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SUMMARY REPORT FOR
PCBs DETECTED IN NEW YORK STATE BARGE CANAL SEDIMENTS
DURING INVESTIGATION OF
NYSEG's TRANSIT STREET AND STATE ROAD FORMER MGP SITES
SITES #9-32-098 AND #9-32-109
LOCKPORT, NEW YORK

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1.0 INTRODUCTION

On behalf of New York State Electric & Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present the New York State Department of Environmental Conservation (NYSDEC) with this Summary Report for PCBs detected in New York State Barge Canal sediments that were discovered during the remedial investigations of NYSEG's Transit Street and State Road Former Manufactured Gas Plant (MGP) sites in the City of Lockport, Niagara County, New York. The locations of the former MGP sites are shown on Figure 1. The NYSDEC's identification numbers for the Transit Street and State Road sites are 9-32-098 and 9-32-109, respectively. This summary report is being issued at the Department's request to document the analytical results for polychlorinated biphenyls (PCBs) in the New York State Barge Canal sediments prior to issuing the Remedial Investigation (RI) Report for the Transit Street site. The RI Report for Transit Street will be issued to the NYSDEC in the summer of 2006 and will include the contents presented herein. The RIs for both sites are being conducted as required under the Order on Consent (#DO-0002-9309) between NYSEG and the NYSDEC, dated March 25, 1994.

Work for the RIs was completed in general accordance with the NYSDEC-approved Remedial Investigation Work Plan – Transit Street and State Road Former Manufactured Gas Plants, dated November 2004. The Remedial Investigation Work Plan and, more specifically, its sediment investigation component, were refined through several discussions between the NYSDEC, NYSEG, and URS. Due to the large size of the study area, a phased approach was developed to evaluate the New York State Barge Canal sediments. Initially, a qualitative assessment was performed between January 11 and 17, 2005 to identify areas of visual contamination and potential sample collection areas. The qualitative data were used to develop the plan for the quantitative investigation that was conducted between April 9, 2005 and April 12, 2005.

1.1 Purpose of Report

The purpose of this report is to present the results of the investigation, which show that PCB contamination identified in the New York State Barge Canal is not related to the former activities of, or contamination present at, the NYSEG Transit Street and/or State Road sites.

1.2 Site Background

The State Road site is the location of the former State Road Tar Works, which operated circa 1900 to 1911 as a processing plant for tar generated at the Transit Street Former MGP, which operated from circa 1851 to 1927, at a location approximately 700 feet northeast of the State Road site. Both sites are currently owned by NYSEG. The locations of both sites relative to the New York State Barge Canal are shown on Figure 1. No information is available to determine if there were any subsurface structures such as pipes or conduits between the Transit Street site and the State Road site. The following site histories have been developed based on a review of historic Sanborn maps.

1.2.1 State Road

In 1892, there was a large warehouse and a few smaller buildings occupied by Barker Asphalt Paving Company at the State Road site. The adjacent neighbor to the northeast was Holley Company, which used the northeastern portion of the State Road site for storage from approximately 1892 through 1914. Lockport Gas and Electric Company occupied the site and adjacent areas to the north and southwest in 1898. In 1903 and 1909, there were four tar tanks east of the warehouse on the Lockport Gas and Electric Company property. By 1919, the four tar tanks were no longer present and Lockport Light, Heat, and Power occupied the State Road site and the adjacent property to the northeast, formerly occupied by Holley Company. A 500,000-cubic-foot gasholder was present in 1928. Between 1928 and 1948, the warehouse was no longer present and NYSEG occupied the site. In 1969, the gasholder was no longer present and the remaining structures were NYSEG's natural gas regulating station, office building, and the warehouse northeast of the State Road site. Currently, the only permanent structure on the site is a natural gas regulator, which is partially fenced; the remainder of the property is vacant with the

exception of a temporary office trailer that was used by the New York State Department of Transportation (NYSDOT) during construction of the High Street bridge. The former concrete pad and foundation of the gasholder and portions of the foundation of the Lockport Light, Heat, and Power warehouse are partially visible.

1.2.2 Transit Street

In 1886, the plant consisted of several process buildings and at least three gasholders; only two gasholders were present in 1898. By 1903, Lockport Gas & and Electric Light Company had expanded its property east to Saxton Street and erected a new third gasholder. Over the following years, many of the structures remained unchanged. However, oil tanks were added along the southern property line circa 1914 and a coal bucket runway system and storage area were present by 1928. Most of the plant buildings were razed by 1948 (plant operations reportedly ceased in 1927). By 1969, an electric transfer yard had been established on the property by NYSEG. Currently, there is an electric substation control building, the substation grid (transformers, etc.), and a storage warehouse present on the property.

1.3 Scope of Work

A Draft Remedial Investigation Work Plan was prepared by URS and submitted to the NYSDEC September 9, 2004. As part of the originally proposed scope, four sediment transects were to be conducted and four surface water/sediment sampling locations were to be established and sampled in the New York State Barge Canal. The NYSDEC Division of Fish and Wildlife subsequently made substantial comments on the proposed sampling scope for the New York State Barge Canal. The NYSDEC comments on the original scope and URS/NYSEG responses are documented in correspondence dated November 18, 2004 and April 8, 2005 (provided as Appendix A). In general, the NYSDEC wanted a greater number of transects and a larger number of samples than originally proposed.

Ultimately, NYSDEC mandated that the assessment be conducted in a phased approach. Initially, the New York State Barge Canal was assessed qualitatively without taking any samples for environmental analyses. The qualitative assessment consisted of the establishment of the 14

transects in the New York State Barge Canal upstream, adjacent to, and downstream from the Transit Street and State Road sites. Each transect was a section line taken perpendicular to the New York State Barge Canal, along which the canal sediments were probed for thickness and collected for visual characterization at distances of every 10 feet. A MiniRAE photoionization detector (PID) was used to help characterize the sediments. No samples were submitted for laboratory analytical analysis as part of this phase of the investigation.

URS summarized the results of the qualitative investigation and submitted a summary report with recommendations for the quantitative phase of the investigation to the NYSDEC on April 8, 2005. Based on the results and NYSDEC comments, URS/NYSEG developed the final quantitative investigation scope of work, which included:

- 7 additional transect locations.
- 10 surface water sample locations.
- 27 sediment-sampling locations.
- The collection of additional sediment samples (for vertical profiling) in areas where sediment thickness exceeded 2 feet.

Because the New York State Barge Canal is a complex system with numerous discharge outfalls, is the regional sink of many current and former commercial/industrial users, and is situated in an urban setting, NYSDEC mandated that very detailed characterization and assessment would be required in order to understand NYSEG's potential responsibility/liability for possible future remedial action(s) in the New York State Barge Canal. The analytical data were used to assess and evaluate the potential impacts of the two NYSEG sites on the New York State Barge Canal and to complete Step I through Step IIB of a Fish and Wildlife Impact Analysis, which will be included in the *Transit Street Remedial Investigation Report*.

2.0 INVESTIGATION ACTIVITIES

The investigation activities consisted of two phases, the qualitative investigation and the quantitative investigation, which are discussed in the following sections.

2.1 Qualitative Investigation

Between January 11 and 17, 2005, fourteen transects (TS-01 through TS-14) were established within the New York State Barge Canal. Each transect is a perpendicular line drawn across the New York State Barge Canal along which sediments were characterized. Transects are identified from west to east beginning with TS-01 (west of the High Street Bridge) and continuing to TS-14 (east of the New York State Barge Canal locks), and their respective locations are shown on Figure 2. There is a distance of approximately 2,700 feet between TS-01 and TS-13 with an average spacing of approximately 225 feet. There is an approximate distance of 1,270 feet between TS-13 and TS-14 and approximately 3,970 feet between TS-01 and TS-14. Between TS-13 and TS-14 are New York State Barge Canal locks and a spillway, which prevented access in that interval.

The investigation was performed while the New York State Barge Canal water level was low. The New York State Barge Canal Corporation allows the New York State Barge Canal to drain during the winter months because there is no boating traffic and it allows them to perform maintenance on the locks and canal banks. During this period, there was still water flowing in the canal with depths of typically less than 2 feet; however, the water was greater than four feet deep in some areas of the canal and in other areas where the sediments were not submerged. Since the majority of the study area had shallow water depths the investigation was conducted on foot using chest high waders and a boat was used to transport materials.

In general, sediment thickness was measured at 10-foot intervals along each transect using a ½-inch-diameter steel probe approximately 7 feet long. The probe was physically pushed until refusal was encountered and the depth from the top of the sediment was recorded. At each of the probing positions, sediment cores (up to approximately 4 feet) also were obtained using 2-

inch diameter by 4-foot-long acetate liners that are typically used for Geoprobe® borings. The liners were physically pushed into the sediment until refusal was obtained. The recovered cores were visually inspected and described. Sediment thickness and texture, visual observations including the presence and/or absence of sheens/odors, potential sources of MGP-related and non MGP-related sources of contamination, and water depth were recorded. The sediment cores also were screened using a MiniRAE PID to determine if any volatile organic compounds (VOCs) were present.

Four additional locations (BA-01 through BA-04) at the front of the old lock spillway were sampled using a bucket auger to evaluate sediment build up in this area (see Figure 2). The auger was advanced in 0.5-foot increments until refusal was encountered. Samples were bagged in 0.5-foot intervals and later screened for headspace using a PID.

Additional sediment samples were collected using a bucket auger at the foot of the rock talus slope on the north side of the New York State Barge Canal at TS-11 and TS-12, and the south side of the New York State Barge Canal at TS-05 through TS-10 (labeled BA-05 through BA-12 on Figure 2). Samples were collected at discrete one-foot depth intervals, placed in sealed plastic bags, allowed to warm up and screened for headspace with a PID. The objective of the qualitative investigation was to characterize the sediment in order to develop a quantitative investigation plan. Therefore, no sediment samples collected during the qualitative investigation were retained for laboratory analysis.

2.2 Quantitative Investigation

Subsequent to the qualitative investigation and discussions with the Department, a letter dated March 15, 2005 was submitted to the Department summarizing the findings of the investigation and presenting a proposed Sampling Plan for the quantitative investigation. The Department responded with comments on April 5, 2005. In general, the NYSDEC requested seven additional transects (TS-15 through TS-21), additional samples for forensic analyses, additional sediment sampling locations, as well as vertical profiling, and additional samples (at depth) in areas where sediment thickness exceeded two feet. URS addressed the NYSDEC

comments and submitted a revised Qualitative Assessment Summary and Sampling Plan to the NYSDEC on April 8, 2005.

2.2.1 Additional Transects

Between April 9 and April 12, 2005, transects TS-15 through TS-17 were established between TS-12 and TS-13, beneath the “Big Bridge”. The “Big Bridge” is the approximately 400-foot-wide bridge that conveys West Main Street/Route 31 across the New York State Barge Canal. Transects TS-18 through TS-20 were established downstream from the New York State Barge Canal locks. TS-21 was established between TS-10 and TS-11 in the vicinity of observed MGP seeps in the south bedrock cut of the New York State Barge Canal. Transect locations are presented on Figure 2. Sediment thickness was measured, and samples were collected and characterized using the same procedures as had been used during the Qualitative Investigation.

2.2.2 Surface Water Samples

Ten surface water samples were collected from the New York State Barge Canal at the locations shown on Figure 3. The samples were sent to Severn Trent Laboratories (STL) for analysis of target compound list (TCL) VOCs, semi-volatile organic compounds (SVOCs), total phenols, target analyte list (TAL) metals, and PCBs.

2.2.3 Sediment Samples

Bucket augers were used to collect sediment samples from 36 separate locations (SED-01 through SED-36) as shown on Figures 2 and Figure 4. One sample (typically 0 to 1 foot depth) was collected from the upper portion of the sediments at each location. If the sediments were thicker than two feet, an additional sample was collected from the sediment/bedrock interface (the New York State Barge Canal is excavated into rock in the study area). At several locations, where the sediment thickness was greater than three feet, an additional intermediate sample was collected between the “surface” and “top of bedrock samples”. The intermediate samples were sent to the lab, but held pending the results of the upper and lower samples. According to the

sampling procedures, if there were significant differences in analytical concentrations between the upper and lower samples, then the intermediate samples were to be analyzed. However, because results did not dictate the need, these intermediate samples were never analyzed. A total of 62 sediment samples were collected.

A total of 53 sediment samples were sent to STL and analyzed for TCL VOCs, TCL SVOCs, PCBs, TAL metals, total phenols, total cyanide, and total organic carbon. Seven additional samples were sent to STL, held, but never analyzed as discussed above. Sixty-two samples also were sent to META Environmental, Inc. (META) for forensic analyses and extended polycyclic aromatic hydrocarbon (PAH) profiles; 17 were actually analyzed, and the remaining 45 were held in cold storage but never analyzed because it was determined that the 17 analyzed samples provided sufficient information to perform a forensic analysis of the New York State Barge Canal sediments. The samples sent to META were collected from the same locations/depths as those sent to STL with the exception of two samples (VPSS-1-0'-1' and VPSS-1-1'-2'), which were collected from a vertical profile location on the south side of the New York State Barge Canal on Transect TS-01. Table 1 summarizes the sediment samples collected, sediment characteristics, and analyses. PID readings were collected from the headspace of the sampling jars prior to sample shipment, at the end of each sampling day.

3.0 INVESTIGATION RESULTS

This section discusses the results of both the qualitative and quantitative investigations.

3.1 Qualitative Findings

The various sediment conditions encountered across the study area are summarized below. Transects and sediment sampling locations are presented on Figures 2 and 4. Table 1 summarizes the sediment samples collected, sediment characteristics, and analyses. Transect profile summaries are included on Table 2. A summary of findings from the bucket auger sample locations, BA-01 through BA-04, is presented on Table 3.

In general, sediment thickness was relatively thin in the central portions of the transects, and tended to be significantly thicker (up to greater than 10.4 feet) at the base of the north and south New York State Barge Canal walls where talus material has accumulated. The sediments were generally characterized as light to dark brown, gray, black, and brownish-gray silts and clayey silts with varying amounts of organic material. Bedrock was exposed or was observed to be covered with less than 0.25 foot of sediments at approximately 20% of all sediment thickness sampling locations (see Table 2).

Numerous foreign objects and debris, including several shopping carts, a motorcycle, automobile battery, lawn mower, tires, 55-gallon drum and general construction debris (bricks, rebar and lumber), were observed within the New York State Barge Canal.

The New York State Barge Canal is classified as a Class C surface water body by the NYSDEC. Class C surface water can be used for irrigation, food preparation, fishing, or primary and secondary contact recreation. Water is not withdrawn from the New York State Barge Canal for potable use. The Canal is open to discharge from multiple point and non-point sources. Over 25 non-permitted water discharge pipes ranging in diameter from 3 to 30 inches were observed in the survey area in addition to two State Pollutant Discharge Elimination System (SPDES) discharges. Observed flows in these outfall pipes ranged from non-existent to at least 5 gallons

per minute. No stained or discolored discharges were noted emanating from the discharge pipes. Figure 2 presents the observed discharge pipe sizes and locations in the study area. White precipitate and MGP-related dark brown, viscous coal tar were observed seeping from the rock face approximately 10 to 15 feet below the top of the Rochester Shale in the vicinity of transects TS-09, TS-10, and TS-11 on the south side of the New York State Barge Canal.

All PID readings of sediment cores and headspace samples were non-detect, with a few minor exceptions. A maximum value of 5.9 parts per million (ppm) above background was observed in TS-05 at a depth of 3 to 4 feet in sediments with a slight petroleum-like odor. Several other samples exhibited PID readings of 1 to 2 ppm above background, which is most likely attributable to the high sample moisture content, since there was a total lack of staining and odor.

3.2 Laboratory Analytical Results

Upon receipt of the laboratory reports from STL and META, URS performed data validation. The resulting validation report will be included in the Remedial Investigation Report for the Transit Street site. In general, the laboratory data were found to meet quality assurance/quality control (QA/QC) goals. This report focuses primarily on the analytical results for PCBs. Data on other contaminants are presented for completeness but are not discussed in detail in this report.

3.2.1 Surface Water Results

Table 4 presents a summary of detected analytical results for the surface water samples. Low concentrations of a few VOCs were detected in several samples. Compounds detected include 1,1,1-trichloroethane, 1,2-dichloroethene (cis), acetone, bromodichloromethane, chloroform, dibromochloromethane, tetrachloroethene, and trichloroethene. No compounds detected exceeded their respective Class C surface water standards.

Total Phenolics were detected at a low concentration of 0.15 milligram per liter in one surface water sample (SW-08). No PCBs were detected at any concentration in any surface water sample collected. Several metals compounds were detected and concentrations were typically similar in magnitude as those for individual compounds in all samples collected.

3.2.2 Sediment PCB Results

Table 5 presents a summary of detected analytical results for the sediment samples. For the purposes of this report, these results were not compared to standards, criteria, and guidance values (SCGs). Because of the large area of the New York State Barge Canal investigated, Figures 5 through 8 are divided into four areas corresponding to the area below the locks (Area 1), the area from the locks to the Transit Street bridge crossing (Area 2), the area from the Transit Street bridge crossing to just upstream of the High Street bridge crossing (Area 3), and the area from just upstream of the High Street bridge crossing to upstream of the Route 93 bridge (Area 4). Figures 5 through 8 summarize the detected PCB compounds that were reported at concentrations above detection limits in each of the four areas. Total PCBs are also listed on the figures.

Table 6 presents a statistical summary of the PCB results from all of the sediment samples analyzed. PCBs were detected in all sediment samples collected from the New York State Barge Canal in April 2005. Four different mixtures of PCB Aroclors were detected (i.e., Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260). Aroclor 1248 was the most frequently detected, appearing in 48 of 53 samples, followed by Aroclor 1254, which was detected in 38 of 53 samples. Aroclors 1242 and 1260 were detected in 6 and 4 out of 53 samples, respectively.

The four locations in which Aroclor 1260 was detected are all upstream from and/or adjacent to the State road site. Aroclor 1260 concentrations ranged from 13 to 600 micrograms per kilogram ($\mu\text{g}/\text{kg}$).

The highest concentrations of Aroclor 1242 were detected in sediments below the locks at locations:

- SED-15 (21,000 µg/kg).
- SED-22 (220,000 µg/kg).

Much lower concentrations were detected at:

- SED-03 (2,400 µg/kg), on the opposite side of the New York State Barge Canal from the State Road site.
- SED-13 (4,000 µg/kg), in a sediment accumulation area in front of the old New York State Barge Canal locks.
- SED-21 (84 µg/kg), in sediment accumulation beneath the “Big Bridge”.
- SED-24 (4,600 µg/kg), downstream from the locks.

