311	0.0003	< 0.0055 U	--	--	< 0.0047 U	--	--
ACENAPHTHYLENE	452	9.04	0.0025 J	0.3365	0.0007	0.0036 J	0.1043	0.0002	< 0.0042 U	--	--	0.0146	0.6109	0.0014	0.0024 J	0.3681	0.0008	0.0099	0.5156	0.0011	0.0074	0.5441	0.0012	< 0.0054 U	--	--	0.0134	0.8072	0.0018	0.0319	0.6243	0.0014	< 0.0055 U	--	--	0.0052	0.5149	0.0011
ANTHRACENE	594	11.88	0.0024 J	0.3230	0.0005	< 0.0060 U	--	--	< 0.0042 U	--	--	0.0213	0.8912	0.0015	0.0029 J	0.4448	0.0007	0.0105	0.5469	0.0009	0.0063	0.4632	0.0008	< 0.0054 U	--	--	0.0106	0.6386	0.0011	0.0291	0.5695	0.0010	< 0.0055 U	--	--	0.0034 J	0.3366	0.0006
BENZO(A)ANTHRACENE	841	16.82	0.0049	0.6595	0.0008	0.0062	0.1797	0.0002	< 0.0042 U	--	--	0.0345	1.4435	0.0017	0.0057	0.8742	0.0010	0.0188	0.9792	0.0012	0.0161	1.1838	0.0014	< 0.0054 U	--	--	0.0168	1.0120	0.0012	0.0595	1.1644	0.0014	< 0.0055 U	--	--	0.0079	0.7822	0.0009
BENZO(A)PYRENE	964	19.28	0.0056 J	0.7537	0.0008	0.0075 J	0.2174	0.0002	< 0.0042 U	--	--	0.0362 J	1.5146	0.0016	0.0060 J	0.9202	0.0010	0.0196 J	1.0208	0.0011	0.0180 J	1.3235	0.0014	< 0.0054 U	--	--	0.0180 J	1.0843	0.0011	0.0686 J	1.3425	0.0014	< 0.0055 U	--	--	0.0096 J	0.9505	0.0010
BENZO(B)FLUORANTHENE	979	19.58	0.0053 J	0.7133	0.0007	0.0074 J	0.2145	0.0002	< 0.0042 U	--	--	0.0317 J	1.3264	0.0014	0.0059 J	0.9049	0.0009	0.0179 J	0.9323	0.0010	0.0185 J	1.3603	0.0014	< 0.0054 U	--	--	0.0186 J	1.1205	0.0011	0.0599 J	1.1722	0.0012	< 0.0055 U	--	--	0.0091 J	0.9010	0.0009
BENZO(G,H,I)PERYLENE	1095	21.9	0.0038 J	0.5114	0.0005	0.0053 J	0.1536	0.0001	< 0.0042 U	--	--	0.0246 J	1.0293	0.0009	0.0047 J	0.7209	0.0007	0.0137 J	0.7135	0.0007	0.0134 J	0.9853	0.0009	< 0.0054 U	--	--	0.0140 J	0.8434	0.0008	0.0452 J	0.8845	0.0008	< 0.0055 U	--	--	0.0067 J	0.6634	0.0006
BENZO(K)FLUORANTHENE	980	19.6	0.0052 J	0.6999	0.0007	0.0068 J	0.1971	0.0002	< 0.0042 U	--	--	0.0316 J	1.3222	0.0013	0.0056 J	0.8589	0.0009	0.0181 J	0.9427	0.0010	0.0175 J	1.2868	0.0013	< 0.0054 U	--	--	0.0168 J	1.0120	0.0010	0.0618 J	1.2094	0.0012	< 0.0055 U	--	--	0.0086 J	0.8515	0.0009
BENZO(E)PYRENE	967	19.34	0.0041 J	0.5518	0.0006	0.0057 J	0.1652	0.0002	< 0.0042 U	--	--	0.0274 J	1.1464	0.0012	0.0052 J	0.7975	0.0008	0.0154 J	0.8021	0.0008	0.0154 J	1.1324	0.0012	< 0.0054 U	--	--	0.0162 J	0.9759	0.0010	0.0508 J	0.9941	0.0010	< 0.0055 U	--	--	0.0077 J	0.7624	0.0008
C1-Benzanthracenes/Chrysenes	930	18.6	0.0041 J	0.5518	0.0006	0.0062	0.1797	0.0002	< 0.0042 U	--	--	0.0175	0.7322	0.0008	0.0038 J	0.5828	0.0006	0.0142	0.7396	0.0008	0.0104	0.7647	0.0008	< 0.0054 U	--	--	0.0129	0.7771	0.0008	0.0374	0.7319	0.0008	< 0.0055 U	--	--	0.0061	0.6040	0.0006
C1-Fluoranthenes/Pyrenes	769	15.38	0.0088	1.1844	0.0015	0.0122	0.3536	0.0005	0.0042	0.8268	0.0011	0.0359	1.5021	0.0020	0.0081	1.2423	0.0016	0.0288	1.5000	0.0020	0.0187	1.3750	0.0018	0.0045 J	0.3103	0.0004	0.0250	1.5060	0.0020	0.0711	1.3914	0.0018	0.0038 J	0.1301	0.0002	0.0122	1.2079	0.0016
C1-Fluorenes	611	12.22	0.0066	0.8883	0.0015	0.0064	0.1855	0.0003	0.0039 J	0.7677	0.0013	0.0082	0.3431	0.0006	0.0039 J	0.5982	0.0010	0.0088	0.4583	0.0008	0.0061	0.4485	0.0007	0.0044 J	0.3034	0.0005	0.0084	0.5060	0.0008	0.0085	0.1663	0.0003	0.0033 J	0.1130	0.0002	0.0068	0.6733	0.0011
C1-Naphthalenes	445	8.9	0.0062	0.8345	0.0019	0.0080	0.2319	0.0005	0.0051	1.0039	0.0023	0.0102	0.4268	0.0010	0.0091	1.3957	0.0031	0.0162	0.8438	0.0019	0.0145	1.0662	0.0024	0.0089	0.6138	0.0014	0.0266	1.6024	0.0036	0.0194	0.3796	0.0009	0.0075	0.2568	0.0006	0.0088	0.8713	0.0020