Detections of Aroclor 1248 and Aroclor 1254 were widespread throughout the New York State Barge Canal sediments. The highest detected Aroclor 1248 concentration of 40,000 µg/kg was at SED-24, the furthest downstream sampling location. Aroclor 1248 was detected at a concentration of 20,000 µg/kg at SED-18, which is beneath the Transit Street Bridge over the New York State Barge Canal and just upstream from the area of observed MGP seeps to the New York State Barge Canal. Concentrations ranged from 7 to 9,200 µg/kg at the 46 other locations where Aroclor 1248 was detected.

The highest concentrations of Aroclor 1254 were detected in sediments below the locks at locations SED-15, SED-22, and SED-24 (at 16,000, 90,000, and 26,000 µg/kg, respectively). The next three highest detected concentrations of Aroclor 1254 were at SED-18 (11,000 µg/kg), which is beneath the Transit Street Bridge over the New York State Barge Canal and just upstream from the area of observed MGP seeps to the New York State Barge Canal; SED-23 (6,100 µg/kg), which is downstream from the locks between SED-15 and SED-24; and SED-31 (1,300 µg/kg), which is beneath the “Big Bridge”. The remaining 36 detections of Aroclor 1254 were spread throughout the sampling area and ranged from 22 to 970 µg/kg.

3.2.3 Source Area Comparison

NAPL

Table 8 presents the chemical data for the dense non-aqueous phase liquid (DNAPL) sample collected from well BMW-04-11. No PCBs were detected in the DNAPL, which represents the worst-case example of contaminants related to the Transit Street MGP site. Given the absence of PCBs in the site DNAPL, the observed DNAPL within the seeps cannot be contributing PCBs to the New York State Barge Canal.

Surface and Subsurface Soil

Tables 9 and 10 present statistical summaries of all of the surface soil and subsurface soil samples collected during the RI and indicate that PCB compounds were only detected in 6 of the 70 plus samples collected at concentrations ranging from 14 to 95 µg/kg. This extent and quantity of PCB contamination is significantly less than that observed in the New York State Barge Canal, indicating that the NYSEG Transit Street and State Road sites are not the source of the PCBs in the New York State Barge Canal.

Groundwater

No PCBs were detected in any of the groundwater samples collected from the network of 45 wells sampled as part of the remedial investigations for the State Road and Transit Street sites. The New York State Barge Canal acts as a regional sink for groundwater present in the overburden and shallow bedrock. Hence, groundwater in both the overburden and shallow bedrock flows towards the New York State Barge Canal.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this investigation, the following conclusion has been reached:

- The PCBs present in the New York State Barge Canal sediments are not attributable to past or current activities at the NYSEG Transit Street and State Road former MGP sites.

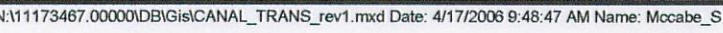
URS/NYSEG offers the following recommendation for consideration by the Department:

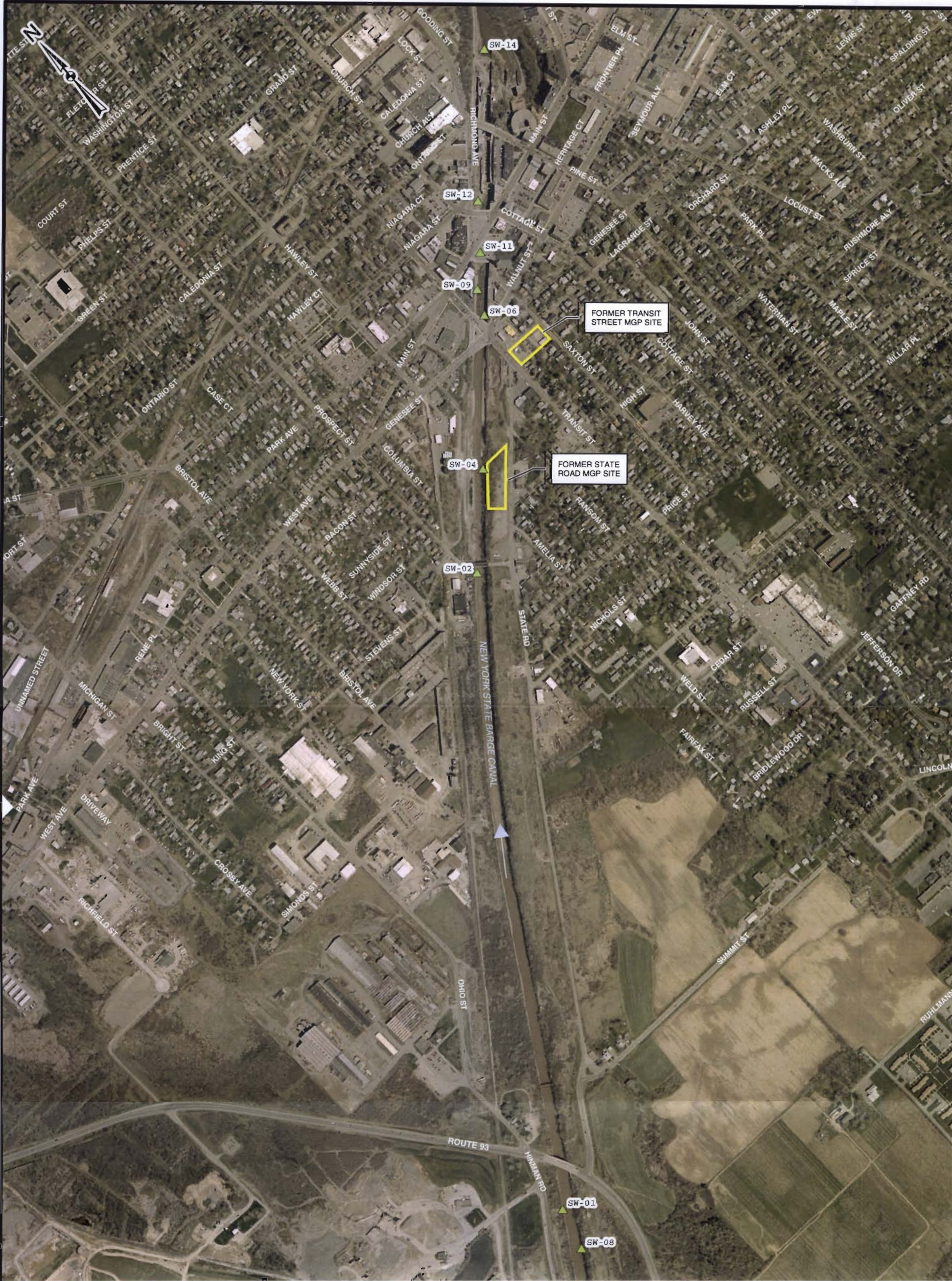
- Based upon the results presented herein, it is clear that the PCBs detected in New York State Barge Canal sediments are not attributable to past and/or current activities at either of NYSEG's former MGP sites in Lockport, New York. As such, NYSEG should not be responsible for any potential remedial activities or additional characterization of the PCB contamination in the New York State Barge Canal.

FIGURES



FIGURE 1

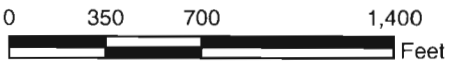
FIGURE 2



Legend

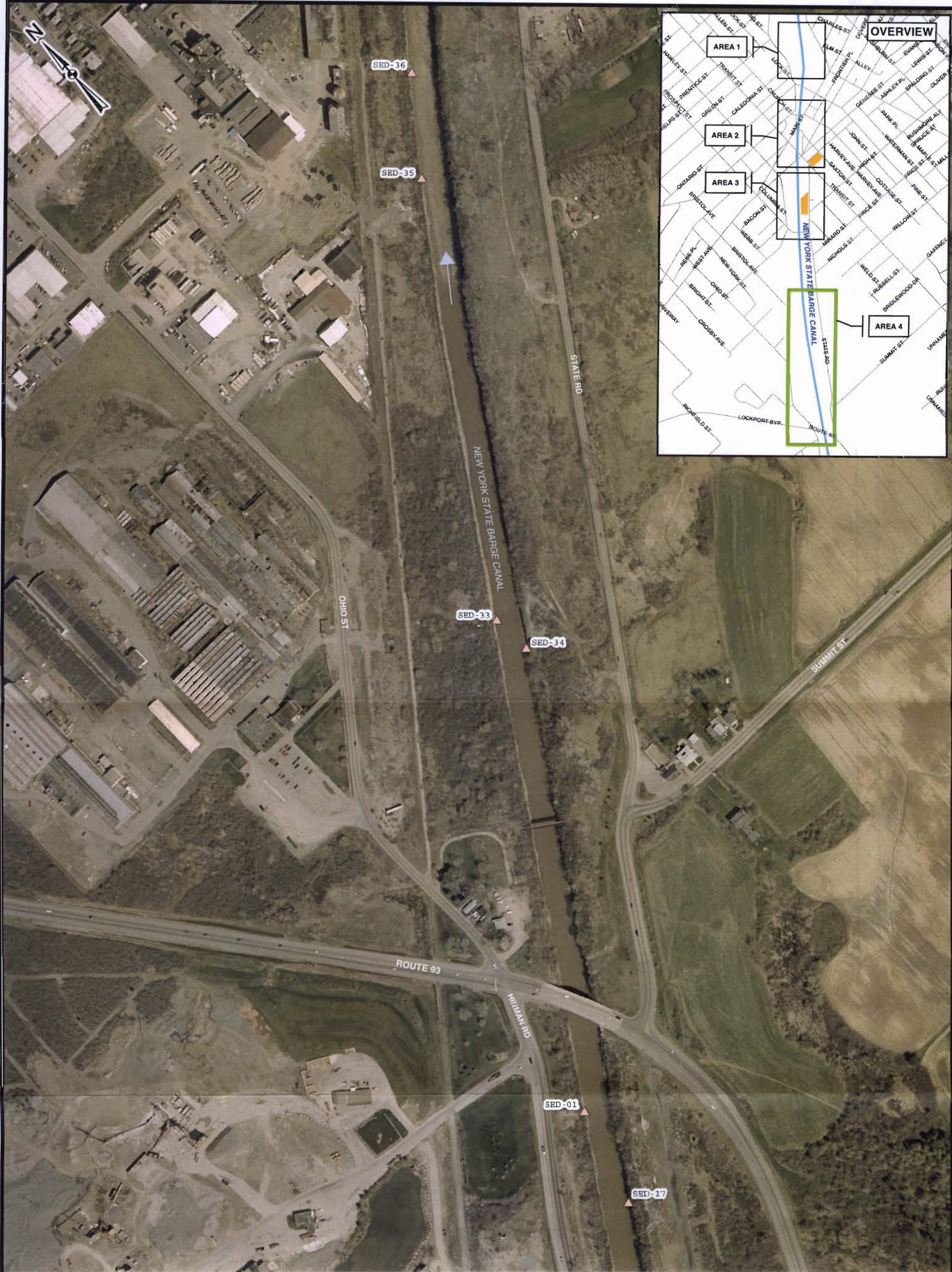
Surface Water Sample Location

Flow Direction



NYSEG - TRANSIT STREET AND STATE ROAD FORMER MGP SITES
SURFACE WATER SAMPLING LOCATIONS

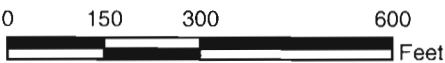
FIGURE 3



Legend

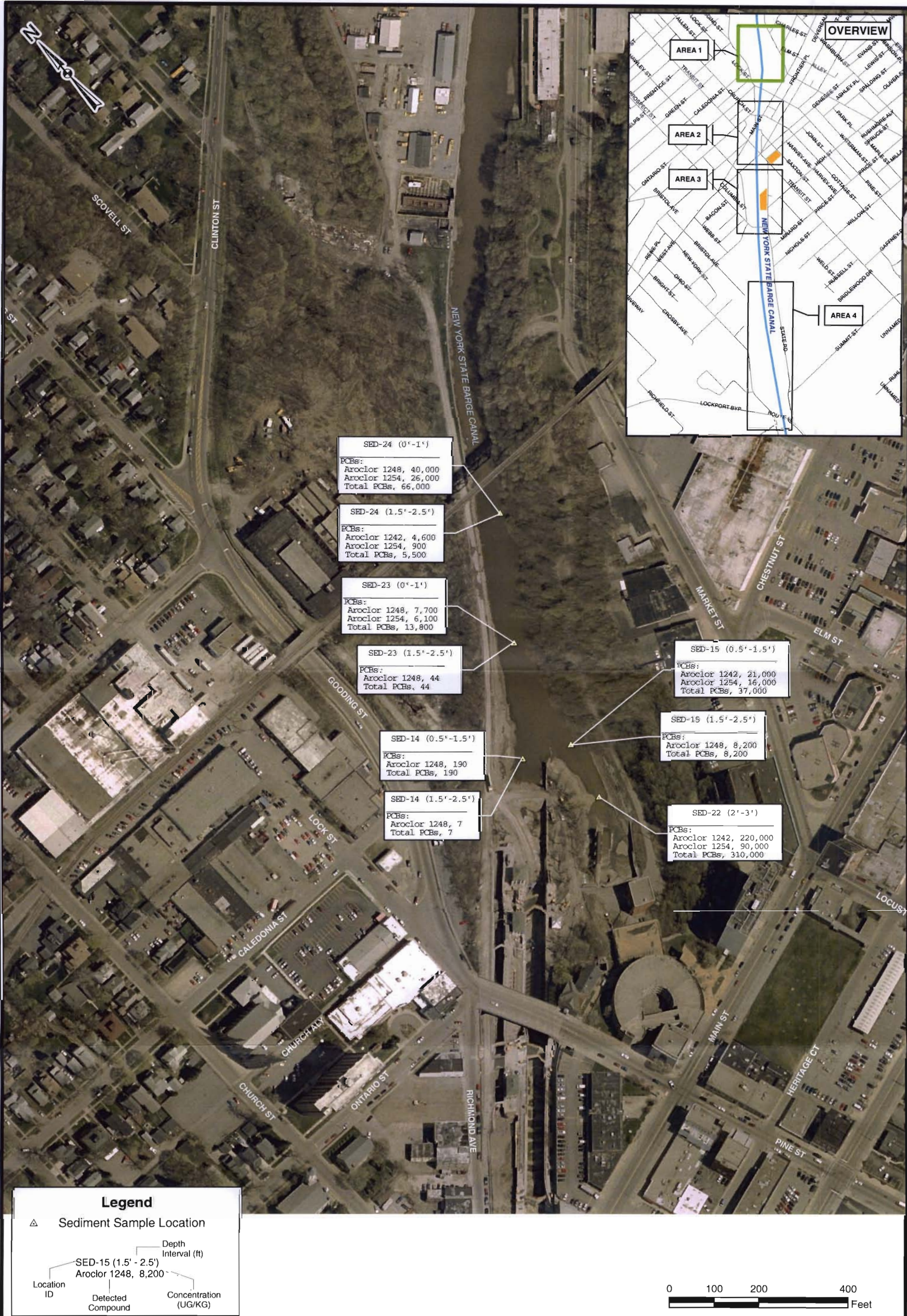
▲ Sediment Sample Location

← Flow Direction

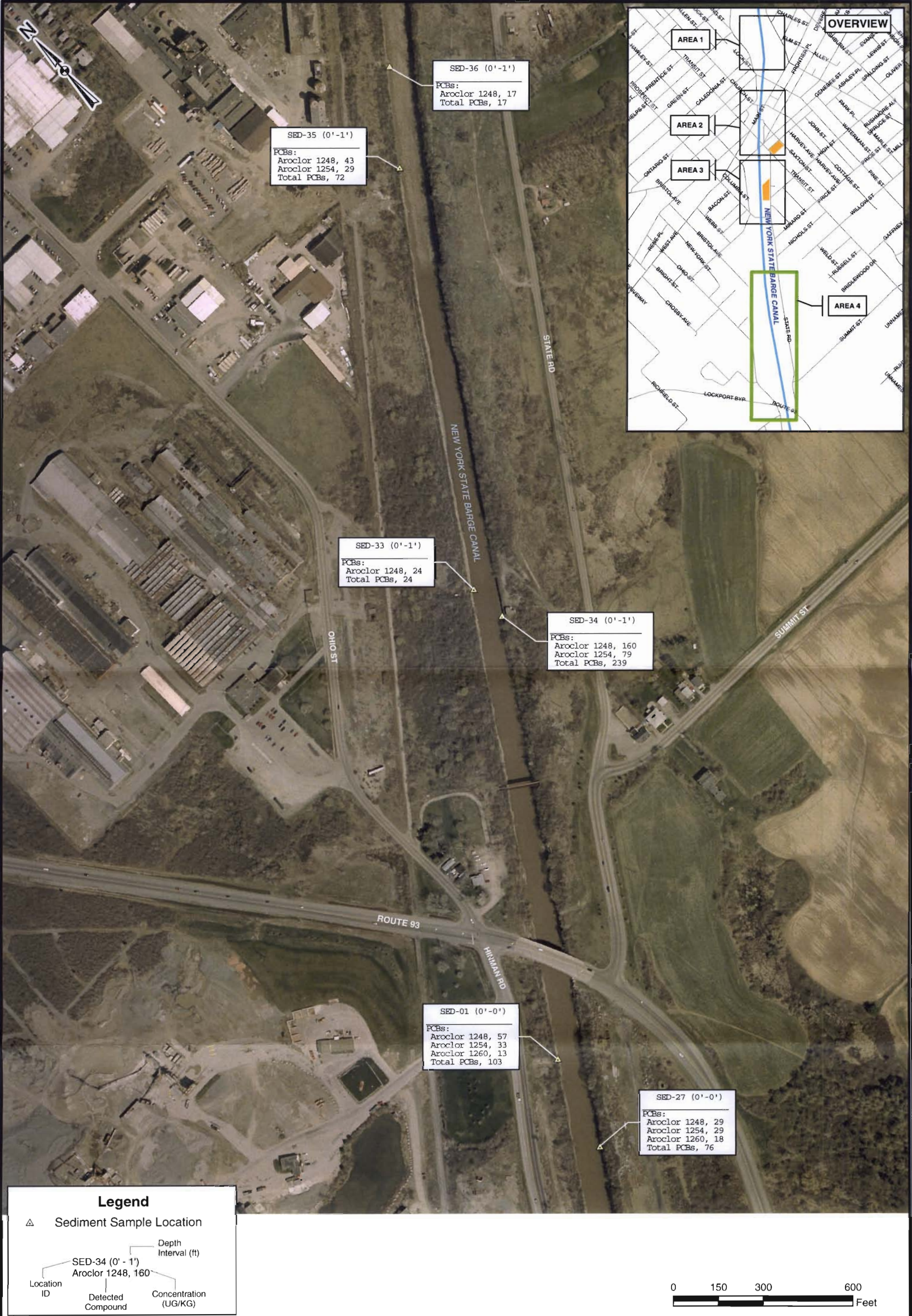


NYSEG - TRANSIT STREET AND STATE ROAD FORMER MGP SITES
UPSTREAM SEDIMENT SAMPLE LOCATIONS

FIGURE 4







TABLES

Table 1

Sediment Sample Analysis Summary
Former Transit Street and State Road MGP Sites - Lockport, New York
New York State Electric & Gas