C1-Phenanthrenes/Anthracenes	670	13.4	0.0131	1.7631	0.0026	0.0150	0.4348	0.0006	0.0064	1.2598	0.0019	0.0302	1.2636	0.0019	0.0092	1.4110	0.0021	0.0292	1.5208	0.0023	0.0196	1.4412	0.0022	0.0065	0.4483	0.0007	0.0274	1.6506	0.0025	0.0539	1.0548	0.0016	0.0063	0.2158	0.0003	0.0264	2.6139	0.0039
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0041 J	0.5518	0.0005	0.0062 U	0.1797	0.0002	< 0.0042 U	--	--	0.0175	0.7322	0.0007	0.0038 J	0.5828	0.0006	0.0142	0.7396	0.0007	0.0104	0.7647	0.0008	< 0.0054 U	--	--	0.0129	0.7771	0.0008	0.0374	0.7319	0.0007	< 0.0055 U	--	--	0.0061 U	0.6040	0.0006
C2-Fluorenes	687	13.74	0.0082	1.1036	0.0016	0.0121	0.3507	0.0005	0.0078	1.5354	0.0022	0.0106	0.4435	0.0006	0.0077	1.1810	0.0017	0.0143	0.7448	0.0011	0.0107	0.7868	0.0011	0.0055	0.3793	0.0006	0.0117	0.7048	0.0010	0.0164	0.3209	0.0005	< 0.0055 U	--	--	0.0141	1.3960	0.0020
C2-Naphthalenes	510	10.2	0.0147	1.9785	0.0039	0.0151	0.4377	0.0009	0.0098	1.9291	0.0038	0.0164	0.6862	0.0013	0.0140	2.1472	0.0042	0.0229	1.1927	0.0023	0.0283	2.0809	0.0041	0.0132	0.9103	0.0018	0.0269	1.6205	0.0032	0.0234	0.4579	0.0009	0.0115	0.3938	0.0008	0.0295	2.9208	0.0057
C2-Phenanthrenes/Anthracenes	745	14.9	0.0108	1.4536	0.0020	0.0119	0.3449	0.0005	0.0053	1.0433	0.0014	0.0167	0.6987	0.0009	0.0068	1.0429	0.0014	0.0213	1.1094	0.0015	0.0141	1.0368	0.0014	0.0048 J	0.3310	0.0004	0.0168	1.0120	0.0014	0.0330	0.6458	0.0009	0.0051 J	0.1747	0.0002	0.0224	2.2178	0.0030
C3-Benzanthracenes/Chrysenes	1213	24.26	< 0.0047 U	--	--	< 0.0060 U	--	--	< 0.0042 U	--	--	< 0.0053 U	--	--	< 0.0047 U	--	--	< 0.0063 U	--	--	< 0.0049 U	--	--	< 0.0054 U	--	--	< 0.0056 U	--	--	< 0.0074 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--
C3-Fluorenes	768	15.36	0.0071	0.9556	0.0012	0.0128	0.3710	0.0005	0.0062	1.2205	0.0016	0.0143	0.5983	0.0008	0.0074	1.1350	0.0015	0.0170	0.8854	0.0012	0.0166	1.2206	0.0016	< 0.0054 U	--	--	0.0381	2.2952	0.0030	0.0445	0.8708	0.0011	< 0.0055 U	--	--	0.0158	1.5644	0.0020
C3-Naphthalenes	581	11.62	0.0218	2.9341	0.0051	0.0224	0.6493	0.0011	0.0124	2.4409	0.0042	0.0186	0.7782	0.0013	0.0136	2.0859	0.0036	0.0263	1.3698	0.0024	0.0311	2.2868	0.0039	0.0118	0.8138	0.0014	0.0201	1.2108	0.0021	0.0224	0.4384	0.0008	< 0.0055 U	--	--	0.0482	4.7723	0.0082
C3-Phenanthrenes/Anthracenes	830	16.6	0.0068	0.9152	0.0011	0.0086	0.2493	0.0003	0.0042	0.8268	0.0010	0.0096	0.4017	0.0005	0.0049	0.7515	0.0009	0.0110	0.5729	0.0007	0.0076	0.5588	0.0007	0.0038 J	0.2621	0.0003	0.0087	0.5241	0.0006	0.0171	0.3346	0.0004	0.0034 J	0.1164	0.0001	0.0121	1.1980	0.0014
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0047 U	--	--	< 0.0060 U	--	--	< 0.0042 U	--	--	< 0.0053 U	--	--	< 0.0047 U	--	--	< 0.0063 U	--	--	< 0.0049 U	--	--	< 0.0054 U	--	--	< 0.0056 U	--	--	< 0.0074 U	--	--	< 0.0055 U	--	--	< 0.0047 U	--	--
C4-Naphthalenes	657	13.14	0.0169	2.2746	0.0035	0.0231	0.6696	0.0010	0.0103	2.0276	0.0031	0.0115	0.4812	0.0007	0.0127	1.9479	0.0030	0.0217	1.1302	0.0017	0.0214	1.5735	0.0024	0.0115	0.7931	0.0012	0.0156	0.9398	0.0014	0.0212	0.4149	0.0006	0.0111	0.3801	0.0006	0.0357	3.5347	0.0054
C4-Phenanthrenes/Anthracenes	670	13.4	0.0050	0.6729	0.0010	0.0054 J	0.1565	0.0002	0.0036 J	0.7087	0.0011	0.0063	0.2636	0.0004	< 0.0047 U	--	--	0.0072	0.3750	0.0006	0.0036 J	0.2647	0.0004	< 0.0054 U	--	--	0.0049 J	0.2952	0.0004	0.0079	0.1546	0.0002	< 0.0055 U	--	--	0.0040 J	0.3960	0.0006
CHRYSENE	843	16.86	0.0075	1.0094	0.0012	0.0100	0.2899	0.0003	< 0.0042 U	--	--	0.0446	1.8661	0.0022	0.0082	1.2577	0.0015	0.0273																				