Collection Date	Location ID	Sample Depth (feet)	Sample ID	Description	Analysis	
					STL	META
4/9/05	SED-01	0-1.5	SED-1	Gray organic-rich Silt with Clay, some plant stems, and leaves, mussel shells, trace gravel.	X	X
4/9/05	SED-02	0-1	SED-2 0-1	Dark brown Silt, trace clay, no odor or sheens	X	X
4/9/05	SED-02	2.5-3	SED-2 2.5-3	Dark brown to blue gray silt, trace clay, with an undifferentiated petroleum-like odor	X	
4/9/05	SED-03	0-1	SED-3 0-1	Dark gray Clayey Silt, trace organics	X	X
4/9/05	SED-03	3.5-4	SED-3 3.5-4	Dark gray Clayey Silt, trace organics, trace sand, faint undifferentiated petroleum odor noted.	X	
4/9/05	SED-04	0-1	SED-4 0-1	0-4" Medium Brown, fine to medium sand and fine to medium gravel, 4"-1": Black clayey Silt, slight to moderate undifferentiated petroleum odor.	X	
4/9/05	SED-04	3.5-4	SED-4 3.5-4	Black Clayey Silt, slight to moderate undifferentiated petroleum odor. Shale fragments, slight sheen.	X	
4/9/05	SED-05	0-1	SED-5 0-1	Medium brown clayey silt, trace fine sand, fine gravel.	X	X
4/9/05	SED-05	3.5-4	SED-5 3.5-4	Dark gray Clayey Silt, trace fine sand, fine gravel. Moderate undifferentiated petroleum odor.	X	
4/11/05	SED-06	0-1	SED-06 0-1	Brown-Gray clayey silt, some angular gravel, trace sand	X	X
4/11/05	SED-06	1-2	SED-06 1-2	Dark Gray, Clayey Silt, some angular gravel, slight petroleum odor, MGP odor and sheen blebs	X	X
4/11/05	SED-07	0-1	SED-07 0-1	Light Gray to medium Gray Clayey Silt, trace fine to coarse gravel, slight undifferentiated petroleum odor at 1.0'.	X	X
4/11/05	SED-08	0-1	SED-08 0-1	0-0.4' Gravel, 0.4-1.0' Dark gray to black Clayey Silt, trace to some gravel, sheen blebs and slight petroleum and/or MGP odors.	X	X
4/11/05	SED-09	0-1	SED-09 0-1	Brown Gray Clayey Silt, trace coarse sand and fine gravel.	X	
4/11/05	SED-09	3-4	SED-09 3-4	Dark-Medium Gray Clayey Silt trace coarse Sand and fine gravel, slight petroleum odor.	X	
4/11/05	SED-10	0-1	SED-10 0-1	Brown, Clayey Silt, trace angular gravel and silt	X	
4/11/05	SED-10	1-2	SED-10 1-2	Gray, Clayey Silt, trace gravel, slight petroleum odor	X	
4/11/05	SED-11	5-1.5	SED-11 5-1.5	Brown to Gray, Clayey Silt, trace angular gravel and sand, slight undifferentiated petroleum odor.	X	
4/10/05	SED-12	0-1	SED-12 0-1	Brown Silty Clay, trace coarse sand. Soft 0-0.5' then Silty. Some black mottling. Slight undifferentiated petroleum odor.	X	
4/10/05	SED-13	0-1	SED-13 0-1	0-0.5' Brown Silty Clay, sticky, trace organics (roots, stems) 0.5-1.0' Dark Gray Silty Clay, some fine shale gravel, undifferentiated petroleum odor.	X	X

Table 1
Sediment Sample Analysis Summary
Former Transit Street and State Road MGP Sites - Lockport, New York
New York State Electric & Gas

Collection Date	Location ID	Sample Depth (feet)	Sample ID	Description	Analysis	
					STL	META
4/10/05	SED-13	1-2	SED-13 1-2	Dark Gray Silty Clay, some fine to coarse shale gravel, undifferentiated petroleum odor.		X
4/10/05	SED-13	2-3	SED-13 2-3	Dark Gray Silty Clay with some fine shale gravel (angular), trace coarse sand, undifferentiated petroleum odor.	X	X
4/10/05	SED-14	5-1.5	SED-14 5-1.5	0-0.5' Gray to black Fine Sand and Gravel, some mussel shells. 0.5-1.5' Medium Gray Silty Clay, trace fine sand and gravel.	X	X
4/10/05	SED-14	1.5-2.5	SED-14 1.5-2.5	Light gray Clayey Silt, trace organics.	X	
4/10/05	SED-15	5-1.5	SED-15 5-1.5	Black Silty Sand some gravel and shells, moderate petroleum odor	X	X
4/10/05	SED-15	1.5-2.5	SED-15 1.5-2.5	Dark Gray, Fine Sandy Silt, trace gravel and wood fragments, sheen and moderate odor.	X	
4/9/05	SED-16	0-1	SED-16 0-1	0-5" Brown Silty Sand and Gravel. 5"-1' Black, Clayey Silt, trace sand and gravel, moderate undifferentiated petroleum odor and slight sheen	X	
4/9/05	SED-17	0-1	SED-17 0-1	Gray-Brown, Silty Clay, trace fine gravel, sand, slight undifferentiated petroleum odor.	X	
4/9/05	SED-18	0-1	SED-18 0-1	Gray-Brown to Black, Sandy Silt, trace clay, slight undifferentiated petroleum odor, slight sheen	X	
4/11/05	SED-19	0-1	SED-19 0-1	Brown/Gray Silt trace clay, some fine to coarse gravel and shells.	X	
4/11/05	SED-20	0-0.7	SED-20 0-0.7	Brown Gray Clayey Silt and gravel	X	X
4/10/05	SED-21	0-0.7	SED-21 0-0.7	Soft, Brown to Dark Brown Clayey Silt, some black mottling, trace fine angular gravel	X	
4/10/05	SED-22	2-3	SED-22 2-3	Black Silty Sand/Sandy Silt, some organics, trace gravel and sheen.	X	
4/10/05	SED-23	0-1	SED-23 0-1	Black Sandy silt, some organics, trace gravel and mussel shells, swampy odor.	X	
4/10/05	SED-23	1.5-2.5	SED-23 1.5-2.5	Light Gray Silty Clay/Clayey Silt, trace shell fragments, wood fragments.	X	
4/10/05	SED-24	0-1	SED-24 0-1	Black Sandy Silt, some organics, trace gravel and mussel shells.	X	X
4/10/05	SED-24	1.5-2.5	SED-24 1.5-2.5	Light gray Silty Clay/Clayey Silt, trace organics	X	
4/12/05	SED-25	0-1	SED-25 0-1	0-0.5' Brown to Gray, Sand and Gravel 0.5-1.0' Dark Gray to Black Clayey Silt with Gravel, slight MGP odor, slight petroleum odor	X	
4/12/05	SED-26	0-1	SED-26 0-1	Brown Clayey Silt, trace sand and gravel, soft	X	
4/12/05	SED-26	3-4	SED-26 3-4	Gray to Dark Gray to Black Clayey Silt, trace sand and gravel with weathered petroleum odor.	X	
4/9/05	SED-27	0-1	SED-27	Fine Silty Sand with some organics, leaves and plant stems, trace gravel.	X	
4/12/05	SED-28	0-1	SED-28 0-1	Medium Gray-Brown, Clayey Silt, some fine to coarse gravel, trace shells	X	

Table 1

Sediment Sample Analysis Summary
Former Transit Street and State Road MGP Sites - Lockport, New York
New York State Electric & Gas

Collection Date	Location ID	Sample Depth (feet)	Sample ID	Description	Analysis	
					STL	META
4/12/05	SED-28	1-2	SED-28 1-2	Medium-Dark Gray Clayey Silt, trace gravel	X	
4/12/05	SED-29	0.5-1.5	SED-29 0.5-1.5	Dark Brown Clayey Silt, some medium sand and very fine gravel. Slight chemical odor.	X	
4/12/05	SED-30	0-1	SED-30 0-1	0-0.4": Sand and Gravel, 0.4-1.0": Gray Silty Clay, some sand and fine to medium angular shale gravel. Petroleum-like odor.	X	
4/12/05	SED-30	1-2	SED-30 1-2	Black Clayey Silt, trace sand and very fine gravel, slightly stiff. Chemical odor.	X	
4/12/05	SED-31	0-1	SED-31 0-1	Brown Silty Sand, fine to coarse angular gravel, loose, increase in silt content (0.5-1.0").	X	
4/12/05	SED-31	1-2	SED-31 1-2	Brown Silty Clay, trace fine to medium gravel, slight chemical-like odor.	X	
4/12/05	SED-32	0-1	SED-32 0-1	Brown Clayey Silt, some fine to medium angular gravel. No odor, Loose.	X	
4/12/05	SED-32	4-4.8	SED-32 4-4.8	Black Clayey Silt, trace fine angular shale gravel	X	
4/12/05	SED-33	0-1	SED-33 0-1	Black organic Clayey Silt, soft, decay odor	X	
4/12/05	SED-34	0-1	SED-34 0-1	Gray Clayey Silt, trace gravel, cobbles, slight petroleum odor.	X	
4/12/05	SED-35	0-1	SED-35 0-1	Black, Clayey Silt, some organics and shells, slight petroleum odor, small sheen blebs.	X	
4/12/05	SED-36	0-1	SED-36 0-1	Dark Gray Clayey Silt, very soft. Decay/sewage-like odor.	X	
4/9/05	VPSS-1	0-1	VPSS-1 0-1	Dark Gray, Clayey Silt, some organics, trace fine gravel and sand		X
4/9/05	VPSS-1	1-2	VPSS-1 1-2	Dark Gray, Clayey Silt, some organics, trace gravel.		X

TABLE 2

Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-01	0.0'	7.1'	Rock Talus	No
	10.0'	3.1'	Brown Silt to Clayey Silt, some fine to coarse gravel, overlying rock talus	No
	20.0'	0.9'	Brown Silt to Coarse Sand, increasing gray with depth.	No
	30.0'	0.2'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	40.0'	0.1'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	50.0'	0.3'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	60.0'	0.1'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	70.0'	0.2'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	80.0'	0.2'	Brown in upper 6", then dark gray, fine to coarse Gravel, angular, some cobbles, some silt to clayey silt and shell fragments.	No
	90.0'	0.7'	Gray brown, silty clay to clayey silt with decomposed organic material	No
	100.0'		Talus: Brown silt, some clay over cobble to boulder size dolomite talus in similar matrix.	No
	102.0'	6.1'	Talus: Brown silt, some clay over cobble to boulder size dolomite talus in similar matrix.	No
TS-02	0.0'	7.2'	Rock Talus with Silty Clay matrix.	No
	10.0'		Rock Talus with Silty Clay matrix.	No
	20.0'	4.0'	Brown Silt, some clay, with dark black bands and light bedding features.	No
	30.0'	2.0'	Brown with gray to black bedding features, lighter brown near top. Silty, some clay, trace glass, black organic debris.	No
	40.0'	1.8'	Brown with interbedded black Silt some clay. Black layers appear to be fibrous organic rich layers (leaf litter, stems)	No
	50.0'	2.6'	Brown Silt with organic material (roots). Dark Gray with depth ~1.3'	No
	60.0'	1.7'	Dark Brown to brown Silt, some clay. Very prominent layering, high organic content in black layers.	No
	70.0'	0.8'	Black to Brown Silt, some clay. Black material more organic, some bivalves, roots, leaf litter	No
	80.0'	1.0'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
	90.0'	0.9'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
	100.0'	0.4'	Brown and black Silty Clay, trace plastic (thin mil), disturbed structure patterns.	No
	110.0'	0.4'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
TS-03	120.0'	0.7'	Brown and black Silty Clay, disturbed structure patterns.	No
	130.4'	4.2'	Rock Talus with Silty Clay matrix.	No
	0.0'	5.5'	Rock Talus with Silty Clay matrix.	No
	10.0'	5.0'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus.	No
	20.0'	3.7'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	30.0'	3.0'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	40.0'	2.1'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	50.0'	0.8'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	60.0'	0.6'	Light Brown Silt underlain by Gray organic Silt with bivalve shells.	No
	70.0'	0.4'	Light Brown Silt underlain by Gray organic Silt, some fine to medium gravel and bivalve shells.	No
	80.0'	0.4'	Light Brown Silt underlain by Gray organic Silt and fine to medium gravel and bivalve shells, trace plant stems. Swampy odor.	No
	90.0'	0.5'	Light Brown-Gray Silty Clay with bivalve shells and cobbles/boulders	No
	100.0'	0.6'	Brown-Gray Silt, some clay, soft with bivalves (live)	No
	110.0'	0.6'	Dark Gray organic silt, varved silt, trace fine sand.	No
	120.0'	2.9'	Mottled Dark Gray and Brown Silty Clay, plastic, fine varves	No
	130.0'	9.3'	Medium Brown Silt trace clay over Rock Talus.	No

TABLE 2

Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-04	0.0'	4.7'	Rock Talus with Silty Clay matrix	No
	10.0'	3.2'	Brown-Gray soft Silt with black organics.	No
	20.0'	2.5'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus	No
	30.0'	2.6'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus	No
	40.0'	2.8'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus.	No
	50.0'	2.8'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus	No
	60.0'	0.6'	Dark Gray Silt, some clay varves, plant stems, trace angular to sub-rounded fine gravel	No
	70.0'	0.8'	Light Gray-Brown Gravelly Silt (Gravel is shell and rock fragments)	No
	80.0'	0.5'	Gray Silt and bivalve shells, trace clay and fine gravel.	No
	90.0'	0.5'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel	No
	100.0'	0.7'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel	No
	110.0'	1.1'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel	No
	120.0'	2.5'	Dark Gray Varved Silt with Bivalve Shells and plant detritus, some fine angular gravel and fine sand.	No
	130.0'	8.8'	Rock Talus with Silty Clay matrix	No
	0.0'	7.8'	Rock Talus with Silty Clay matrix	No
TS-05	10.0'	5.6'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments.	No
	20.0'	3.8'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments.	No
	30.0'	2.6'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments.	No
	40.0'	1.8'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present	No
	50.0'	1.7'	Brown Gray Silt and Bivalves with organic detritus. No evident structure	No
	60.0'	0.5'	Brown Gray Silt and Bivalves with organic detritus. No evident structure. Overlain by Algae	No
	70.0'	0.2'	Brown Gray Silt and Bivalves with organic detritus. No evident structure	No
	80.0'	0.2'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure.	No
	90.0'	0.3'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure. Overlain by Algae	No
	100.0'	1.9'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure. Overlain by Algae	No
	110.0'	3.2'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present.	No
	120.0'	3.4'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present.	No
	130.0'	4.5'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present.	No
	136.0'	7.8'	Rock Talus with Silty Clay matrix.	No

TABLE 2

Transect Sediment Profile Summary NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-06	0.0'	7.3'	Rock Talus with Silty Clay matrix.	No
	10.0'	4.2'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor.	No
	20.0'	4.2'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor.	No
	30.0'	4.0'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor.	No
	40.0'	1.3'	Dark Gray Clayey Silt, trace organics.	No
	50.0'	0.7'	Dark Gray Silt to Clayey Silt, trace coarse angular gravel.	No
	60.0'	0.3'	~1" Brown Silt to Clayey Silt over ~1" Dark Gray Organic detritus (leaf litter).	No
	70.0'	0.0'		No
	80.0'	0.2'	Brown Silt some clay. Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	90.0'	0.3'	Brown Silt some clay. Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	100.0'	1.3'	Brown Silt some clay. Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	110.0'	2.4'	Brown Silt some clay. Gray to Dark Gray with depth, some organic decayed leaf litter, trace coarse angular gravel.	No
	120.0'		Brown Silt some clay. Gray to Dark Gray with depth, some organic decayed leaf litter. Underlain by Rock Talus.	No
	130.0'		Rock Talus with Silty Clay matrix.	No
TS-07	134.0'	7.6'	Rock Talus with Silty Clay matrix.	No
	0.0'	6.4'	Rock Talus with Silty Clay matrix.	No
	10.0'	3.2'	~4.5" Brown Clayey Silt over Dark Gray Silt with leaf litter and swampy odor.	No
	20.0'	3.0'	~4.5" Brown Clayey Silt over Dark Gray Silt with leaf litter and swampy odor.	No
	30.0'	3.5'	5" Brown Clayey Silt, some fine to coarse gravel over Dark Gray Silt with leaf litter and swampy odor.	No
	40.0'	4.5'	6" Brown Silt, some fine angular rock and shell fragments over Dark Gray organic rich Silt.	No
	50.0'	2.6'	8" Brown Silt, some fine angular rock and shell fragments over Dark Gray organic rich Silt.	No
	60.0'	0.6'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt, trace brick and tile fragments.	No
	70.0'	0.2'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt.	No
	80.0'	0.1'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt.	No
	90.0'	0.3'	1" Brown Silt, trace angular fine to coarse gravel rock fragments, over Dark Gray organic rich Silt (leaf litter).	No
	100.0'	0.2'	1" Brown Silt and angular fine to coarse gravel rock fragments and cobbles, over Dark Gray organic rich Silt (leaf litter).	No
	110.0'	1.9'	0.3" Brown Silt with fine to coarse gravel, brick and shell fragments over Dark Gray organic rich Silt (leaf litter).	No
	120.0'		Rock Talus with Silty Clay matrix.	No
TS-08	130.0'	8.8'	Rock Talus with Silty Clay matrix.	No
	0.0'	7.2'	Rock Talus with Silty Clay matrix.	No
	10.0'	0.6'	Rock Talus with Silty Clay matrix.	No
	20.0'	0.2'	Brown Silt and Bivalve shell fragments.	No
	30.0'	0.4'	Brown Silt and Bivalve shell fragments.	No
	40.0'	0.6'	Brown Silt and Bivalve shell fragments.	No
	50.0'	0.0'		No
	60.0'	0.1'	Brown Silt and Bivalve shell fragments.	No
	70.0'	0.4'	Brown Silt to Clayey Silt, some organic plant detritus (decayed), some fine to coarse gravel sized shell fragments.	No
	80.0'	0.3'	Brown Silt to Clayey Silt, some organic plant detritus (decayed), some fine to coarse gravel sized shell fragments.	No
	90.0'	1.4'	Brown Silt, trace clay, over Gray organic rich silt (plant detritus).	No
	100.0'		Rock Talus with Silty Clay matrix.	No
	106.0'	7.1'	Rock Talus with Silty Clay matrix.	No