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		North Swale to Sanders Creek																										
Sample ID			SDS5			SDS5			SDS5			SDS6			SDS6			SDS6			SDS7			SDS7			SDS7		
Sample Date			11/4/2013			11/4/2013			11/4/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013		
Sample Interval (inches)			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0219	0.4140	0.0008	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0061 U	--	--	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
ACENAPHTHYLENE	452	9.04	0.0353	0.6673	0.0015	0.0164	0.4955	0.0011	< 0.0053 U	--	--	0.0119	0.3260	0.0007	0.0135	0.5153	0.0011	0.0046 J	0.1549	0.0003	0.0120	0.3960	0.0009	0.0069	0.5149	0.0011	0.0038 J	0.3930	0.0009
ANTHRACENE	594	11.88	0.0382	0.7221	0.0012	0.0122	0.3686	0.0006	< 0.0053 U	--	--	0.0138	0.3781	0.0006	0.0151	0.5763	0.0010	0.0047 J	0.1582	0.0003	0.0152	0.5017	0.0008	0.0084	0.6269	0.0011	0.0031 J	0.3206	0.0005
BENZO(A)ANTHRACENE	841	16.82	0.0635	1.2004	0.0014	0.0259	0.7825	0.0009	< 0.0053 U	--	--	0.0380	1.0411	0.0012	0.0399	1.5229	0.0018	0.0124	0.4175	0.0005	0.0469	1.5479	0.0018	0.0243	1.8134	0.0022	0.0065	0.6722	0.0008
BENZO(A)PYRENE	964	19.28	0.0685 J	1.2949	0.0013	0.0301 J	0.9094	0.0009	< 0.0053 U	--	--	0.0462	1.2658	0.0013	0.0485	1.8511	0.0019	0.0148	0.4983	0.0005	0.0588	1.9406	0.0020	0.0308	2.2985	0.0024	0.0080	0.8273	0.0009
BENZO(B)FLUORANTHENE	979	19.58	0.0605 J	1.1437	0.0012	0.0247 J	0.7462	0.0008	< 0.0053 U	--	--	0.0382	1.0466	0.0011	0.0414	1.5802	0.0016	0.0123	0.4141	0.0004	0.0539	1.7789	0.0018	0.0278	2.0746	0.0021	0.0066	0.6825	0.0007
BENZO(G,H,I)PERYLENE	1095	21.9	0.0431 J	0.8147	0.0007	0.0185 J	0.5589	0.0005	< 0.0053 U	--	--	0.0288	0.7890	0.0007	0.0299	1.1412	0.0010	0.0086	0.2896	0.0003	0.0400	1.3201	0.0012	0.0206	1.5373	0.0014	0.0053	0.5481	0.0005
BENZO(K)FLUORANTHENE	980	19.6	0.0627 J	1.1853	0.0012	0.0274 J	0.8278	0.0008	< 0.0053 U	--	--	0.0413	1.1315	0.0012	0.0430	1.6412	0.0017	0.0129	0.4343	0.0004	0.0532	1.7558	0.0018	0.0270	2.0149	0.0021	0.0068	0.7032	0.0007
BENZO(E)PYRENE	967	19.34	0.0515 J	0.9735	0.0010	0.0223 J	0.6737	0.0007	< 0.0053 U	--	--	0.0312	0.8548	0.0009	0.0331	1.2634	0.0013	0.0098	0.3300	0.0003	0.0439	1.4488	0.0015	0.0227	1.6940	0.0018	0.0055	0.5688	0.0006
C1-Benzanthracenes/Chrysenes	930	18.6	0.0387	0.7316	0.0008	0.0187	0.5650	0.0006	< 0.0053 U	--	--	0.0201	0.5507	0.0006	0.0219	0.8359	0.0009	0.0070	0.2357	0.0003	0.0223	0.7360	0.0008	0.0123	0.9179	0.0010	0.0046	0.4757	0.0005
C1-Fluoranthenes/Pyrenes	769	15.38	0.0840	1.5879	0.0021	0.0349	1.0544	0.0014	< 0.0053 U	--	--	0.0361	0.9890	0.0013	0.0382	1.4580	0.0019	0.0122	0.4108	0.0005	0.0389	1.2838	0.0017	0.0212	1.5821	0.0021	0.0078	0.8066	0.0010
C1-Fluorenes	611	12.22	0.0170	0.3214	0.0005	0.0055 J	0.1662	0.0003	< 0.0053 U	--	--	0.0033 J	0.0904	0.0001	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
C1-Naphthalenes	445	8.9	0.0458	0.8658	0.0019	0.0101	0.3051	0.0007	0.0048 J	0.2254	0.0005	< 0.0061 U	--	--	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0852	1.6106	0.0024	0.0320	0.9668	0.0014	0.0038 J	0.1784	0.0003	0.0238	0.6521	0.0010	0.0265	1.0115	0.0015	0.0089	0.2997	0.0004	0.0233	0.7690	0.0011	0.0134	1.0000	0.0015	0.0059	0.6101	0.0009
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0387	0.7316	0.0007	0.0187	0.5650	0.0006	< 0.0053 U	--	--	0.0201	0.5507	0.0005	0.0219	0.8359	0.0008	0.0070 J	0.2357	0.0002	0.0223	0.7360	0.0007	0.0123 J	0.9179	0.0009	< 0.0046 U	0.4757	0.0005
C2-Fluorenes	687	13.74	0.0175	0.3308	0.0005	0.0091	0.2749	0.0004	< 0.0053 U	--	--	0.0056 J	0.1534	0.0002	0.0046 J	0.1756	0.0003	< 0.0052 U	--	--	0.0047 J	0.1551	0.0002	0.0030 J	0.2239	0.0003	0.0034 J	0.3516	0.0005