Transect Sediment Profile Summary

NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-09	0.0'	9.5'	Rock Talus with Silty Clay matrix.	No
	10.0'		Rock Talus with Silty Clay matrix.	No
	20.0'	0.3'	Brown Silt and Bivalve Shell Fragments.	No
	30.0'	0.8'	Brown Silt and Bivalve Shell Fragments.	No
	40.0'	0.4'	Brown Silt and Bivalve Shell Fragments.	No
	50.0'	0.3'	Gray-Brown organic rich Silt with Coarse Sand to Fine Gravel sized Shell Fragments.	No
	60.0'	0.1'	Gray-Brown Silt with Coarse Sand to Fine Gravel sized Shell Fragments.	No
	70.0'	0.1'	Brown Silt and Bivalve Shell Fragments.	No
	80.0'	0.4'	0.2' Brown Silt and Bivalve Shell Fragments over Dark Gray Organic Rich Silty Clay.	No
	90.0'	0.6'	Brown Silt and Bivalve Shell Fragments.	No
	100.0'		Rock Talus with Silty Clay matrix, trace bivalve shells/shell fragments.	No
	104.0'	5.3'	Rock Talus with Silty Clay matrix, trace bivalve shells/shell fragments.	No
TS-10	0.0'	10.4'	Rock Talus with Silty Clay matrix.	No
	10.0'		Rock Talus with Silty Clay matrix.	No
	20.0'	2.6'	Brown fine to coarse Silty Gravel over Dark Gray Silt, with slight undifferentiated petroleum odor.	Yes, odor
	30.0'	0.7'	Brown-Gray fine to coarse Gravel and Silt, some cobbles.	No
	40.0'	1.6'	Gray to Dark Gray Bivalve Shells and Silt, some cobbles and boulders and fine to coarse gravel.	No
	50.0'	2.4'	Bivalve Shells and Brown Silt over Silty Gray Silt with fine sand to boulder sized rock fragments.	No
	60.0'	1.7'	Bivalve Shells and Brown Silt over Silty Gray Silt with fine sand to boulder sized rock fragments.	No
	70.0'	0.1'	Bivalve Shells and Brown Silt.	No
	80.0'	0.3'	Brown-Gray Fine to medium angular Gravel, trace sand. Agitation produces sheen. Slight MGP odor.	Yes, odor and sheen.
	90.0'	0.7'	Dark Brown, stained Fine Gravel to Boulder and silt. Agitation produces sheen. Slight MGP odor.	Yes, odor and sheen.
	100.0'		Rock Talus with Silty Clay matrix. Dark brown staining. Near 12" outfall. Swampy/sewer and MGP odor.	Yes, odor.
	109.5'	3.7'	Rock Talus with Silty Clay matrix. Dark brown staining. Near 12" outfall. Swampy/sewer and MGP odor.	Yes, odor and sheen/sleeps
TS-11	0.0'	8.1'	Rock Talus with Silty Clay matrix.	No
	10.0'	4.5'	0.5' Brown Silt with gravel, over Dark Gray organic silt with swampy odor.	No
	20.0'	1.9'	0.5' Brown Silt with gravel, over Dark Gray to black organic silt with swampy odor.	No
	30.0'	0.6'	0.1' Brown Silt with gravel, over 0.5' Dark Gray stiff Silty Clay.	No
	40.0'	1.4'	Gray Silty to Clayey Silt, slight MGP odor.	Yes, odor.
	50.0'	2.0'	Dark Gray Silt and Gravel. Slight MGP odor, slight sheen visible with disturbance.	Yes, odor and sheen.
	60.0'	0.6'	0.1' Brown Silt with fine gravel and shell fragments, over Dark Gray Silty Clay, some coarse gravel to cobble. Slight MGP odor, slight sheen visible with disturbance.	Yes, odor and sheen.
	70.0'	0.3'	Brown-Gray Fine to coarse angular gravel and Silt.	No
	80.0'	0.1'	Gray Fine to coarse angular gravel.	No
	90.0'	0.4'	Gray-Brown Fine to coarse Angular Gravel to Boulders with Interstitial Silt.	No
	100.0'		Rock Talus with Silty Clay matrix.	No
	105.0'	5.7'	Rock Talus with Silty Clay matrix. MGP odor at Canal Wall.	Yes, odor.

Transect Sediment Profile Summary

NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-12	0.0'	8.4'	Rock Talus with Silty Clay matrix	No
	10.0'	4.6'	6.5" Shale Fragments with Ash, over Brown Silt, some clay with Rock Fragments.	No
	20.0'	2.9'	4" Brown Clayey Silt, some fine to coarse angular gravel 4" x 1.0"; Gray Silt Silt with slight undifferentiated petroleum odor and abundant bivalve shells.	Yes, odor.
	30.0'	2.6'	Olive Gray Brown Silt with Clay above Silt Gray Silty Clay (ML), with some fine to coarse angular gravel. Slight undifferentiated petroleum odor	Yes, odor.
	40.0'	1.5'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some gravel. Slight undifferentiated petroleum odor.	Yes, odor.
	50.0'	1.2'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some gravel. Slight undifferentiated petroleum odor	Yes, odor.
	60.0'	1.5'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some bivalve shells and angular gravel. Slight undifferentiated petroleum odor	Yes, odor.
	70.0'	0.0'		No
	80.0'	0.0'		No
	90.0'	0.0'		No
	100.0'		Rock Talus with Silty Clay matrix	No
	102.0'	5.2'	Rock Talus with Silty Clay matrix.	No
TS-13	0.0'	4.3'	Rock Talus with Silty Clay matrix	No
	8.0'	3.0'	Brown Silt (ML), very soft, trace Gravel and bivalve shells.	No
	18.0'	2.2'	Brown Silt (ML), very soft, trace Gravel and bivalve shells.	No
	28.0'	0.0'		No
	38.0'	0.0'		No
	48.0'	1.2'	Gray Clayey Silt (ML) with organic swampy odor	No
	58.0'	0.0'	Trace Silt	No
	68.0'	0.6'	6" Rounded gravel with angular rock fragments and brown silt matrix, some organic matter (GM) over Gray Brown Silt some Clay	No
	78.0'	0.7'	8" Rounded gravel with angular rock fragments some brown silt matrix, some organic matter (GW) over Gray Brown Silt some Clay.	No
	88.0'	0.5'	Brown Silt with rock fragments and angular gravel (GW/GM)	No
	98.0'	0.0'		No
	108.0'	0.0'		No
	118.0'	0.0'		No
	128.0'	0.0'		No
	140.0'	7.0'	Rock Talus with Silty Clay matrix.	No

Transect Sediment Profile Summary

NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-14	0.0'		Large Boulders/Rip Rap with fine to medium Brown Sand to 6". Dark Gray Silt with old petroleum odor. Produces sheen.	Yes, Odor and Sheen
	10.0'	2.3'	4" Brown Sand and Gravel over Dark Gray Silt with slight diesel odor.	Yes, Odor and Sheen
	20.0'	2.3'	5" Brown fine to medium Sand and fine to coarse gravel, over Gray to Dark Gray Silt with slight diesel odor.	Yes, Odor and Sheen
	30.0'	3.3'	6" Brown fine to medium Sand, fine gravel, trace wood, over Gray to Dark Gray Silt trace Clay with slight diesel odor. Produces sheen.	Yes, Odor and Sheen
	40.0'	1.9'	6" Brown fine to medium Sand and silt, some fine to medium gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes, Odor and Sheen
	50.0'	4.8'	Produces sheen.	Yes, Odor and Sheen
	60.0'	5.6'	Produces sheen.	Yes, Odor and Sheen
	70.0'	5.5'	Produces sheen.	Yes, Odor and Sheen
	80.0'	2.3'	6" Brown fine to medium Sand and silt, some fine to medium gravel with cobbles/boulders, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes, Odor and Sheen
	90.0'	1.8'	Produces sheen.	Yes, Odor and Sheen
	100.0'	2.6'	Produces sheen.	Yes, Odor and Sheen
	110.0'	2.7'	Produces sheen.	Yes, Odor and Sheen
	120.0'	1.3'	Produces sheen.	Yes, Odor and Sheen
	130.0'	>9.3'	Produces sheen.	Yes, Odor and Sheen
	140.0'	>9.25'	8" Brown fine to medium Sand and Gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes, Odor and Sheen
	150.0'	>9.2'	Produces sheen.	Yes, Odor and Sheen
	160.0'	>10'	Produces sheen.	Yes, Odor and Sheen
	170.0'	7.2'	Produces sheen.	Yes, Odor and Sheen
	180.0'	6.6'	8" Brown fine to medium Sand and Gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes, Odor and Sheen
	190.0'	1.0'	Produces sheen.	Yes, Odor and Sheen
	200.0'	0.9'	Produces sheen.	Yes, Odor and Sheen
TS-15	204.0'	0.0'	Concrete Apron	No
	0.0'	2.2'	0-2.0' Gray Silty Clay, silt, some coarse sand and fine gravel. Slight undifferentiated petroleum odor starting at 1.5'. 2.0-2.2' Black Silty Gravel, slight undifferentiated petroleum odor.	Yes, Odor.
	10.0'	2.4'	Brown (top 6") to Gray Silty Clay, silt, some sand and angular gravel. Slight undifferentiated petroleum odor starts at 0.5'.	Yes, Odor.
	20.0'	1.2'	Brown Gray Silty Clay, silt, some fine gravel, trace sand, turns to medium gray at 0.9', slight undifferentiated petroleum odor.	Yes, Odor.
	30.0'	2.2'	Brown Clayey Silt, trace angular gravel and sand, turns gray at 1.5', slight undifferentiated petroleum odor to 2.2'.	Yes, Odor.
	40.0'	2.0'	Brown to Gray (@1.5') Clayey Silt, slight undifferentiated petroleum odor starts at 1.5'.	Yes, Odor.
	50.0'	2.0'	Brown to Gray (@1.5') Clayey Silt, slight undifferentiated petroleum odor starts at 1.5'.	Yes, Odor.
	60.0'	0.0'		No
	70.0'	0.0'		No
	80.0'	0.0'		No
	85.0'	1.0'	Brown to Gray Silt, trace clay with fine to coarse gravel, some fine to coarse sand (shells).	No
	90.0'	4.8'	Rock Talus with Silty Clay matrix.	No
	98.0'	9.0'	Rock Talus with Silty Clay matrix.	No

TABLE 2

Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-16	0.0'	1.4'	Brown Silty Clay, trace fine to coarse angular gravel. No odor. Soft. Bottom 3" have increase sand and gravel content.	No
	10.0'	0.3'	Dark Gray Silty Clay, some fine to coarse angular gravel. No odor, soft.	No
	20.0'	0.4'	Angular Shale Gravel with interstitial brown silty clay, no odor, no sheen	No
	30.0'	0.0'		No
	40.0'	0.4'	Fine to Medium Angular Shale Gravel, some fine to coarse sand and silt, no odor, no sheen, few shell fragments	No
	50.0'	0.2'	Fine to Medium Angular Shale Gravel, some fine to coarse sand, trace silt, gray to brown, no odor, no sheen, few shell fragments	No
	60.0'	0.0'		No
	70.0'	0.0'		No
	80.0'	0.0'		No
	90.0'	0.7'	Soft Brown to Dark Brown Clayey Silt, some lack mottling, trace angular shale gravel, no odor, no sheen	No
	100.0'	6.5'	Rock Talus with Silty Clay matrix	No
	106.0'	9.5'	Rock Talus with Silty Clay matrix	No
	0.0'	1.3'	Brown, soft, Silt, trace clay, some to trace fine to coarse angular gravel. Dark Gray to Black (0.5-1.3').	No
TS-17	10.0'	0.3'	Gray, soft, Silt trace clay, some to trace fine angular gravel, black at top of rock with slight decay odor.	No
	20.0'	0.4'	Fine to Coarse Shale gravel with interstitial Brown Silt, trace clay and trace fine to coarse sand, no odor	No
	30.0'	1.1'	0-0.5' Brown Silt trace clay, some fine to coarse gravel 0.5-1.1' Gray Clayey Silt, some fine to coarse angular gravel with undifferentiated petroleum odor and slight sheen.	Yes, Odor and Sheen
	40.0'	2.1'	0-0.5' Brown Clayey Silt with fine to coarse angular shale gravel, 0.5-2.0' Gray Clayey Silt, silt with fine to coarse angular gravel, slight undifferentiated petroleum odor and sheen	Yes, Odor and Sheen
	50.0'	0.7'	Brown Fine to Coarse Angular Shale Gravel with Brown Silt, some fine to coarse sand, No odor, no sheen	No
	60.0'	0.0'		No
	70.0'	0.0'		No
	80.0'	0.0'		No
	90.0'	0.7'	Brown-Gray Clayey Silt and gravel (rock talus), soft	No
	100.0'	6.2'	Rock Talus and concrete with Silty Clay matrix.	No
	104.0'	8.2'	Rock Talus and concrete with Silty Clay matrix	No
	0.0'			No
	10.0'	3.0'		No
TS-18	20.0'	>10.0'	0-2' Brown Silty Sand and Gravel, trace shells, 2-4' Black, Silty Sand, some gravel, organics and sheen	Yes, sheen
	30.0'	7.0'		No
	40.0'	5.2'	0-1.5' Medium Brown, Gravelly Sand, trace shells, 1.5-2.5 Black, Silty Sand	No
	50.0'	6.0'		No
	60.0'	2.0'		No
	70.0'	2.0'		No
	77.0'			No

TABLE 2

Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-19	0.0'			No
	10.0'	2.8'		No
	20.0'	2.7'		No
	30.0'	0.5'	Black Fine Sandy Silt, some organics, swampy odor.	No
	40.0'	0.7'		No
	50.0'	4.4'		No
	60.0'	1.7'	0-1.5' Black Sandy Silt, some organics, trace gravel and shells 1.5-4.0' Light Gray, Clayey Silty/Silty Clay	No
	70.0'	3.0'		No
	80.0'	4.3'		No
	90.0'	4.2'	0-2.0' Medium Gray, Silty Clay/Clayey Silt, trace gravel, organics, mussel shells 2.0-4.0' Light Gray, Clayey Silt, trace gravel and organics	No
TS-20	100.0'	6.3'		No
	110.0'	3.5'		No
	114.0'			No
	0.0'			No
	10.0'	0.8'		No
	20.0'	1.8'		No
	30.0'	1.5'	Black Sandy Silt, some organics, trace shells and gravel.	No
	40.0'	1.5'		No
	50.0'	1.8'		No
	60.0'	2.9'	0-1.5' Black Sandy Silt, some organics, trace gravel and shells 1.5-3.0' Light Gray, Clayey Silty/Silty Clay	No
TS-21	70.0'	7.1'		No
	80.0'	3.8'		No
	90.0'	5.4'	0-0.5' Black Silty Sand with Gravel, 0.5+ Medium Gray Silty Clay, trace gravel, trace woody material, lighter gray at 1.0' and increased clay content	No
	100.0'	5.0'		No
	0.0'	6.4'	0-1.5' Brown Clayey Silt, trace sand and gravel, soft 1.5-6.4.0' Gray to Dark Gray to Black Clayey Silt, trace sand and gravel, weather petroleum odor	Yes, Odor
	10.0'	4.2'	0-1.5' Brown Clayey Silt, trace sand and gravel, soft 1.5-4.0' Gray to Dark Gray to Black Clayey Silt, trace sand and gravel, weather petroleum odor.	Yes, Odor
	20.0'	2.0'	0-0.5' Brown Clayey Silt, trace gravel, 0.5-2.0' Gray to Medium Gray Clayey Silt, trace fine to coarse gravel	No
	30.0'	1.2'	Brown Gravel at surface, then Gray Clayey Silt trace line to coarse gravel, slight petroleum odor.	Yes, Odor
	40.0'	1.2'	Dark Gray Clayey Silt, some fine to coarse gravel, slight petroleum odor	Yes, Odor
	50.0'	2.0'	Brown to Dark Gray Clayey Silt and Gravel	No
	60.0'	1.8'	Dark Brown to Dark Gray Clayey Silt with gravel and shell fragments	No
	70.0'	0.8'	Dark Gray Gravelly Sand, trace silt, shells	No
	80.0'	Trace		No
	90.0'	0.4'	Dark Gray to Black Clayey Silt with Gravel Petroleum odor	Yes, Odor
	100.0'	5.4'	Rocky Talus with Silty Clay matrix.	No
	102.0'	6.9'	Rocky Talus with Silty Clay matrix	No

TABLE 3

Bucket Auger Sample Summary NYSEG-Lockport MGP Sites

Boring ID	Sediment Interval (feet)	Headspace PID (ppm)	Description
BA-1	0.0-0.5	ND	0.0-0.9 Gray-Brown Clayey Silt to Silt, some fine to coarse angular rock fragments, gravel size, trace angular cobbles
	0.5-1.0	ND	
	1.0-1.5	ND	0.9-2.2' Med Gray, well laminated Silty Clay, trace fine to coarse gravel rock fragments
	1.5-2.0	ND	
	2.0-2.5	3.4	
	2.5-3.0	5.6	2.2-3.7' As above with some dark gray laminations increasing with depth Slightly moist, stiff.
	3.0-3.5	29.6	
	3.5-4.0	35.7	3.7-5.0' Mostly Dark gray to black lamination
	4.0-4.5	-	
	4.5-5.0	87.3	
BA-2	5.0-5.5	101	2.0-5.8' More brown coloration, minor black lamination. Strong undifferentiated petroleum odor.
	5.5-5.8	75.6	
	0.0-0.5	ND	0.0-0.2' Leaf Litter
	0.5-1.0	ND	0.2-0.8' Brown Clayey Silt, some fine angular gravel., moist.
	1.0-1.5	ND	0.8-1.5' Light Gray brown Fine angular Gravel
	1.5-2.0	ND	1.5-2.3' Brown Clayey Silt, wet, soft.
	2.0-2.5	18.4	
	2.5-3.0	32.3	2.3-3.5' Dark Gray to Gray Silty Clay, strong undifferentiated petroleum odor
BA-3	3.0-3.5	21.6	
	0.0-0.5	ND	0.0-0.4' Leaf Litter
	0.5-1.0	ND	0.4-0.6' Brown Silt, wet.
	1.0-1.5	ND	0.6-2.1' Gray Silty Clay, trace fine to coarse angular gravel
	1.5-2.0	ND	
	2.0-2.5	ND	2.1-2.7' Fine to coarse angular to sub angular gravel and cobble
	2.5-3.0	2.3	2.7-3.5' Gray Silty Clay, some black staining, slight undifferentiated petroleum odor
	3.0-3.5	4.1	
BA-4	0.0-0.5	ND	0.0-0.8' Leaf Litter
	0.5-1.0	ND	0.8-1.6' Brown Silt, trace fine to coarse gravel, wet.
	1.0-1.5	ND	
	1.5-2.0	ND	1.6-2.3' Gray Silty Clay, wet
	2.0-2.5	ND	
	2.5-3.0	ND	2.3-4.5' Gray Silty Clay, very moist, swells
	3.0-3.5	ND	
	3.5-4.0	ND	
	4.0-4.5	ND	

TABLE 4
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SW-01	SW-02	SW-04	SW-06	SW-08
Sample ID		SW-01	SW-02	SW-04	SW-06	SW-08
Matrix		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/09/05
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	UG/L	5.0 U	2.7 J	5.0 U	5.0 U	3.5 J
Bromodichloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	UG/L	0.42 J	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Volatile Organic Compounds	UG/L	0.42	2.99	0.25	ND	3.5
Metals						
Aluminum	UG/L	200 U	817	397	200 U	889
Barium	UG/L	29.5	34.0	57.6	158	36.7
Calcium	UG/L	173,000	79,900	179,000	225,000	51,600
Chromium	UG/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Copper	UG/L	10.0 U	10.0 U	10.0 U	12.5	10.0 U
Iron	UG/L	174	656	623	254	761
Lead	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Magnesium	UG/L	49,000	21,200	44,000	55,800	13,300
Manganese	UG/L	40.7	54.1	34.1	18.6	54.0
Potassium	UG/L	7,860	3,970	7,020	29,400	2,860
Sodium	UG/L	63,300	59,900	165,000	564,000	49,300
Vanadium	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Zinc	UG/L	20.0 U	20.0 U	20.0 U	41.0	28.8

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Only Detected Results Reported

Detection Limits shown are PQL

TABLE 4
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SW-01	SW-02	SW-04	SW-06	SW-08
Sample ID		SW-01	SW-02	SW-04	SW-06	SW-08
Matrix		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/09/05
Parameter	Units					
Miscellaneous Parameters						
Phenolics, Total Recoverable	MG/L	0.010 U	0.010 U	0.010 U	0.010 U	0.15

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Only Detected Results Reported.

Detection Limits shown are PQL

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 Printed: 4/12/2006 11:15:09 AM
 [MATRIX] = "WS" AND [LOCATION] = "4492005"

TABLE 4
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SW-09	SW-11	SW-12	SW-14	SW-14
Sample ID		SW-09	SW-11	SW-12	SW-14	SW-DUP1
Matrix		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/09/05
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	2.3	2.4
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	4.7	4.9
Acetone	UG/L	5.0 U	28	5.0 U	5.0 U	5.0 U
Bromochloromethane	UG/L	1.0 U	1.9	0.65 J	1.0 U	1.0 U
Chloroform	UG/L	1.0 U	2.2	1.1	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0	0.44 J	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	0.28 J	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.5	1.0 U	18	19
Total Volatile Organic Compounds	UG/L	ND	34.88	2.19	25	26.3
Metals						
Aluminum	UG/L	200 U	200 U	3,030	713	705
Barium	UG/L	88.0	38.4	43.2	32.8	32.5
Calcium	UG/L	165,000	58,100	46,600	61,100	60,700
Chromium	UG/L	4.0 U	6.5	4.1	4.0 U	4.0 U
Copper	UG/L	10.0 U	10.0 U	11.9	10.0 U	10.0 U
Iron	UG/L	80.5	104	3,370	661	647
Lead	UG/L	5.0 U	5.0 U	6.2	5.0 U	5.0 U
Magnesium	UG/L	37,400	14,500	12,700	16,100	16,100
Manganese	UG/L	24.6	22.0	83.4	43.3	43.4
Potassium	UG/L	8,510	3,460	3,250	3,740	3,740
Sodium	UG/L	241,000	65,200	37,100	64,000	64,300
Vanadium	UG/L	5.0 U	5.0 U	5.1	5.0 U	5.0 U
Zinc	UG/L	22.3	29.1	32.0	20.0 U	20.0 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit

J - The reported concentration is an estimated value

Only Detected Results Reported.

Detection Limits shown are PQL

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 Printed: 8/17/2006 11:13:09 AM
 (BATCH) = 'MS' AND (LOGDATE) = 8/16/2005

TABLE 4
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SW-09	SW-11	SW-12	SW-14	SW-14
Sample ID		SW-09	SW-11	SW-12	SW-14	SW-DUP1
Matrix		Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/09/05
Parameter	Units					Field Duplicate (1-1)
Miscellaneous Parameters						
Phenolics, Total Recoverable	MG/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Only Detected Results Reported.

Detection Limits shown are PQL

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 Printed: 8/17/2006 11:13:09 AM
 (MATRIX) = "A2" AND (LOGDATE) = 8/16/2006

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-01	SED-02	SED-02	SED-03	SED-03
Sample ID		SED-1	SED-2 0-1	SED-2 2-3	SED-3 0-1	SED-3 3.5-4
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	0.0-1.0	2.5-3.0	0.0-1.0	3.5-4.0
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/09/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	25 U	26 U	120 U	25 U	270 U
Aroclor 1221	UG/KG	25 U	26 U	120 U	25 U	270 U
Aroclor 1232	UG/KG	25 U	26 U	120 U	25 U	270 U
Aroclor 1242	UG/KG	25 U	26 U	120 U	25 U	2,400
Aroclor 1248	UG/KG	57	65	1,400	140	1,700
Aroclor 1254	UG/KG	33	40	810	81	860
Aroclor 1260	UG/KG	13 U	25 U	120 U	25 U	600
Total Polychlorinated Biphenyls	UG/KG	103	105	2,210	221	5,560

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

E - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-04	SED-04	SED-05	SED-05	SED-06
Sample ID		SED-4 0-1	SED4 3.5-4	SED-5 0-1	SED5 3.5-4	SED-06 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-1.0	3.5-4.0	0.0-1.0	3.5-4.0	0.0-1.0
Date Sampled		04/09/05	04/09/05	04/09/05	04/09/05	04/11/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	23 U	24 U	120 U	25 U	21 U
Aroclor 1221	UG/KG	23 U	24 U	120 U	25 U	21 U
Aroclor 1232	UG/KG	23 U	24 U	120 U	25 U	21 U
Aroclor 1242	UG/KG	23 U	24 U	120 U	25 U	21 U
Aroclor 1248	UG/KG	200	110	950	67	390
Aroclor 1254	UG/KG	100	76	490	110	21 U
Aroclor 1260	UG/KG	23 U	44	120 U	25 U	21 U
Total Polychlorinated Biphenyls	UG/KG	300	230	1,440	177	390

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

- The reported concentration is an estimated value.

- Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-06	SED-07	SED-08	SED-09	SED-09
Sample ID		SED-06 1-2	SED-07 0-1	SED-08 0-1	SED-09 0-1	SED OUP 3
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		1.0-2.0	0.0-1.0	0.0-1.0	0.0-1.0	3.0-4.0
Date Sampled		04/11/05	04/11/05	04/11/05	04/11/05	04/11/05
Parameter	Units					Field Duplicate (1-1)
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	21 U	110 U	450 U	24 U	26 U
Aroclor 1221	UG/KG	21 U	110 U	450 U	24 U	26 U
Aroclor 1232	UG/KG	21 U	110 U	450 U	24 U	26 U
Aroclor 1242	UG/KG	21 U	110 U	450 U	24 U	26 U
Aroclor 1248	UG/KG	250	1,100	2,800	180	88
Aroclor 1254	UG/KG	21 U	110 U	450 U	140	57
Aroclor 1260	UG/KG	21 U	110 U	450 U	24 U	26 U
Total Polychlorinated Biphenyls	UG/KG	250	1,100	2,800	320	143

Flags assigned during chemistry validation are shown.

- U - Not detected above the reported quantitation limit
- J - The reported concentration is an estimated value.
- D - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-09	SED-10	SED-10	SED-11	SED-12
Sample ID		SED-09 3-4	SED-10 B-1	SED-10 1-2	SED-11 5-1.5	SED-12 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		3.0-4.0	0.0-1.0	1.0-2.0	0.5-1.5	0.0-1.0
Date Sampled		04/11/05	04/11/05	04/11/05	04/11/05	04/10/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	25 U	40 U	21 U	22 U	27 U
Aroclor 1221	UG/KG	25 U	40 U	21 U	22 U	27 U
Aroclor 1232	UG/KG	25 U	40 U	21 U	22 U	27 U
Aroclor 1242	UG/KG	25 U	40 U	21 U	22 U	27 U
Aroclor 1248	UG/KG	27	400	240	190	330
Aroclor 1254	UG/KG	22 J	270	120	98	150
Aroclor 1260	UG/KG	25 U	40 U	21 U	22 U	27 U
Total Polychlorinated Biphenyls	UG/KG	49	670	360	288	460

Flags assigned using chemistry validation are shown.

- U - Not detected above the reported quantitation limit.
- J - The reported concentration is an estimated value.
- D - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL.

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-13	SED-13	SED-14	SED-14	SED-15
Sample ID		SED-13 0-1	SED-13 2-3	S14 5-1.5	S141.5-2.5	S15 5-1.5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-1.0	2.0-3.0	0.5-1.5	1.5-2.5	0.5-1.5
Date Sampled		04/10/05	04/10/05	04/10/05	04/10/05	04/10/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	30 U	250 U	24 U	23 U	2,200 U
Aroclor 1221	UG/KG	30 U	250 U	24 U	23 U	2,200 U
Aroclor 1232	UG/KG	30 U	250 U	24 U	23 U	2,200 U
Aroclor 1242	UG/KG	30 U	4,000	24 U	23 U	21,000
Aroclor 1248	UG/KG	53	250 U	190	7.0 J	2,200 U
Aroclor 1254	UG/KG	31	970	24 U	23 U	16,000
Aroclor 1260	UG/KG	30 U	250 U	24 U	23 U	2,200 U
Total Polychlorinated Biphenyls	UG/KG	84	4,970	190	7	37,000

Flags assigned during chemistry validation are shown:

- U - Not detected above the reported quantitation limit.
- J - The reported concentration is an estimated value.
- 0 - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-15	SED-16	SED-17	SED-18	SED-19
Sample ID		S151 S-2.5	SED-16 0-1	SED-17 0-1	SED-18 0-1	SED-19 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		1.5-2.5	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0
Date Sampled		04/10/05	04/09/05	04/09/05	04/09/05	04/11/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	590 U	440 U	21 U	1,000 U	26 U
Aroclor 1221	UG/KG	590 U	440 U	21 U	1,000 U	26 U
Aroclor 1232	UG/KG	590 U	440 U	21 U	1,000 U	26 U
Aroclor 1242	UG/KG	590 U	440 U	21 U	1,000 U	26 U
Aroclor 1248	UG/KG	8,200	9,200	230	20,000	120
Aroclor 1254	UG/KG	590 U	440 U	97	11,000	26 U
Aroclor 1260	UG/KG	590 U	440 U	21 U	1,000 U	26 U
Total Polychlorinated Biphenyls	UG/KG	8,200	9,200	327	31,000	120

Flags assigned during chemistry validation are shown

- U - Not detected above the reported quantitation limit
- E - The reported concentration is an estimated value
- J - Result reported from a secondary dilution analysis

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-19	SED-20	SED-21	SED-22	SED-23
Sample ID		SED DUP 2	S-20 0-0.7	S-21 0-0.7	SED-22 2-3	SED-23 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-1.0	0.0-0.7	0.0-0.7	2.0-3.0	0.0-1.0
Date Sampled		04/11/05	04/11/05	04/10/05	04/10/05	04/10/05
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	28 U	23 U	34 UJ	12,000 U	1,500 U
Aroclor 1221	UG/KG	28 U	23 U	34 UJ	12,000 U	1,500 U
Aroclor 1232	UG/KG	28 U	23 U	34 UJ	12,000 U	1,500 U
Aroclor 1242	UG/KG	28 U	23 U	84 J	220,000	1,500 U
Aroclor 1248	UG/KG	85	82	34 UJ	12,000 U	7,700
Aroclor 1254	UG/KG	28 U	32	48 J	90,000	6,100
Aroclor 1260	UG/KG	28 U	23 U	34 UJ	12,000 U	1,500 U
Total Polychlorinated Biphenyls	UG/KG	85	114	132	310,000	13,800

Flags assigned during chemistry validation are shown

- U - Not detected above the reported quantitation limit.
- J - The reported concentration is an estimated value.
- Result reported from a secondary dilution analysis

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-23	SED-23	SED-24	SED-24	SED-25
Sample ID		S231.5-2.5	SED DUP 1	SED-24 0-1	S241.5-2.5	SED 25 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		1.5-2.5	1.5-2.5	0.0-1.0	1.5-2.5	0.0-1.0
Date Sampled		04/10/05	04/10/05	04/10/05	04/10/05	04/12/05
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	21 U	23 U	14,000 U	220 U	120 U
Aroclor 1221	UG/KG	21 U	23 U	14,000 U	220 U	120 U
Aroclor 1232	UG/KG	21 U	23 U	14,000 U	220 U	120 U
Aroclor 1242	UG/KG	21 U	23 U	14,000 U	4,600	120 U
Aroclor 1243	UG/KG	44	21 J	40,000	220 U	860
Aroclor 1254	UG/KG	21 U	23 U	26,000	900	120 U
Aroclor 1260	UG/KG	21 U	23 U	14,000 U	220 U	120 U
Total Polychlorinated Biphenyls	UG/KG	44	21	66,000	5,500	860

Flags assigned during chemistry validation are shown

- U - Not detected above the reported quantitation limit
- J - The reported concentration is an estimated value
- D - Result reported from a secondary dilution analysis

Detection Limits shown are POL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-26	SED-26	SED-27	SED-28	SED-28
Sample ID		SED 26 0-1	SED 26 3-4	SED-27	SED 28 0-1	SED 28 1-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-1.0	3.0-4.0	-	0.0-1.0	1.0-2.0
Date Sampled		04/12/05	04/12/05	04/09/05	04/12/05	04/12/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	23 U	26 U	28 U	23 U	23 U
Aroclor 1221	UG/KG	23 U	26 U	28 U	23 U	23 U
Aroclor 1232	UG/KG	23 U	26 U	28 U	23 U	23 U
Aroclor 1242	UG/KG	23 U	25 U	28 U	23 U	23 U
Aroclor 1248	UG/KG	69	360	29	350	480
Aroclor 1254	UG/KG	52	110	29	150	200
Aroclor 1260	UG/KG	23 U	26 U	18 U	23 U	23 U
Total Polychlorinated Biphenyls	UG/KG	121	470	76	500	680

Flags assigned during chemistry validation are shown:

- U - Not detected above the reported quantitation limit.
- E - The reported concentration is an estimated value.
- D - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-29	SED-30	SED-30	SED-31	SED-31
Sample ID		SED 29 0.5-1.5	SED 30 0-1	SED 30 1-2	SED 31 0-1	SED 31 1-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.5-1.5	0.0-1.0	1.0-2.0	0.0-1.0	1.0-2.0
Date Sampled		04/12/05	04/12/05	04/12/05	04/12/05	04/12/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	24 U	23 U	46 U	190 U	22 U
Aroclor 1221	UG/KG	24 U	23 U	46 U	190 U	22 U
Aroclor 1232	UG/KG	24 U	23 U	46 U	190 U	22 U
Aroclor 1242	UG/KG	24 U	23 U	46 U	190 U	22 U
Aroclor 1248	UG/KG	400	410	640	980	270
Aroclor 1254	UG/KG	170	23 U	46 U	1,300	120
Aroclor 1260	UG/KG	24 U	23 U	46 U	190 U	22 U
Total Polychlorinated Biphenyls	UG/KG	570	410	640	2,280	390

Flags assigned during chemistry validation are shown

U - Not detected above the reported quantitation limit

E - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-32	SED-32	SED-33	SED-34	SED-35
Sample ID		SED 32 0-1	SED 32 4-4.8	SED 33 0-1	SED 34 0-1	SED 35 0-1
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-1.0	4.0-4.8	0.0-1.0	0.0-1.0	0.0-1.0
Date Sampled		04/12/05	04/12/05	04/12/05	04/12/05	04/12/05
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	110 U	26 U	31 U	23 U	25 U
Aroclor 1221	UG/KG	110 U	26 U	31 U	23 U	25 U
Aroclor 1232	UG/KG	110 U	26 U	31 U	23 U	25 U
Aroclor 1242	UG/KG	110 U	26 U	31 U	23 U	25 U
Aroclor 1248	UG/KG	660	38	24 J	160	43
Aroclor 1254	UG/KG	410	62	31 U	79	29
Aroclor 1260	UG/KG	110 U	26 U	31 U	23 U	25 U
Total Polychlorinated Biphenyls	UG/KG	1,070	100	24	239	72

Flags assigned during chemistry validation are shown.