C2-Naphthalenes	510	10.2	0.0473	0.8941	0.0018	0.0146	0.4411	0.0009	0.0064	0.3005	0.0006	0.0061	0.1671	0.0003	0.0089	0.3397	0.0007	0.0038 J	0.1279	0.0003	0.0047 J	0.1551	0.0003	0.0036 J	0.2687	0.0005	0.0029 J	0.2999	0.0006
C2-Phenanthrenes/Anthracenes	745	14.9	0.0438	0.8280	0.0011	0.0209	0.6314	0.0008	< 0.0053 U	--	--	0.0117	0.3205	0.0004	0.0139	0.5305	0.0007	0.0052	0.1751	0.0002	0.0115	0.3795	0.0005	0.0060	0.4478	0.0006	0.0032 J	0.3309	0.0004
C3-Benzanthracenes/Chrysenes	1213	24.26	0.0110	0.2079	0.0002	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0061 U	--	--	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
C3-Fluorenes	768	15.36	0.0270	0.5104	0.0007	0.0125	0.3776	0.0005	< 0.0053 U	--	--	0.0037 J	0.1014	0.0001	0.0049 J	0.1870	0.0002	< 0.0052 U	--	--	0.0041 J	0.1353	0.0002	< 0.0046 U	--	--	< 0.0043 U	--	--
C3-Naphthalenes	581	11.62	0.0342	0.6465	0.0011	0.0154	0.4653	0.0008	< 0.0053 U	--	--	0.0066	0.1808	0.0003	0.0076	0.2901	0.0005	0.0036 J	0.1212	0.0002	0.0056 J	0.1848	0.0003	0.0042 J	0.3134	0.0005	0.0031 J	0.3206	0.0006
C3-Phenanthrenes/Anthracenes	830	16.6	0.0190	0.3592	0.0004	0.0118	0.3565	0.0004	< 0.0053 U	--	--	0.0066	0.1808	0.0002	0.0080	0.3053	0.0004	0.0030 J	0.1010	0.0001	0.0070	0.2310	0.0003	0.0036 J	0.2687	0.0003	0.0024 J	0.2482	0.0003
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0071 U	--	--	< 0.0060 U	--	--	< 0.0053 U	--	--	< 0.0061 U	--	--	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
C4-Naphthalenes	657	13.14	0.0243	0.4594	0.0007	0.0138	0.4169	0.0006	0.0053	0.2488	0.0004	0.0056 J	0.1534	0.0002	0.0070	0.2672	0.0004	0.0052	0.1751	0.0003	0.0069	0.2277	0.0003	0.0052	0.3881	0.0006	0.0044	0.4550	0.0007
C4-Phenanthrenes/Anthracenes	670	13.4	0.0089	0.1682	0.0003	0.0056 J	0.1692	0.0003	< 0.0053 U	--	--	0.0038 J	0.1041	0.0002	0.0046 J	0.1756	0.0003	< 0.0052 U	--	--	0.0035 J	0.1155	0.0002	< 0.0046 U	--	--	< 0.0043 U	--	--
CHRYSENE	843	16.86	0.0884	1.6711	0.0020	0.0369	1.1148	0.0013	< 0.0053 U	--	--	0.0498	1.3644	0.0016	0.0530	2.0229	0.0024	0.0156	0.5253	0.0006	0.0647	2.1353	0.0025	0.0332	2.4776	0.0029	0.0085	0.8790	0.0010
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0112 J	0.2117	0.0002	0.0047 J	0.1420	0.0001	< 0.0053 U	--	--	0.0072	0.1973	0.0002	0.0082	0.3130	0.0003	< 0.0052 U	--	--	0.0105	0.3465	0.0003	0.0049	0.3657	0.0003	< 0.0043 U	--	--
FLUORANTHENE	708	14.16	0.162	3.0624	0.0043	0.0623	1.8822	0.0027	< 0.0053 U	--	--	0.0900	2.4658	0.0035	0.0950	3.6260	0.0051	0.0275	0.9259	0.0013	0.112	3.6964	0.0052	0.0569	4.2463	0.0060	0.0140	1.4478	0.0020
FLUORENE	539	10.78	0.0164	0.3100	0.0006	0.0041 J	0.1239	0.0002	< 0.0053 U	--	--	0.0039 J	0.1068	0.0002	0.0040 J	0.1527	0.0003	< 0.0052 U	--	--	0.0041 J	0.1353	0.0003	0.0025 J	0.1866	0.0003	< 0.0043 U	--	--
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0433 J	0.8185	0.0007	0.0180 J	0.5438	0.0005	< 0.0053 U	--	--	0.0280	0.7671	0.0007	0.0311	1.1870	0.0011	0.0092	0.3098	0.0003	0.0419	1.3828	0.0012	0.0209	1.5597	0.0014	0.0054	0.5584	0.0005
NAPHTHALENE	385	7.7	0.0469	0.8866	0.0023	0.0111	0.3353	0.0009	0.0049 J	0.2300	0.0006	< 0.0061 U	--	--	< 0.0057 U	--	--	< 0.0052 U	--	--	< 0.0057 U	--	--	< 0.0046 U	--	--	< 0.0043 U	--	--
PERYLENE	967	19.34	0.0230 J	0.4348	0.0004	0.0073 J	0.2205	0.0002	< 0.0053 U	--	--	0.0119	0.3260	0.0003	0.0127	0.4847	0.0005	0.0044 J	0.1481	0.0002	0.0154	0.5083	0.0005	0.0080	0.5970	0.0006	0.0021 J	0.2172	0.0002
PHENANTHRENE	597	11.94	0.136	2.5709	0.0043	0.0401	1.2115	0.0020	0.0038 J	0.1784	0.0003	0.0472	1.2932	0.0022	0.0491	1.8740	0.0031	0.0141	0.4747	0.0008	0.0535	1.7657	0.0030	0.0266	1.9851	0.0033	0.0072	0.7446	0.0012
PYRENE	698	13.96	0.146	2.7599	0.0040	0.0559	1.6888	0.0024	< 0.0053 U	--	--	0.0764	2.0932	0.0030	0.0803	3.0649	0.0044	0.0235	0.7912	0.0011	0.0940	3.1023	0.0044	0.0482	3.5970	0.0052	0.0125	1.2927	0.0019
TOC	--	--	52900	--	--	33100	--	--	21300	--																			