- U - Not detected above the reported quantitation limit.
- J - The reported concentration is an estimated value.
- J - Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 5
PCB SEDIMENT SAMPLE ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		SED-36
Sample ID		SED 36 0-1
Matrix		Sediment
Depth Interval (ft)		0.0-1.0
Date Sampled		04/12/05
Parameter	Units	
Polychlorinated Biphenyls		
Aroclor 1016	UG/KG	32 U
Aroclor 1221	UG/KG	32 U
Aroclor 1232	UG/KG	32 U
Aroclor 1242	UG/KG	32 U
Aroclor 1248	UG/KG	17 J
Aroclor 1254	UG/KG	32 U
Aroclor 1260	UG/KG	32 U
Total Polychlorinated Biphenyls	UG/KG	17

Flags assigned during chemistry validation are shown

- U - Not detected above the reported quantitation limit.
- J - The reported concentration is an estimated value.
- Result reported from a secondary dilution analysis.

Detection Limits shown are PQL

TABLE 6
STATISTICAL SUMMARY OF DETECTED PCB SEDIMENT SAMPLE RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max
				Min	Max	Avg	StdDev			
Polychlorinated Biphenyls										
Aroclor 1016	UG/KG	53	•	•	•	•	•	•	•	
Aroclor 1221	UG/KG	53	•	•	•	•	•	•	•	
Aroclor 1232	UG/KG	53	•	•	•	•	•	•	•	
Aroclor 1242	UG/KG	53	6	84.00	2.20E+05	4.20E+04	8.75E+04	Non-Normal	SED-22	2-3
Aroclor 1248	UG/KG	53	48	7.00	4.00E+04	2.129	6.544	Non-Normal	SED-24	0-1
Aroclor 1254	UG/KG	53	38	28.00	9.00E+04	4.140	1.52E+04	Non-Normal	SED-22	2-3
Aroclor 1260	UG/KG	53	4	13.00	800.0	188.8	287.8	Non-Normal	SED-03	3.5-4

Table 7
Sediment PCB Summary
Former Transit Street and State Road MGP Sites - Lockport, New York
New York State Electric & Gas

Collection Date	Location ID	Sample ID	PCB			
			Aroclor 1254	Aroclor 1260	Aroclor 1242	Aroclor 1248
4/9/05	SED-01	SED-1	33	3		57
4/9/05	SED-02	SED-2 0-1	40			65
4/9/05	SED-02	SED-2 2.5-3	810			1,400
4/9/05	SED-03	SED-3 0-1	81			140
4/9/05	SED-03	SED-3 3.5-4	860	600	2,400	1,700
4/9/05	SED-04	SED-4 0-1	100			200
4/9/05	SED-04	SED-4 3.5-4	76	44		110
4/9/05	SED-05	SED-5 0-1	490			950
4/9/05	SED-05	SED-5 3.5-4	110			67
4/11/05	SED-06	SED-06 0-1				390
4/11/05	SED-06	SED-06 1-2				250
4/11/05	SED-07	SED-07 0-1				1,100
4/11/05	SED-08	SED-08 0-1				2,800
4/11/05	SED-09	SED-09 0-1	140			180
4/11/05	SED-09	SED-09 3-4	22			27
4/11/05	SED-10	SED-10 0-1	270			400
4/11/05	SED-10	SED-10 1-2	120			240
4/11/05	SED-11	SED-11 5-1.5	98			190
4/10/05	SED-12	SED-12 0-1	150			330
4/10/05	SED-13	SED-13 0-1	31			53
4/10/05	SED-13	SED-13 2-3	970		4,000	
4/10/05	SED-14	SED-14 5-1.5				190
4/10/05	SED-14	SED-14 1.5-2.5				7
4/10/05	SED-15	SED-15 5-1.5	16,000		21,000	
4/10/05	SED-15	SED-15 1.5-2.5				8,200
4/9/05	SED-16	SED-16 0-1				9,200
4/9/05	SED-17	SED-17 0-1	97			230
4/9/05	SED-18	SED-18 0-1	11,000			20,000
4/11/05	SED-19	SED-19 0-1				120
4/11/05	SED-20	SED-20 0-0.7	32			82
4/10/05	SED-21	SED-21 0-0.7	48		84	
4/10/05	SED-22	SED-22 2-3	90,000		220,000	
4/10/05	SED-23	SED-23 0-1	6,100			7,700
4/10/05	SED-23	SED-23 1.5-2.5				44
4/10/05	SED-24	SED-24 0-1	26,000			40,000
4/10/05	SED-24	SED-24 1.5-2.5	900		4,600	
4/12/05	SED-25	SED-25 0-1				860
4/12/05	SED-26	SED-26 0-1	52			69
4/12/05	SED-26	SED-26 3-4	110			360
4/9/05	SED-27	SED-27	29	18		29
4/12/05	SED-28	SED-28 0-1	150			350
4/12/05	SED-28	SED-28 1-2	200			480
4/12/05	SED-29	SED-29 0.5-1.5	170			400
4/12/05	SED-30	SED-30 0-1				410
4/12/05	SED-30	SED-30 1-2				640
4/12/05	SED-31	SED-31 0-1	1,300			980
4/12/05	SED-31	SED-31 1-2	120			270
4/12/05	SED-32	SED-32 0-1	410			660
4/12/05	SED-32	SED-32 4-4.8	62			38
4/12/05	SED-33	SED-33 0-1				24
4/12/05	SED-34	SED-34 0-1	79			160
4/12/05	SED-35	SED-35 0-1	29			43
4/12/05	SED-36	SED-36 0-1				17

TABLE 8
DNAPL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		BMW-04-11
Sample ID		MW-4-11-LH
Matrix		Dense NAPL
Depth Interval (ft)		-
Date Sampled		06/14/05
Parameter	Units	
Semivolatile Organic Compounds		
1,1-Biphenyl	UG/KG	71,000 U
2,2-oxybis(1-Chloropropane)	UG/KG	71,000 U
2,4,5-Trichlorophenol	UG/KG	170,000 U
2,4,6-Trichlorophenol	UG/KG	71,000 U
2,4-Dichlorophenol	UG/KG	71,000 U
2,4-Dimethylphenol	UG/KG	71,000 U
2,4-Dinitrophenol	UG/KG	340,000 U
2,4-Dinitrotoluene	UG/KG	71,000 U
2,6-Dinitrotoluene	UG/KG	71,000 U
2-Chloronaphthalene	UG/KG	71,000 U
2-Chlorophenol	UG/KG	71,000 U
2-Methylnaphthalene	UG/KG	71,000 U
2-Methylphenol (o-cresol)	UG/KG	71,000 U
2-Nitroaniline	UG/KG	340,000 U
2-Nitrophenol	UG/KG	71,000 U
3,3-Dichlorobenzidine	UG/KG	71,000 U
3-Nitroaniline	UG/KG	340,000 U
4,5-Dinitro-2-methylphenol	UG/KG	340,000 U
4-Bromophenyl-phenylether	UG/KG	71,000 U
4-Chloro-3-methylphenol	UG/KG	71,000 U
4-Chloroaniline	UG/KG	71,000 U
4-Chlorophenyl-phenylether	UG/KG	71,000 U
4-Methylphenol (p-cresol)	UG/KG	71,000 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

Detection Limits shown are PQL

TABLE 8
DNAPL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		BMW-04-11
Sample ID		MW-4-11-UH
Matrix		Dense NAPL
Depth Interval (ft)		-
Date Sampled		06/14/05
Parameter	Units	
Semivolatile Organic Compounds		
4-Nitroaniline	UG/KG	340,000 U
4-Nitrophenol	UG/KG	340,000 U
Acenaphthene	UG/KG	71,000 U
Acenaphthylene	UG/KG	71,000 U
Acetophenone	UG/KG	71,000 U
Anthracene	UG/KG	71,000 U
Atrazine	UG/KG	71,000 U
Benzaldehyde	UG/KG	71,000 U
Benzo(a)anthracene	UG/KG	71,000 U
Benzo(a)pyrene	UG/KG	71,000 U
Benzo(b)fluoranthene	UG/KG	71,000 U
Benzo(g,h,i)perylene	UG/KG	71,000 U
Benzo(k)fluoranthene	UG/KG	71,000 U
bis(2-Chloroethoxy)methane	UG/KG	71,000 U
bis(2-Ethylhexyl)phthalate	UG/KG	71,000 U
Butylbenzylphthalate	UG/KG	71,000 U
Caprolactam	UG/KG	71,000 U
Carbazole	UG/KG	71,000 U
Chrysene	UG/KG	71,000 U
Dibenz(a,h)anthracene	UG/KG	71,000 U
Dibenzofuran	UG/KG	71,000 U
Diethylphthalate	UG/KG	71,000 U
Dimethylphthalate	UG/KG	71,000 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

Detection Limits shown are PQL

TABLE 8
DNAPL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		BMW-04-11
Sample ID		MW-4-11-LH
Matrix		Dense NAPL
Depth Interval (ft)		-
Date Sampled		06/14/05
Parameter	Units	
Semivolatile Organic Compounds		
Di-n-butylphthalate	UG/KG	71,000 U
Di-n-octylphthalate	UG/KG	71,000 U
Fluoranthene	UG/KG	71,000 U
Fluorene	UG/KG	71,000 U
Hexachlorobenzene	UG/KG	71,000 U
Hexachlorobutadiene	UG/KG	71,000 U
Hexachlorocyclopentadiene	UG/KG	71,000 U
Hexachloroethane	UG/KG	71,000 U
Indeno(1,2,3-cd)pyrene	UG/KG	71,000 U
Isophorone	UG/KG	71,000 U
Naphthalene	UG/KG	71,000 U
Nitrobenzene	UG/KG	71,000 U
N-Nitroso-di-n-propylamine	UG/KG	71,000 U
N-Nitrosodiphenylamine	UG/KG	71,000 U
Pentachlorophenol	UG/KG	340,000 U
Phenanthrene	UG/KG	71,000 U
Phenol	UG/KG	71,000 U
Pyrene	UG/KG	71,000 U
Total Carcinogenic PAHs	UG/KG	ND
Total Non-Carcinogenic PAHs	UG/KG	ND
Total Polycyclic Aromatic Hydrocarbons	UG/KG	ND
Total Semivolatile Organic Compounds	UG/KG	ND

Flags assigned during chemistry validation are shown.

U = Not detected above the reported quantitation limit.

Detection Limits shown are PQL

TABLE 8
DNAPL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Location ID		BMW-04-11
Sample ID		MW-4-11-LH
Matrix		Dense NAPL
Depth Interval (ft)		-
Date Sampled		06/14/05
Parameter	Units	
Polychlorinated Biphenyls		
Aroclor 1015	MG/KG	0.88 U
Aroclor 1221	MG/KG	0.88 U
Aroclor 1232	MG/KG	0.88 U
Aroclor 1242	MG/KG	0.88 U
Aroclor 1248	MG/KG	0.88 U
Aroclor 1254	MG/KG	0.88 U
Aroclor 1260	MG/KG	0.88 U
Total Polychlorinated Biphenyls	MG/KG	ND

Flags assigned during chemistry validation are shown

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 9

Parameter	Units	No. of Samples	No. of Detections	Range of Detections					Dist	Location of Max Value
				Min	Max	Avg	StdDev	UCL95		
Semivolatile Organic Compounds										
2-Methylnaphthalene	MG/KG	9	2	0.290	0.450	0.370	0.113	0.527	Normal	SS-04
Acenaphthene	MG/KG	9	3	0.530	2.80	1.26	1.16	2.57	Normal	SS-04
Acenaphthylene	MG/KG	9	3	0.760	0.880	0.823	0.060	0.892	Normal	SS-09
Anthracene	MG/KG	9	6	0.410	5.30	1.53	1.61	2.65	Non-Normal	SS-04
Benzo(a)anthracene	MG/KG	9	9	1.10	13.00	4.49	3.66	6.89	Non-Normal	SS-04
Benzo(a)pyrene	MG/KG	9	9	0.910	10.00	4.20	2.90	6.09	Non-Normal	SS-04
Benzo(b)fluoranthene	MG/KG	9	8	1.70	16.00	6.56	4.90	9.78	Non-Normal	SS-04
Benzo(g,h,i)perylene	MG/KG	9	8	0.710	3.70	2.17	0.953	2.83	Normal	SS-04
Benzo(k)fluoranthene	MG/KG	9	9	0.800	14.00	3.50	4.20	6.25	Non-Normal	SS-06
bis(2-Ethylhexyl)phthalate	MG/KG	9	3	0.720	1.10	0.900	0.191	1.12	Normal	SS-07
Butylbenzylphthalate	MG/KG	9	1	0.380	0.360	0.302	-	-	Normal	SS-08
Carbazole	MG/KG	9	5	0.460	3.30	1.13	1.22	2.20	Normal	SS-04
Chrysene	MG/KG	9	9	0.830	12.00	4.30	3.39	6.52	Non-Normal	SS-04
Dibenz(a,h)anthracene	MG/KG	9	8	0.260	1.49	0.784	0.418	1.07	Non-Normal	SS-02
Dibenzofuran	MG/KG	9	2	0.410	2.00	1.21	1.12	2.76	Normal	SS-04
Fluoranthene	MG/KG	9	9	1.90	32.00	10.31	9.00	16.19	Non-Normal	SS-04
Fluorene	MG/KG	9	2	0.680	2.90	1.79	1.57	3.97	Normal	SS-04
Indeno(1,2,3-cd)pyrene	MG/KG	9	8	0.730	3.70	2.05	0.952	2.71	Normal	SS-04

Only Detected Results Reported

```
N = 173467 / COUNT(ProgramStat.m)
      4170008
WHERE (Matrix = 'S' AND LOCID) LIKE '%-' AND (LOCID) != 4117009.
```

TABLE 9
STATISTICAL SUMMARY OF DETECTED RI SURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value
				Min	Max	Avg	StdDev		
Semivolatile Organic Compounds									
Naphthalene	MG/KG	9	1	0.620	0.620	0.620		Normal	SS-06
Pentachlorophenol	MG/KG	9	1	3.75	3.75	3.75		Normal	SS-02
Phenanthrene	MG/KG	9	9	0.810	22.00	5.74	6.42	Non-Normal	SS-04
Pyrene	MG/KG	9	9	1.40	21.00	7.12	5.85	Non-Normal	SS-04
Polychlorinated Biphenyls									
Aroclor 1254	MG/KG	6	2	0.024	0.055	0.044	0.018	Non-Normal	SS-04
Metals									
Aluminum	MG/KG	9	9	2.470	6.650	4.031	1.612	Non-Normal	SS-01
Argenic	MG/KG	9	8	2.90	6.90	4.31	1.31	Normal	SS-06
Barium	MG/KG	9	9	31.60	58.40	46.49	13.36	Normal	SS-01
Beryllium	MG/KG	9	4	0.240	0.440	0.340	0.082	Normal	SS-01
Cadmium	MG/KG	9	4	0.220	0.800	0.492	0.315	Non-Normal	SS-08
Calcium	MG/KG	9	9	1.48E+04	1.33E+05	5.71E+04	4.29E+04	Normal	SS-01
Chromium	MG/KG	9	9	8.60	36.20	15.88	10.57	Non-Normal	SS-07
Cobalt	MG/KG	9	9	3.00	6.50	4.87	1.85	Normal	SS-01
Copper	MG/KG	9	9	12.80	85.90	39.83	28.32	Non-Normal	SS-07
Iron	MG/KG	9	9	5.410	1.95E+04	1.17E+04	4.278	Normal	SS-07
Lead	MG/KG	9	9	45.90	873.0	208.1	256.7	Non-Normal	SS-08

Only Detected Results Reported

TABLE 9
STATISTICAL SUMMARY OF DETECTED RI SURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections					Dist	Location of Max Value
				Min	Max	Avg	StdDev	UCL95		
Metals										
Magnesium	MG/KG	9	9	3.280	4.28E+04	2.16E+04	1.54E+04	3.18E+04	Normal	SS-03
Manganese	MG/KG	9	9	278.0	862.0	525.3	207.2	660.7	Normal	SS-01
Mercury	MG/KG	9	9	0.068	0.573	0.229	0.185	0.350	Normal	SS-02
Nickel	MG/KG	9	9	18.20	42.90	25.37	8.31	30.78	Non-Normal	SS-02
Potassium	MG/KG	9	9	324.0	1,410	726.3	371.4	969.0	Normal	SS-01
Sodium	MG/KG	9	3	149.0	404.0	301.0	134.4	453.1	Non-Normal	SS-08
Vanadium	MG/KG	9	9	6.40	16.20	9.14	3.44	11.69	Non-Normal	SS-01
Zinc	MG/KG	9	9	62.90	489.0	199.4	162.5	305.6	Non-Normal	SS-07
Miscellaneous Parameters										
Total Cyanide	MG/KG	9	3	1.10	2.20	1.63	0.551	2.26	Non-Normal	SS-05
Total Cyanide (Secondary Lab)	MG/KG	3	3	0.170	3.77	2.29	1.88	4.42	Non-Normal	SS-08
Free Cyanide	MG/KG	3	3	0.070	0.100	0.083	0.015	0.101	Normal	SS-05
Ferri/Ferrous Iron Cyanide Complex	MG/KG	3	3	0.030	1.85	1.15	0.982	2.26	Non-Normal	SS-08
Unknown Iron Cyanide Complex	MG/KG	3	1	0.170	0.170	0.170	-	-	Non-Normal	SS-08

Only Detected Results Reported

TABLE 10
STATISTICAL SUMMARY OF DETECTED RI SUBSURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max
				Min	Max	Avg	StdDev			
Volatile Organic Compounds										
1,2-Dichloroethene (cis)	MG/KG	85	1	0.003	0.003	0.003		Non-Normal	GB-18	6.5-7
Acetone	MG/KG	65	13	0.028	0.740	0.126	0.192	Non-Normal	GB-07	5.5-6.5
Benzene	MG/KG	65	21	0.002	2.30	0.235	0.508	Non-Normal	GB-09	10-12
Carbon disulfide	MG/KG	65	15	0.001	0.022	0.004	0.005	Non-Normal	GB-07	5.5-6.5
Chloromethane	MG/KG	65	1	0.003	0.003	0.003		Non-Normal	GB-29	13-14
Cyclohexane	MG/KG	65	8	0.002	0.320	0.075	0.134	Non-Normal	GB-17	6.2-8.2
Dichlorodifluoromethane	MG/KG	65	1	0.003	0.003	0.003		Non-Normal	GB-42	6-8
Ethylbenzene	MG/KG	65	27	0.001	15.00	2.73	4.27	Non-Normal	GB-14	8.5-9.5
Isopropylbenzene (Cumene)	MG/KG	65	27	0.002	19.00	1.17	3.68	Non-Normal	GB-16	0.5-1.5
Methyl ethyl ketone (2-Butanone)	MG/KG	65	19	0.008	0.150	0.025	0.032	Non-Normal	GB-07	5.5-6.5
Methylcyclohexane	MG/KG	65	10	0.002	0.280	0.052	0.101	Non-Normal	GB-17	6.2-8.2
Methylene chloride	MG/KG	65	1	0.010	0.010	0.010		Non-Normal	GB-07	12.5-13.5
Styrene	MG/KG	65	9	0.004	14.00	3.34	4.92	Non-Normal	GB-26	9.5-10.75
Tetrachloroethene	MG/KG	65	10	0.001	0.009	0.004	0.002	Non-Normal	GB-42	6-8
Toluene	MG/KG	65	43	0.002	41.00	1.72	6.64	Non-Normal	GB-09	10-12
Trichlorofluoromethane	MG/KG	65	1	0.003	0.003	0.003		Non-Normal	GB-42	6-8
Xylene (total)	MG/KG	65	27	0.003	130.0	16.82	31.01	Non-Normal	GB-09	10-12
Semivolatile Organic Compounds										

Only Detected Results Reported.

TABLE 10
STATISTICAL SUMMARY OF DETECTED RI SUBSURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max
				Min	Max	Avg	StdDev			
Semivolatile Organic Compounds										
1,1-Biphenyl	MG/KG	64	21	0.090	19.00	6.16	5.79	Non-Normal	GB-09	12-13.8
2,4-Dimethylphenol	MG/KG	64	1	0.043	0.043	0.043	-	Normal	GB-10	9.5-10.5
2-Chloronaphthalene	MG/KG	64	1	0.670	0.670	0.670	-	Non-Normal	GB-09	10-12
2-Methylnaphthalene	MG/KG	64	41	0.022	160.0	17.40	35.92	Non-Normal	GB-09	12-13.8
4-Chloroaniline	MG/KG	64	1	0.140	0.140	0.140	-	Normal	GB-20	7.5-8.5
4-Methylphenol (p-cresol)	MG/KG	64	1	0.190	0.190	0.190	-	Non-Normal	GB-09	10-12
Acenaphthene	MG/KG	64	39	0.023	58.00	7.89	12.95	Non-Normal	GB-43	5-5.5
Acenaphthylene	MG/KG	64	38	0.019	70.00	9.65	18.75	Non-Normal	GB-09	12-13.8
Anthracene	MG/KG	64	45	0.021	82.00	10.68	17.29	Non-Normal	GB-16	0.5-1.5
Benzo(a)anthracene	MG/KG	64	48	0.021	47.00	7.43	10.59	Non-Normal	GB-16	0.5-1.5
Benzo(a)pyrene	MG/KG	64	47	0.023	35.00	5.70	7.90	Non-Normal	GB-16	0.5-1.5
Benzo(b)fluoranthene	MG/KG	64	47	0.039	32.00	5.94	7.70	Non-Normal	GB-09	12-13.8
Benzo(g,h,i)perylene	MG/KG	64	46	0.024	16.00	2.69	3.64	Non-Normal	GB-16	0.5-1.5
Benzo(k)fluoranthene	MG/KG	64	43	0.040	34.00	3.77	6.17	Non-Normal	GB-16	0.5-1.5
bis(2-Ethylhexyl)phthalate	MG/KG	63	14	0.031	0.440	0.112	0.120	Normal	GB-31	9.5-10.5
Butylbenzylphthalate	MG/KG	64	1	0.380	0.380	0.380	-	Non-Normal	GB-09	10-12
Carbazole	MG/KG	64	26	0.020	19.00	2.91	4.22	Non-Normal	GB-09	12-13.8
Chrysene	MG/KG	64	47	0.023	35.00	6.13	8.28	Non-Normal	GB-16	0.5-1.5

Only Detected Results Reported

TABLE 10
STATISTICAL SUMMARY OF DETECTED RI SUBSURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max
				Min	Max	Avg	StdDev			
Semivolatile Organic Compounds										
Dibenz(a,h)anthracene	MG/KG	64	37	0.027	5.40	1.27	1.30	Non-Normal	GB-16	0.5-1.5
Dibenzofuran	MG/KG	64	33	0.022	49.00	6.96	11.27	Non-Normal	GB-09	12-13.8
Fluoranthene	MG/KG	64	51	0.027	100.0	15.70	23.44	Non-Normal	GB-09	12-13.8
Fluorene	MG/KG	64	41	0.024	82.00	13.06	19.78	Non-Normal	GB-16	0.5-1.5
Indeno(1,2,3-cd)pyrene	MG/KG	64	46	0.020	15.00	2.66	3.48	Non-Normal	GB-09	12-13.8
Naphthalene	MG/KG	64	40	0.019	840.0	57.40	148.6	Non-Normal	GB-09	12-13.8
Phenanthrene	MG/KG	64	54	0.026	260.0	28.16	52.42	Non-Normal	GB-16	0.5-1.5
Pyrene	MG/KG	64	52	0.029	110.0	13.36	22.00	Non-Normal	GB-16	0.5-1.5
Polychlorinated Biphenyls										
Aroclor 1248	MG/KG	64	1	0.059	0.058	0.058		Non-Normal	GB-16	0.5-1.5
Aroclor 1254	MG/KG	64	2	0.014	0.095	0.055	0.057	Non-Normal	GB-16	0.5-1.5
Metals										
Aluminum	MG/KG	64	84	2.090	1.01E+04	4.480	2.100	Non-Normal	GB-22	7.8
Arsenic	MG/KG	64	34	2.40	8.80	3.91	1.37	Non-Normal	GB-31	9.5-10.5
Barium	MG/KG	64	64	13.50	529.0	73.05	82.01	Non-Normal	GB-22	7.8
Beryllium	MG/KG	64	34	0.155	0.560	0.327	0.064	Normal	GB-22	7.8
Cadmium	MG/KG	64	3	0.190	0.360	0.270	0.085	Non-Normal	GB-22	7.8
Calcium	MG/KG	64	64	3.650	2.24E+05	5.48E+04	3.74E+04	Non-Normal	GB-32	4.5

Only Detected Results Reported

TABLE 10
STATISTICAL SUMMARY OF DETECTED RI SUBSURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max
				Min	Max	Avg	StdDev			
Metals										
Chromium	MG/KG	64	64	3.10	18.80	6.52	3.09	Non-Normal	GB-22	7-8
Cobalt	MG/KG	64	64	1.70	10.10	4.15	1.63	Non-Normal	GB-35	18-19
Copper	MG/KG	64	64	3.60	75.90	15.76	11.14	Non-Normal	GB-31	9.5-10.5
Iron	MG/KG	64	64	4.570	1.97E+04	6.391	3.299	Non-Normal	GB-01	8.4-11.4
Lead	MG/KG	64	64	1.10	185.0	26.27	38.33	Non-Normal	GB-20	4-6
Magnesium	MG/KG	64	64	2.500	3.88E+04	9.070	6.538	Non-Normal	GB-19	7-8
Manganese	MG/KG	64	64	160.0	1.280	446.4	203.8	Non-Normal	GB-24	6-8
Mercury	MG/KG	64	37	0.017	0.521	0.144	0.135	Non-Normal	GB-19	7-8
Nickel	MG/KG	64	64	4.20	189.0	11.37	22.85	Non-Normal	GB-31	9.5-10.5
Potassium	MG/KG	64	64	452.0	1.930	877.9	298.2	Non-Normal	GB-22	7-8
Silver	MG/KG	64	1	1.30	1.30	1.30	-	Non-Normal	GB-32	4-5
Sodium	MG/KG	64	26	106.0	1.740	451.3	388.7	Non-Normal	GB-41	9.5-10.5
Vanadium	MG/KG	64	64	4.70	18.10	8.97	3.49	Non-Normal	GB-42	6.2-8.2
Zinc	MG/KG	64	64	9.70	153.0	35.03	25.15	Non-Normal	GB-20	4-5
Miscellaneous Parameters										
Total Cyanide	MG/KG	65	19	1.20	118.0	10.64	27.03	Non-Normal	GB-38	14-18
Phenolics, Total Recoverable	MG/KG	64	1	6.90	6.90	6.90	-	Non-Normal	GB-37	8.4-9.4
Total Organic Carbon (TOC)	MG/KG	13	14	386.0	8.20E+04	3.61E+04	2.79E+04	Normal	GB-17	6.2-8.2

Only Detected Results Reported

NYSEG/RI/FORMER TRANSIT STREET AND STATE ROAD MGP SITES
 NYSEG/RI/FORMER TRANSIT STREET AND STATE ROAD MGP SITES
 WHEN: (MATRIX) - NYSEG/RI/FORMER TRANSIT STREET AND STATE ROAD MGP SITES

TABLE 10
STATISTICAL SUMMARY OF DETECTED RI SUBSURFACE SOIL ANALYTICAL RESULTS
NYSEG - FORMER TRANSIT STREET AND STATE ROAD MGP SITES

Parameter	Units	No. of Samples	No. of Detections	Range of Detections				Dist	Location of Max Value	Depth Of Max	
				Min	Max	Avg	StdDev				UCL95
Miscellaneous Parameters											
Total Cyanide (Secondary Lab)	MG/KG	19	19	0.080	300.0	33.27	70.51	Non-Normal	GB-10	6-6.2	
Free Cyanide	MG/KG	19	8	0.090	0.760	0.271	0.222	Non-Normal	GB-10	6-6.2	
Ferrie/Ferrous Iron Cyanide Complex	MG/KG	19	19	0.010	188.0	23.69	45.88	Non-Normal	GB-10	6-6.2	
Unknown Iron Cyanide Complex	MG/KG	18	13	0.010	5.52	1.00	1.60	Non-Normal	GB-10	6-6.2	
Natural Oxidant Demand (Low Dose)	GRG	15	15	0.300	3.30	2.41	1.15	Non-Normal	GB-17	4-6	
Natural Oxidant Demand (Medium Dose)	GRG	15	15	0.500	16.70	8.86	6.46	Normal	GB-19	7-8	
Natural Oxidant Demand (High Dose)	GRG	15	15	0.700	33.30	14.51	12.60	Normal	GB-19	7-8	

Only Detected Results Reported

APPENDIX A

NYSEG/URS/NYSDEC CORRESPONDENCE

November 18, 2004

Mr. William Ottaway, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7017

**RE: Responses to NYSDEC Fish & Wildlife Comments on Draft Remedial Investigation
Work Plan - New York State Electric & Gas Corporation
Transit Street and State Road Former MGP Sites
Lockport, New York**

Dear Mr. Ottaway:

Thank you for the NYSDEC's Fish & Wildlife review of the draft Work Plan for the above-referenced project. On behalf of New York State Electric and Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present the responses to NYSDEC comments provided in your November 5, 2004 letter. NYSDEC comments are printed below in *Italics* followed by the NYSEG reply in **bold**.

1 Section 2.2.2 page 2-3 "Bedrock groundwater flow is reportedly towards the north-northwest." and Figure 6 - Groundwater contamination data support the above statement as monitoring wells closest to the canal produced samples containing elevated levels of several MGP related contaminants. There is, however, no definitive evidence that the canal has impeded the northwestern migration of contaminants in groundwater. As such, there should be several bedrock monitoring wells on the western side of the canal that are strategically placed in order to better understand the actual migration of contaminated groundwater in relation to the Transit Street site.

NYSEG/URS Response: At this time, it is premature to speculate that contaminated groundwater is migrating beneath the canal. As part of the RI field program, NYSEG has proposed to install a deep bedrock monitoring well adjacent to the south wall of the canal, and downgradient of the Transit Street Former MGP site. Groundwater data from discrete groundwater samples collected from the deepest intervals of this well will be used to assess the potential of contaminated groundwater migrating beneath the canal. If this data or other data gathered as part of the RI suggests that contaminated groundwater is migrating beneath the canal, then NYSEG will address this scenario at that time.

2. Figure 13 - The four proposed sediment sampling locations are an insufficient number for analyzing variance. There should be additional samples taken in areas adjacent to SEEP 1 and SEEP 2 (these are being used as points of reference and are labeled on figure 7) as well as at least two between the seeps and the lock. These sediment samples should be included in the initial round of sediment samples which would consist of no less than 10 samples taken from canal sediments at locations between SG-01 and the large overpass/parking area immediately southwest of the lock.

NYSEG/URS Response: In concert with the Department since the draft RI Work Plan was submitted, NYSEG/URS have agreed to initially conduct a detailed qualitative assessment of the canal surface water and sediments as part of the RI field work. No quantitative sediment/surface water sampling will be conducted initially. The qualitative assessment work will include a detailed reconnaissance of the canal property beginning at the High Street Bridge crossing and extending to below the locks. Additional transects for sediment probing

and characterization will be a major component of the qualitative assessment. Approximately ten transects for sediment probing will be conducted. Based upon the qualitative assessment, NYSEG will discuss with the Department the proposed locations for quantitative sampling at a later time.

3. *When reporting sediment sample data for non-polar organic contaminants, please include a Total Organic Carbon (TOC) value for each corresponding sample.*

NYSEG/URS Response: Comment noted. TOC will be analyzed for each sediment sample.

4. *Section 4.7, page 4-10 "URS will systematically probe along three transects (i.e., 25 foot intervals) established at the locations depicted in Figure 13." – At least ten transects at approximately equal intervals, between SG-01 and the large overpass/parking area immediately southwest of the lock, should be established for probing.*

NYSEG/URS Response: The work plan will be revised to incorporate this request. Figure 11 will be revised to include the additional transect locations.

5. *Table 2, Table 3, Table 5, Figure 6, Figure 6F, Figure 6G – Total Phenolics, Cyanide, and Sulfide are not normally reported in mg/L. The customary and preferred units are ug/L.*

NYSEG/URS Response: Comment noted. URS/NYSEG will report the values for these parameters in ug/L as part of the RI Report.

6. *Section 2.3.1.1.3, page 2-13 states, "...The highest detected concentrations of BTEX and SVOCs were detected at SEEP 2." The data on figure 7 is inconsistent with this statement. Correction is needed.*

NYSEG/URS Response: The referenced text was revised to indicate that detected concentrations of BTEX and SVOCs were detected at SEEP 1.

7. *Figure 14 – The proposed schedule indicates that Step IIB Fish and Wildlife Impact Analysis (Task 11) will be completed without the aid of data collected from groundwater sampling (Task 4 and Task 6). Since infiltration of contaminated groundwater into the canal is a pathway of concern, it may be necessary that operations associated with groundwater sampling be completed prior to the completion of Step IIB Fish and Wildlife Impact Analysis.*

NYSEG/URS Response: Comment noted. NYSEG/URS will consider all data collected as part of the RI in developing the Step IIB Fish and Wildlife Impact Analysis.

8. *Section 4.7, page 4-10 – If samples are sent to META Environmental Services, a minimum of 30 samples should be sent consisting of 10 upstream, 10 adjacent to the site and 10 downstream. Statistical procedures to test the 3 groups for differences should be run on the META samples. The upstream and downstream samples should not be taken near any obvious possible sources of contamination such as outfalls.*

NYSEG/URS Response: Please refer to response to comment number 2. NYSEG/URS disagree with the number of samples proposed by the Department at this time. NYSEG/URS agree that 4 sediment samples is perhaps too few, and upon conclusion of the qualitative sampling effort discussions will be held with the Department to determine an appropriate number of quantitative samples to be collected.

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November 18, 2004
Mr. William Ottaway

9. I am interested in visiting these sites as well as observing some of the sampling procedures. I would appreciate it if you would let me know when you are planning a site visit.

NYSEG/URS Response: Comment noted. NYSEG/URS will keep the Department informed of all site-related field activities.

Very Truly Yours,

URS Corporation

Michael Gutmann
Project Manager

cc: Tracy Blazicek – NYSEG
File: 11173467 C-1

April 8, 2005

Mr. William Ottaway, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7017

**RE: Responses to NYSDEC Comments on Draft Qualitative Assessment of New York State Barge Canal Reconnaissance and Inspection/Revised Sampling Plan
New York State Electric & Gas Corporation
Transit Street (Site No. 9-32-098) and State Road (Site No. 9-32-109) Former MGP Sites - Lockport, New York**

Dear Mr. Ottaway:

Thank you for your review of the draft Qualitative Assessment of New York State Barge Canal Reconnaissance and Inspection/Proposed Sampling Plan for the above-referenced project. On behalf of New York State Electric and Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present the responses to NYSDEC comments provided in your April 5, 2005 letter. NYSDEC comments are printed below in *Italics* followed by the NYSEG reply in bold.

Based upon the Department's comments, NYSEG/URS in concert with META Environmental, Inc., has reconsidered the proposed sampling plan, with regard to the total number of samples throughout the canal area, the vertical characterization of sediments, the analytical parameters, and the forensic analysis. The revised sampling plan incorporates additional transect locations, sampling locations, vertical profiles, and a more robust forensic sampling plan. The final Qualitative Assessment of New York State Barge Canal Reconnaissance and Inspection incorporates many of the recommendations by the Department and will be issued under separate cover.

The following responses to the Department's comments provide the details of the revisions to the originally proposed sampling plan.

The New York State Department of Environmental Conservation has reviewed the "Qualitative Assessment of New York State Barge Canal Reconnaissance and Inspection" for the above referenced sites dated March 15, 2005. Based on our review, the following comments are offered:

1.If analytical results are to be compared to "background" values, a minimum of 5 background samples are required. In a heavily urbanized waterway such as this, we would strongly recommend a minimum of 10 samples to establish background levels

NYSEG/URS Response: NYSEG/URS in concert with META Environmental, Inc. believe that the use of the term "background" is misleading because of the potential connotation that it refers to natural background. Rather, one objective of the sampling and analysis is to characterize the sediment upstream of, downstream of, and adjacent to the former MGP sites to determine the extent of MGP impact. This characterization might include the analysis and identification of heavily impacted sediments unrelated to the former MGP sites, as well as

sediments that contain PAHs and other hydrocarbons from general deposition. The study will generate chemical data that will be used to define the conditions of sediment throughout the canal study area, some of the locations might be characterized as the urban background condition in the vicinity of the former MGP sites.

Because the number and nature of non-MGP impacts to the canal and the distribution of PAHs in the canal sediment are unknown at this time, the number of forensic samples needed to adequately identify possible sources is not clear. However, an initial forensic survey of canal sediment that includes 5 samples upstream, 5 samples adjacent to the former MGP sites, and 5 samples downstream is a reasonable beginning, since this sampling represents approximately one sample per 0.5 acres.