Table 5
PAH Screening Table with Calculated Toxicity Units
November 2013 Event
UTC/Carrier Circle
Carrier-Dewitt Landfill (AOC G)
Thompson Road, Syracuse, New York

Transect	NYSDEC Screening Criteria		Sanders Creek																										
Sample ID			SDS8			SDS8 (Dup)			SDS8			SDS8 (Dup)			SDS8			SDS8 (Dup)			SDS9			SDS9			SDS9		
Sample Date			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013			11/5/2013		
Sample Interval (inches)			0 - 6			0 - 6			6 - 12			6 - 12			18 - 24			18 - 24			0 - 6			6 - 12			18 - 24		
Chemical Name	Sediment Guidance Value (µg/gOC)	NYSDEC Sediment CLASS A	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU	mg/kg	µg/gOC	TU
ACENAPHTHENE	491	9.82	0.0123	0.3361	0.0007	0.0106	0.8480	0.0017	< 0.0057 U	--	--	< 0.0056 U	--	--	< 0.0047 U	--	--	< 0.0045 U	--	--	0.0478	2.7006	0.0055	0.0688	2.0476	0.0042	< 0.0047 U	--	--
ACENAPHTHYLENE	452	9.04	0.0240	0.6557	0.0015	0.0248	1.9840	0.0044	0.0140	0.4698	0.0010	0.0136	0.3736	0.0008	0.0056	0.4590	0.0010	0.0203	0.8750	0.0019	0.0941	5.3164	0.0118	0.106	3.1548	0.0070	0.0082	1.2893	0.0029
ANTHRACENE	594	11.88	0.0435	1.1885	0.0020	0.0382	3.0560	0.0051	0.0190	0.6376	0.0011	0.0141	0.3874	0.0007	0.0051	0.4180	0.0007	0.0198	0.8534	0.0014	0.183	10.3390	0.0174	0.233	6.9345	0.0117	0.0079	1.2421	0.0021
BENZO(A)ANTHRACENE	841	16.82	0.132	3.6066	0.0043	0.12	9.6000	0.0114	0.0605	2.0302	0.0024	0.0347	0.9533	0.0011	0.0111	0.9098	0.0011	0.0353	1.5216	0.0018	0.542	30.6215	0.0364	0.738	21.9643	0.0261	0.0183	2.8774	0.0034
BENZO(A)PYRENE	964	19.28	0.15	4.0984	0.0043	0.139	11.1200	0.0115	0.0753	2.5268	0.0026	0.0420	1.1538	0.0012	0.0133	1.0902	0.0011	0.0457	1.9698	0.0020	0.658	37.1751	0.0386	0.89	26.4881	0.0275	0.0224	3.5220	0.0037
BENZO(B)FLUORANTHENE	979	19.58	0.128	3.4973	0.0036	0.119	9.5200	0.0097	0.0693	2.3255	0.0024	0.0361	0.9918	0.0010	0.0112	0.9180	0.0009	0.0388	1.6724	0.0017	0.564	31.8644	0.0325	0.776	23.0952	0.0236	0.0189	2.9717	0.0030
BENZO(G,H,I)PERYLENE	1095	21.9	0.0945	2.5820	0.0024	0.0872	6.9760	0.0064	0.0515	1.7282	0.0016	0.0271	0.7445	0.0007	0.0084	0.6885	0.0006	0.0328	1.4138	0.0013	0.438	24.7458	0.0226	0.58	17.2619	0.0158	0.0141	2.2170	0.0020
BENZO(K)FLUORANTHENE	980	19.6	0.134	3.6612	0.0037	0.124	9.9200	0.0101	0.0706	2.3691	0.0024	0.0377	1.0357	0.0011	0.0122	1.0000	0.0010	0.0408	1.7586	0.0018	0.61	34.4633	0.0352	0.8	23.8095	0.0243	0.0199	3.1289	0.0032
BENZO(E)PYRENE	967	19.34	0.105	2.8689	0.0030	0.0964	7.7120	0.0080	0.0572	1.9195	0.0020	0.0299	0.8214	0.0008	0.0094	0.7705	0.0008	0.0355	1.5302	0.0016	0.463	26.1582	0.0271	0.617	18.3631	0.0190	0.0153	2.4057	0.0025
C1-Benzanthracenes/Chrysenes	930	18.6	0.0569	1.5546	0.0017	0.0534	4.2720	0.0046	0.0291	0.9765	0.0011	0.0195	0.5357	0.0006	0.0073	0.5984	0.0006	0.0255	1.0991	0.0012	0.247	13.9548	0.0150	0.325	9.6726	0.0104	0.0109	1.7138	0.0018
C1-Fluoranthenes/Pyrenes	769	15.38	0.103	2.8142	0.0037	0.0972	7.7760	0.0101	0.0510	1.7114	0.0022	0.0338	0.9286	0.0012	0.0132	1.0820	0.0014	0.0432	1.8621	0.0024	0.397	22.4294	0.0292	0.519	15.4464	0.0201	0.0193	3.0346	0.0039
C1-Fluorenes	611	12.22	0.0054 J	0.1475	0.0002	0.0053	0.4240	0.0007	0.0031 J	0.1040	0.0002	0.0029 J	0.0797	0.0001	< 0.0047 U	--	--	0.0045	0.1940	0.0003	0.0196	1.1073	0.0018	0.0255	0.7589	0.0012	0.0025 J	0.3931	0.0006
C1-Naphthalenes	445	8.9	0.0064	0.1749	0.0004	0.0059	0.4720	0.0011	< 0.0057 U	--	--	< 0.0056 U	--	--	< 0.0047 U	--	--	0.0047	0.2026	0.0005	0.0223	1.2599	0.0028	0.0243	0.7232	0.0016	< 0.0047 U	--	--
C1-Phenanthrenes/Anthracenes	670	13.4	0.0565	1.5437	0.0023	0.0537	4.2960	0.0064	0.0292	0.9799	0.0015	0.0217	0.5962	0.0009	0.0095	0.7787	0.0012	0.0317	1.3664	0.0020	0.232	13.1073	0.0196	0.299	8.8988	0.0133	0.0130	2.0440	0.0031
C2-Benzanthracenes/Chrysenes	1009	20.18	0.0569	1.5546	0.0015	0.0534	4.2720	0.0042	0.0291	0.9765	0.0010	0.0195	0.5357	0.0005	0.0073	0.5984	0.0006	0.0255	1.0991	0.0011	0.247	13.9548	0.0138	0.325	9.6726	0.0096	0.0109	1.7138	0.0017
C2-Fluorenes	687	13.74	0.0089	0.2432	0.0004	0.0079	0.6320	0.0009	0.0047 J	0.1577	0.0002	0.0044 J	0.1209	0.0002	0.0028 J	0.2295	0.0003	0.0065	0.2802	0.0004	0.0278	1.5706	0.0023	0.0347	1.0327	0.0015	0.0032 J	0.5031	0.0007
C2-Naphthalenes	510	10.2	0.0109	0.2978	0.0006	0.0087	0.6960	0.0014	0.0086	0.2886	0.0006	0.0057	0.1566	0.0003	0.0038 J	0.3115	0.0006	0.0078	0.3362	0.0007	0.0300	1.6949	0.0033	0.0357	1.0625	0.0021	0.0044 J	0.6918	0.0014
C2-Phenanthrenes/Anthracenes	745	14.9	0.0273	0.7459	0.0010	0.0247	1.9760	0.0027	0.0145	0.4866	0.0007	0.0123	0.3379	0.0005	0.0058	0.4754	0.0006	0.0182	0.7845	0.0011	0.115	6.4972	0.0087	0.151	4.4940	0.0060	0.0071	1.1164	0.0015
C3-Benzanthracenes/Chrysenes	1213	24.26	0.0126	0.3443	0.0003	0.0133	1.0640	0.0009	0.0073	0.2450	0.0002	< 0.0056 U	--	--	< 0.0047 U	--	--	0.0096	0.4138	0.0003	0.0578	3.2655	0.0027	0.0769	2.2887	0.0019	< 0.0047 U	--	--
C3-Fluorenes	768	15.36	0.0047 J	0.1284	0.0002	0.0044 J	0.3520	0.0005	< 0.0057 U	--	--	0.0031 J	0.0852	0.0001	< 0.0047 U	--	--	0.0045	0.1940	0.0003	0.0183	1.0339	0.0013	0.0223	0.6637	0.0009	< 0.0047 U	--	--
C3-Naphthalenes	581	11.62	0.0096	0.2623	0.0005	0.0091	0.7280	0.0013	0.0080	0.2685	0.0005	0.0051 J	0.1401	0.0002	0.0040 J	0.3279	0.0006	0.0079	0.3405	0.0006	0.0274	1.5480	0.0027	0.0328	0.9762	0.0017	0.0042 J	0.6604	0.0011
C3-Phenanthrenes/Anthracenes	830	16.6	0.0146	0.3989	0.0005	0.0142	1.1360	0.0014	0.0079	0.2651	0.0003	0.0073	0.2005	0.0002	0.0040 J	0.3279	0.0004	0.0134	0.5776	0.0007	0.0619	3.4972	0.0042	0.0750	2.2321	0.0027	0.0044 J	0.6918	0.0008
C4-Benzanthracenes/Chrysenes	1213	24.26	< 0.0057 U	--	--	< 0.0048 U	--	--	< 0.0057 U	--	--	< 0.0056 U	--	--	< 0.0047 U	--	--	< 0.0045 U	--	--	0.0385	2.1751	0.0018	0.0436	1.2976	0.0011	< 0.0047 U	--	--
C4-Naphthalenes	657	13.14	0.0105	0.2869	0.0004	0.0081	0.6480	0.0010	0.0076	0.2550	0.0004	0.0056	0.1538	0.0002	0.0056	0.4590	0.0007	0.0081	0.3491	0.0005	0.0198	1.1186	0.0017	0.0230	0.6845	0.0010	0.0054	0.8491	0.0013
C4-Phenanthrenes/Anthracenes	670	13.4	0.0072	0.1967	0.0003	0.0066	0.5280	0.0008	0.0043 J	0.1443	0.0002	< 0.0056 U	--	--	0.0031 J	0.2541	0.0004	0.0064	0.2759	0.0004	0.0275	1.5537	0.0023	0.0309	0.9196	0.0014	0.0028 J	0.4403	0.0007
CHRYSENE	843	16.86	0.161	4.3989	0.0052	0.149	11.9200	0.0141	0.0834	2.7987	0.0033	0.0449	1.2335	0.0015	0.0146	1.1967	0.0014	0.0491	2.1164	0.0025	0.676	38.1921	0.0453	0.914	27.2024	0.0323	0.0236	3.7107	0.0044
DIBENZ(A,H)ANTHRACENE	1122	22.44	0.0233	0.6366	0.0006	0.0230	1.8400	0.0016	0.0133	0.4463	0.0004	0.0073	0.2005	0.0002	< 0.0047 U	--	--	0.0085	0.3664	0.0003	0.12	6.7797	0.0060	0.153	4.5536	0.0041	0.0040 J	0.6289	0.0006
FLUORANTHENE	708	14.16	0.304	8.3060	0.0117	0.276	22.0800	0.0312	0.151	5.0671	0.0072	0.0779	2.1401	0.0030	0.0253 J	2.0738	0.0029	0.0828 J	3.5690	0.0050	1.24	70.0565	0.0989	1.69	50.2976	0.0710	0.0410	6.4465	0.0091
FLUORENE	539	10.78	0.0121	0.3306	0.0006	0.0101	0.8080	0.0015	0.0054 J	0.1812	0.0003	0.0033 J	0.0907	0.0002	< 0.0047 U	--	--	0.0046	0.1983	0.0004	0.0460	2.5989	0.0048	0.0647	1.9256	0.0036	0.0027 J	0.4245	0.0008
INDENO(1,2,3-C,D)PYRENE	1115	22.3	0.0939	2.5656	0.0023	0.0901	7.2080	0.0065	0.0522	1.7517	0.0016	0.0280	0.7692	0.0007	0.0086	0.7049	0.0006	0.0312	1.3448	0.0012	0.456	25.7627	0.0231	0.595	17.7083	0.0159	0.0137	2.1541	0.0019
NAPHTHALENE	385	7.7	0.01	0.2732	0.0007	0.0089	0.7120	0.0018	< 0.0057 U	--	--	< 0.0056 U	--	--	< 0.0047 U	--	--	0.0067	0.2888	0.0008	0.0287	1.6215	0.0042	0.0321	0.9554	0.0025	< 0.0047 U	--	--
PERYLENE	967	19.34	0.0402	1.0984	0.0011	0.0370	2.9600	0.0031	0.0198	0.6644	0.0007	0.0112	0.3077	0.0003	0.0035 J	0.2869	0.0003	0.0126	0.5431	0.0006	0.173	9.7740	0.0101	0.23	6.8452	0.0071	0.0061	0.9591	0.0010
PHENANTHRENE	597	11.94	0.147	4.0164	0.0067	0.128	10.2400	0.0172	0.0701	2.3523	0.0039	0.0352	0.9670	0.0016	0.0140	1.1475	0.0019	0.0484	2.0862	0.0035	0.625	35.3107	0.0591	0.869	25.8631	0.0433	0.0222	3.4906	0.0058
PYRENE	698	13.96	0.262	7.1585	0.0103	0.238	19.0400	0.0273	0.1																				

Appendix A

Use of Equilibrium Partitioning Theory to Develop Sediment Guidance Values for Nonpolar Organic Compounds

Appendix A

Use of Equilibrium Partitioning Theory to Develop Sediment Guidance Values for Nonpolar Organic Compounds

The equilibrium partitioning methodology is well-documented in the scientific literature (US EPA, 1991; US EPA SAB, 1992; DiToro et al., 1991). It is based on the principle that nonpolar organic contaminants in sediment will partition between sediment pore water and the organic carbon content of sediment in a constant ratio. That ratio is referred to as the organic carbon partitioning coefficient, or Koc.

The Kow, or *n*-octanol water partitioning coefficient, is a measure of the ratio that describes the partitioning of a nonpolar organic compound between water and octanol. The Kow is a useful surrogate of how nonpolar organic compounds will accumulate in lipid in animal tissue (US EPA 1995). Kows are generally readily available for many common organic compounds, and tend to be similar in value to and vary proportionately with a compound's Koc (Kenaga, 1980; Voice, 1983). US EPA (1991) refers to DiToro (1985) to define the relationship between Kow and Koc as:

$$\text{Log}_{10}\text{Koc} = 0.00028 + 0.983 \cdot \log_{10}\text{Kow} \quad (1)$$

US EPA (2002) reported that the concentration-response curve for biological effects can be correlated with the concentration of the contaminant in the interstitial pore water, *not* with the concentration of the contaminant in sediment; and that the effects concentration for a chemical in pore water is essentially equal to that reported for water-only exposures. In other words, the toxicity of a nonpolar organic contaminant to sediment-dwelling organisms *is proportional to* the concentration of the contaminant that is freely dissolved in the sediment pore water. For nonpolar organic chemicals, the concentration-response curves correlate equally well with the sediment chemical concentration that is normalized on a sediment organic carbon basis. The higher the Kow of a nonpolar organic compound, the stronger the contaminant will adsorb to the organic carbon content in the sediment. When more organic carbon is present in sediment, the concentration of a nonpolar organic contaminant freely dissolved in sediment pore water will be smaller, and therefore, proportionally less toxic to aquatic organisms.

An equilibrium partitioning-based SGV is derived by multiplying the AWQS/GV from 6 NYCRR Part 703.5 or TOGS 1.1.1 for a nonpolar organic compound by its Koc, as derived from equation 1:

$$\text{SGVoc} = \text{AWQS/GV } \mu\text{g/L} * \text{Koc} \quad (2)$$

This results in a SGV in units of microgram (μg) of contaminant per gram of organic carbon in the sediment (SGVoc).

UTC-Carrier used this methodology to develop SGVs for organic chemicals detected at the AOC G landfill wetlands that lacked NYSDEC screening values. For chemicals lacking a NYCRR Part 703.5 or TOGS 1.1.1 AWQS for protection of aquatic life, US EPA Region 3 BTAG Kows and fresh water chronic water quality values were used.

Table A-1: Calculation of NYSDEC Class A Sediment Guidance Values for Nonpolar Organic Compounds

Chemical	Log Kow	Kow Reference	Koc	Chronic Freshwater Guideline (µg/L)	FW Guideline Reference	Class A FW Sed Criteria (µg/gOC)	NYSDEC TOC %	NYSDEC EqP FW Sed (mg/kg)
1,1,1-Trichloroethane	2.48	EPA, 2006.	274.2331802	11	EPA, 2014a. EPA Region III	3.02E+00	2	6.03E-02
1,1-Dichloroethane	1.79	EPA, 2006.	57.52412217	47	NOAA Squirt Table, 2008	2.70E+00	2	5.41E-02
1,2,3-Trichlorobenzene	4.096	NYS DEC	10632.80869	1.1	NYS DEC, 1998 TOGS 1.1.1	1.17E+01	2	2.34E-01
1,2,4-Trichlorobenzene	3.99	NYS DEC	8364.692881	210	NYS DEC, 1998 TOGS 1.1.1	1.76E+03	2	3.51E+01
1,2-Dichloroethene (cis)	1.86	EPA, 2006.	67.40001606	590	NYS DEC, 1998 TOGS 1.1.1	3.98E+01	2	7.95E-01
1,3,5-Trimethylbenzene	3.78	EPA, 2006.	5200.199438	8	NOAA Squirt Table, 2008	4.16E+01	2	8.32E-01
2-Methylnaphthalene	3.86	ATSDR, 2005.	6232.467177	4.7	EPA, 2014a. EPA Region III	2.93E+01	2	5.86E-01
Aroclor 1254	6.72	EPA, 2006.	4036825.718	0.014	NOAA Squirt Table, 2008	5.65E+01	2	1.13E+00
Aroclor 1260	6.91	EPA, 2006.	6205974.689	0.014	NOAA Squirt Table, 2008	8.69E+01	2	1.74E+00
bis(2-ethylhexyl)phthalate	7.6	NYS DEC	29585574.03	0.6	NYS DEC, 1998 TOGS 1.1.1	1.78E+04	2	3.55E+02
Chloroform	1.92	EPA, 2006.	77.20403519	1.8	NOAA Squirt Table, 2008	1.39E-01	2	2.78E-03
Dibenzofuran	4.12	EPA, 2006.	11226.38676	3.7	EPA, 2014a. EPA Region III	4.15E+01	2	8.31E-01
Diethylphthalate	2.5	EPA, 2006.	286.9326703	210	EPA, 2014a. EPA Region III	6.03E+01	2	1.21E+00
Di-n-butylphthalate	4.61	EPA, 2006.	34033.76533	19	EPA, 2014a. EPA Region III	6.47E+02	2	1.29E+01
m,p-Xylenes	3.2	NYS DEC	1399.200656	17	NYS DEC, 1998 TOGS 1.1.1	2.38E+01	2	4.76E-01
PCBs (NYSDEC)	6.14	EPA, 2006.	1086175.494	0.014	NOAA Squirt Table, 2008	1.52E+01	2	3.04E-01
Styrene	2.94	EPA, 2006.	776.7835144	72	EPA, 2014a. EPA Region III	5.59E+01	2	1.12E+00
Trichloroethene (TCE)	2.53	NYS DEC	307.0930586	290	NYS DEC, 1998 TOGS 1.1.1	8.91E+01	2	1.78E+00
Vinyl chloride	1.5	EPA, 2006.	29.838707	930	EPA, 2014a. EPA Region III	2.77E+01	2	5.55E-01
Xylene (total)	3.2	NYS DEC	1399.200656	17	NYS DEC, 1998 TOGS 1.1.1	2.38E+01	2	4.76E-01

References

ATSDR, 2005. Toxicological Profile for Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene, Public health Service, US Department of Health and Human Services, Aug 2005

DiToro, D. M., C. S. Zarba, D. J. Hansen, W. J. Berry, R. C. Swartz, C. E. Cowan, S. P. Pavlou, H. E. Allen, N. A. Thomas, and P. R. Paquin, 1991. Technical Basis for Establishing Sediment Quality Criteria for Nonionic Organic Chemicals by Using Equilibrium Partitioning. *Environ Toxicol Chem* 10(12):1541 - 1586.

Kenaga, E.E., and C.A.I. Goring, 1980. Relationship Between Water Solubility, Soil Sorbtion, Octanol-Water Partitioning, and Concentration of Chemicals in Biota. in *Aquatic Toxicology, Proceedings of the Third Annual Symposium on Aquatic Toxicology*, Eaton, Parrish, and Hendricks, editors. ASTM STP 707, Philadelphia, Pa.

New York State Department of Environmental Conservation (NYSDEC), 2013. Screening and Assessment of Contaminated Sediment, Draft Version 4.0, Division of Fish, Wildlife, and Marine Resources Bureau of Habitat, January 24.

US EPA, 1991. Proposed Technical Basis for Establishing Sediment Quality Criteria for Nonionic Organic Chemicals Using Equilibrium Partitioning. US Environmental Protection Agency, Office of Science and Technology, Health and Ecological Criteria Division, Washington, D.C. 20460.

US EPA, 1995. Great Lakes Water Quality Initiative Technical Support Document for the Procedure to Determine Bioaccumulation Factors. US Environmental Protection Agency, EPA-820-B-95-005, March 1995.

US EPA, 1996. Soil Screening Guidance: Technical Background Document. Office of Emergency and Remedial Response, Washington, D.C., EPA/540/R-95/120. May

US EPA, 2002. Technical Basis for the Derivation of Equilibrium-Partitioning Sediment Guidelines (ESGs) for the Protection of Benthic Organisms: Nonionic Organics [DRAFT]. US Environmental Protection Agency, EPA-822-R-02-041, October 2002.

US EPA, 2014a. EPA Region 3 BTAG Freshwater Screening Benchmarks; Accessed January 2014
<http://www.epa.gov/reg3hscd/risk/eco/btag/sbv/fw/screenbench.htm>

US EPA, 2014b. EPA Region 3 BTAG Freshwater Sediment Screening Benchmarks; Accessed January 2014
<http://www.epa.gov/reg3hscd/risk/eco/btag/sbv/fwsed/screenbench.htm>

US EPA SAB, 1992. An SAB Report: Review of Sediment Criteria Development Methodology for Non-Ionic Organic Contaminants. US Environmental Protection Agency Science Advisory Board, Sediment Quality Subcommittee of the Ecological Process and Effects Committee. EPA-SAB-EPEC-93-002.

Voice, T.C., Rice, C.P., and W.J. Weber, Jr., 1983. Effects of Solids Concentration on the Sorptive Partitioning of Hydrophobic Pollutants in Aquatic Systems. *Environmental Science and Technology* 17(9):513-517.

Appendix B

Data Usability Summary Reports

Due to the size of the Data Usability
Summary Reports, they have been provided
on the enclosed CD.