2. The following additional samples should be collected:

- a. Approximately 3 samples immediately upstream of SED-06 and SED-07,*
- b. Three additional transects should be run, one every 100 feet, between TS-12 and TS-13. Additional samples should be collected from each transect. Impacted areas should be targeted.*
- c. Three additional transects should also be run below the locks. A total of 5 samples should be collected from below the locks.*
- d. Samples SED-06 through Sed-10 should be collected from impacted areas (odors or visible contamination).*

NYSEG/URS Response: (a.) Three additional samples, SED-16, SED-17, and SED-18 were incorporated into the sampling plan at locations recommended by the Department. (b.) Three additional transects were incorporated into the sampling plan. The transects are depicted in Figure 2 and have been designated TS-15, TS-16, and TS-17. One additional sediment sample will be collected from each of the transects. The additional sediment samples have been designated SED-19, SED-20, and SED-21. (c.) Three additional transects below the locks were incorporated into the sampling plan. These transects have been designated TS-18, TS-19, and TS-20. Three additional samples below the lock were incorporated into the sampling plan. These sampling locations are depicted on Figure 2 and have been designated SED-22, SED-23, and SED-24. With the addition of these three samples, a total of 5 sample will be collected below the locks. (d.) Comment noted. Samples will be collected from impacted areas.

3. Please provide some information regarding the hydroelectric plant and the path water takes through it. Confirm that there is no handling of sediment associated with this operation.

NYSEG/URS Response: URS will conduct additional reconnaissance in the vicinity of the hydroelectric plant. We will forward the findings to NYSEG and the Department. URS will also interview plant personnel to inquire about plant operations, if sediments accumulate in the plant, and sediment handling procedures, etc.

4. The majority of proposed sediment samples indicate a depth of 0.0' to 1.0'. Where sediment thickness exceeds 2', there should be an additional sample, co-located with the proposed samples, taken from sediments along the bedrock floor.

NYSEG/URS Response: Comment noted. Additional samples will be collected from the bedrock interface at locations where sediment thickness exceeds 2 feet. The additional samples will be collected from sediments along the bedrock floor and analyzed for the full list of analytical parameters provided in the revised sampling plan.

In addition to looking for tar pooled at the bedrock surface, vertical profiling of sediments can help to identify PAH sources and depositional trends. In this regard, vertical profiling will be conducted at all sampling locations where sediment thickness is greater than 2 feet. Samples will be collected but not necessarily analyzed immediately. These samples will be held in cold storage until analytical results from other samples are reported. Based upon the initial sampling results, some of the samples placed in cold storage may be analyzed at a later date. However at a minimum, three vertical profile core sampling locations will be analyzed. These locations have been designated VPSS-1 through VPSS-3 and correspond to the south wall of TS-01, the south wall of TS-10 at SED-06, and at SED-13, respectively. Figure 2 depicts these locations.

5. To the extent possible, all samples should be taken from soft sediments, excluding coarse materials from the samples. Also, samples on the northern side of the canal should be taken from sediments that are near the center of the canal, closest to potential impacts from the site.

NYSEG/URS Response: Comment noted. To the extent possible, all samples will be taken from soft sediments. Coarse material will be segregated and not included in the samples. For samples that are proposed near the north side of the canal, specific rationale (notably odors or sheen) was presented in Table 4 for these locations (SED-07, SED-09, and SED-10). To the extent that the impacts extend toward the center of the canal, the samples will be taken nearer the center of the canal.

6. An additional transect halfway between TS-10 and TS-11 should be included. Two additional sediment samples one near the south wall and one from sediments in the center of the canal, should be taken along this transect.

NYSEG/URS Response: An additional transect will be incorporated into the revised sampling plan between TS-10 and TS-11. The transect is depicted in Figure 2 of the revised sampling plan and has been designated TS-21. Two additional sediment samples will be collected from this transect. The samples have been designated SED-25 and SED-26.

7. A phone conference should be scheduled as soon as possible to discuss the assumptions and goals of both the background investigation and the proposed forensic analyses to determine whether those goals can be met with the proposed samples.

NYSEG/URS Response: Comment noted. A conference call was held on April 5, 2005 at 1:07 PM between NYSEG, NYSDEC, URS, and META Environmental. These issues were discussed during the teleconference. See response to comment #1.

The goal of the forensic sampling and analysis is to identify the number and chemical composition of potential sources of PAHs to the canal from TS-01 to TS-21. To accomplish this, NYSEG/URS in concert with META Environmental, Inc., are recommending that at least 15 shallow sediment samples will be collected from various locations throughout the length of the study area and analyzed for standard hydrocarbon fingerprinting parameters, including wide-range high resolution GC/FID fingerprints and extended PAH profiles by GC/MS. Fifteen samples represent approximately one sample per 0.5 acres of the study area and provides reasonable coverage of the area. Also, 15 samples will provide baseline data to determine whether non-MGP sources of PAHs are present in the canal, their general locations, and the chemical profiles of each.

During the course of the sampling program, up to 5 additional contingency samples may be collected and may be analyzed for forensic parameters. These samples may be collected at the

discretion of the field team leader and may include samples of unidentified NAPL or sheens or other impacted sediments not anticipated from the initial canal survey data. In addition, at least one sample of NAPL from a monitoring well located on the former MGP site will be analyzed for forensic parameters.

Finally, split samples from all coring locations will be placed in QC-acceptable soil jars and shipped to the laboratory where they will be stored frozen for possible future analysis based upon the interpretation of the initial 15 samples collected for forensic parameters. After review and interpretation of the sampling results from the initial sampling event and discussions with the Department, some of the split samples and/or contingency samples may be analyzed to fill in data gaps, if identified. The additional samples may include shallow sediment, bedrock interface samples, and other samples collected at the discretion of the field team leader during the initial sampling event.

Very Truly Yours,

URS Corporation

Michael Gutmann
Project Manager

cc: Tracy Blazicek – NYSEG
Dave Mauro – META Environmental, Inc.
Matt Forcucci – NYSDOH, Buffalo
File: 11173467 C-1



April 8, 2005

Mr. William Ottaway, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7017

**RE: Final Qualitative Assessment of New York State Barge Canal Reconnaissance and Inspection and Revised Sampling Plan
New York State Electric & Gas Corporation -Transit Street and State Road Former MGP Sites, Lockport, New York**

Dear Mr. Ottaway:

On behalf of New York State Electric and Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present this *Final Qualitative Assessment*, which presents a brief overview of the significant findings from the reconnaissance and inspection of the New York State Barge Canal (Canal) in the vicinity of NYSEG's Former Manufactured Gas Plant (MGP) Sites in Lockport, New York (Figure 1). The results of this *Final Qualitative Assessment* presented herein will be used to identify the quantitative elements of the Canal characterization as specified in the *Remedial Investigation Work Plan*, dated November 2004. This revised submittal incorporates recommendations by the Department listed in your April 5, 2005 letter and presents the revised number and locations of recommended surface water and sediment sampling positions in the Canal.

In January 2005, URS conducted a detailed qualitative reconnaissance within the Canal to visually profile canal sediments, document bedrock outcrop and stratigraphy, assess the number and locations of water seeps, and to characterize the nature and thickness of sediments. Sediment character and thickness were characterized by systematically probing along 14 transects established at the locations depicted in Figure 2. At most transect locations, sediments were profiled vertically using Geoprobe Macrocore liners and with a bucket auger in areas where sediment thickness was substantial (greater than 5 feet). The reconnaissance was conducted during low water conditions to facilitate a comprehensive review of the Canal sediments. Results from the January 2005 qualitative study have been analyzed and reviewed and are summarized below

Canal Rock Cut and Stratigraphy

The bedrock stratigraphy in the vicinity of the City of Lockport has been well documented in the scientific literature by the United States Geologic Survey (USGS) and New York State Geological Survey (NYSGS) in a number of reports and bulletins. The Canal is excavated into bedrock and intersects multiple bedrock formations and rock types, as identified in the USGS reports. As part of the survey, the stratigraphy along the Canal rock cut was distinct and readily correlated with the most recently reported USGS revised stratigraphy (Brett 1995). Along the Canal, the lower section of Lockport Formation and varying amounts of the upper section of the Rochester Formation are exposed (Gasport Dolomite-upper, DeCew Dolomite-middle, and Rochester Shale-bottom). Three bedrock sections on the south side of the Canal were surveyed as part of the qualitative study. The first is located nearby the old Prospect Street Bridge, just east of TS-01, the second is between TS-02

and TS-03, beneath the new Prospect/High Street Bridge, and the third is at the TS-10 location (Photos 1, 2, and 3, respectively).

The Gasport Formation was observed to lie on top of the DeCew formation throughout the survey area with thickness of up to 14 feet. The DeCew Dolomite was observed to range in thickness from approximately 1 foot to approximately 5 feet throughout the survey area, with the thinnest amount observed in the vicinity of TS-07 and TS-08. Varying amounts of the Rochester formation was exposed with greater than 17 feet visible east of TS-10 to being completely obscured by rock talus at TS-01.

Significant regional aquifers are associated with the bedrock interfaces and horizontal fracture zones of the Lockport Formation as reported in Johnston 1964, Yager 1996, and NYPA 2003. In general, groundwater will preferentially flow along these fracture zones, and manifest as seeps where the rock has been cut.

Sediment Transect Profiles

Between January 11 and 17, 2005, fourteen transects (TS-01 through TS-14) were established within the Canal. Transects are identified from west to east beginning from TS-01 (west of the High Street Bridge) to TS-14 (east of the Canal locks) (Figure 2). There is approximately 2,700-feet between TS-01 and TS-13 with an average spacing of approximately 225-feet. There is approximately 1270-feet between TS-13 and TS-14 and approximately 3,970-feet between TS-01 and TS-14. Between TS-13 and TS-14 are Canal locks and a spillway, which prevented access in that interval. Transects were not completed in numeric order: TS-02 through TS-05 were completed on January 11, 2005; TS-01; TS-06 through TS-13 were completed on January 12, 2005; and TS-14 completed on January 14, 2005. Additional measurements and observations at TS-09 through TS-11 were completed on January 11, 2005 (Table 1).

In general, sediment thickness was measured at 10-foot intervals along each transect using a 1/2-inch diameter steel probe approximately 7-feet long. The probe was physically pushed until refusal was encountered. At each of the probing positions, sediment cores (up to approximately 4-feet) were also obtained using 2-inch diameter by 4-foot long acetate liners that are typically used for Geoprobe borings. The sediment cores were obtained by physically pushing the liners until refusal was obtained. The recovered cores were visually inspected and described. Sediment thickness and texture, visual observations including the presence and/or absence of sheens/odors, potential sources of MGP-related and non MGP-related sources of contamination, and water depth was recorded. The sediment cores were also screened using a MiniRAE photo-ionization detector (PID). All PID readings of sediment cores and headspace samples were non-detect unless otherwise indicated.

Four additional locations (BA-01 through BA-04) were sampled using a bucket auger to refusal, to evaluate the sediment built up at the front of the old lock spillway. Locations are shown on Figure 2. Samples were bagged in 0.5-foot intervals and later screened for headspace PID. Findings are summarized on Table 2.

Additional soil samples were collected for characterization using a bucket auger at the foot of the rock talus slope on the north side of the canal at TS-11 and TS-12, and the south side of the canal at TS-05 through TS-10. Soil characteristics were similar to those collected with the acetate liners summarized on Table 1. Soils were bagged at discrete one-foot intervals, allowed to warm up and screened for headspace with a PID. A maximum value of 5.9 ppm above background was observed at TS-05 at depth from 3-4 feet in soils with a slight petroleum-like odor. Several other samples exhibited results from 1-2 ppm, which may have been more attributable to sample moisture based on the lack of staining and odor.

In general, sediment thickness was relatively thin in the central portions of the transects, and tended to be significantly thicker at the base of the north and south Canal walls (up to greater than 10.4 feet) where talus material has accumulated. The sediments were generally characterized as light to dark brown, gray, black, and brownish-gray silts and clayey silts with varying amounts of organic material (Photo 4). Bedrock was exposed or was observed to be within 0.25 feet of the surface at approximately 20% of all sediment thickness measurements (Table 1).

Numerous waste objects and debris were observed within the Canal, including several shopping carts, a motorcycle, automobile battery, lawn mower, tires, 55-gallon drum and general construction debris (bricks, rebar and lumber). Over 25 water discharge pipes ranging in diameter from 3 to 30 inches were observed in the survey area in addition to the previously mentioned SPDES discharges. Observed flows ranged from non-existent to at least 5 gallons per minute. The Canal is open to discharge from multiple point and non-point sources.

Observed Impacts

MGP-Related and Undifferentiated Petroleum Impacts

MGP-related contamination was observed along the bedrock cut and outcrop of the south Canal wall in the vicinity of transects TS-09, TS-10, and TS-11. MGP-related tar seeps were observed generally in the top 15-feet of the Rochester Shale Formation. There were no MGP-related seeps observed in bedrock units above the Rochester Shale Formation, i.e., in the DeCew or Gasport Members of the Lockport Formation, although some water seeps were present without visible impact. Persistent sheens were observed on the water surface when sediments were agitated in the Canal (Photo 5) below the MGP-related seeps (Photo 6). Undifferentiated petroleum odors and sheens were observed in sediments along TS-12, TS-14, and at depth in BA-1, BA-2, and BA-3 (See Tables 1 and 2).

New York State SPDES Discharges and Storm Drain Discharges

There were two New York State permitted SPDES discharge points identified during the reconnaissance (Figure 2). On the north wall near TS-01 an outfall (Outfall #11 -- SPDES Permit # NY0027057) with an 18-inch drop pipe was observed (Photo 7). Flow from the pipe was estimated to be approximately 2-3 gpm. Near TS-13 the other SPDES outfall was observed (Outfall #6 - SPDES Permit # NY0027057). Flow was less than 1 gpm to non-existent during the reconnaissance, but the pipe size was approximately 36 inches indicating the possibility of significant flows (Photo 8). Both outfalls are associated with the City of Lockport Wastewater Treatment Plant.

A number of storm drains were identified along the Canal at various positions. Storm drains were associated with bridges, roadways, and parking areas and were identified along both the north and south Canal walls. On the north wall, between TS-03 and TS-07, a large number of small 1-inch diameter drains were observed associated with a large concrete pad.

Water Seeps

Multiple groundwater seeps were observed emanating from the rock cut along the north and south Canal walls.

In general, the top 10-feet of the Rochester Shale, immediately below the contact between the bottom of the DeCew Dolomite and top of the Rochester Shale, exhibited the greatest number of seeps with the greatest flows. Typically, seeps exhibited low flows, i.e., less than a few gallons per minute (gpm) with only a few at higher flow rates at canal water level on the north side.

transects TS-03 and TS-04, and the south side of the canal between transects TS-04 and TS-05. Predominant seep locations are presented in Figure 2. No sheens were observed at any of the groundwater seeps identified as part of the qualitative assessment.

Quantitative Surface Water and Sediment Sampling Plan

Based upon the Department's comments on the originally proposed sampling plan, NYSEG/URS in concert with META Environmental, Inc., has reconsidered the originally proposed sampling plan, with regard to the total number of samples throughout the canal area, the vertical characterization of sediments, the analytical parameters, and the forensic analysis. The revised sampling plan incorporates additional transect locations, sampling locations, vertical profiles, and a more robust forensic sampling plan. NYSEG/URS in concert with META Environmental, Inc., are proposing that 27 sediment and 10 surface water samples be collected from within the Canal at the locations depicted in Figure 2. Proposed analytical parameters are presented in Table 3. In addition to the 27 sediment samples and 10 surface water samples, additional sediment samples will be collected at the bedrock interface at all sediment sampling locations where sediment thickness exceeds 2 feet deep. At least 15 of these sediment samples (Table 4) will be analyzed for hydrocarbon fingerprint by EPA Method 8100 and extended PAH profiles by modified EPA Method 8270. The purpose of these environmental forensic parameter analyses is to evaluate whether there are sources other than MGP-related sources for the PAHs found in the sediment in the Canal. The samples selected for forensic evaluation will be from locations upgradient of all transects, adjacent to identified outfalls near transects TS-01 and TS-13 and from sediments below seep near transects TS-09, TS-10 and TS-11. Vertical profiling of sediment samples will be conducted at three sediment locations and analyzed for forensic parameters. Sediment samples will also be collected from along transect TS-14 to quantify contamination observed in this transect. The sediment samples will be analyzed for selected environmental forensic parameters to separate hydrocarbon impacts from the former MGP-related impacts from similar chemicals from other potential sources including fueling stations, spill sites, and urban background. The ratios of the PAHs from the sediment samples will be compared to the ratios of the PAHs from various tar samples from META Environmental's in-house source library, that include coke oven tar, coal carbonization tar, and carburetted water gas tar as well as the analytical results of soil samples collected from the site. A summary of proposed sampling locations and rationale is provided in Table 4.

NYSEG and URS appreciate the Department's recommendations on the Qualitative Assessment. NYSEG/URS will conduct the sampling during the week of April 11, 2005. The New York State Canal Corporation will raise the water in the Canal beginning April 18, 2005.

Very Truly Yours,

URS Corporation



Michael Gutmann
Project Manager

cc: Tracy Blazicek - NYSEG
Dave Mauro - META Environmental, Inc.
File: 11173978 C-1

TABLES

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-01	0.0'	7.1'	Rock Talus	No
	10.0'	3.1'	Brown Silt to Clayey Silt, some fine to coarse gravel, overlying rock talus	No
	20.0'	0.9'	Brown Silt to Coarse Sand, increasing gray with depth.	No
	30.0'	0.2'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	40.0'	0.1'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	50.0'	0.3'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	60.0'	0.1'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	70.0'	0.2'	Brown Silt to clayey Silt, some fine to coarse gravel and shell debris.	No
	80.0'	0.2'	Brown in upper 6", then dark gray. Fine to coarse Gravel, angular, some cobbles, some silt to clayey silt and shell fragments.	No
	90.0'	0.7'	Gray brown, silty clay to clayey silt with decomposed organic material	No
TS-02	100.0'		Talus: Brown silt, some clay over cobble to boulder size dolomite talus in similar matrix.	No
	102.0'	6.1'	Talus: Brown silt, some clay over cobble to boulder size dolomite talus in similar matrix.	No
	0.0'	7.2'	Rock Talus with Silty Clay matrix	No
	10.0'		Rock Talus with Silty Clay matrix.	No
	20.0'	4.0'	Brown Silt, some clay, with dark black bands and light bedding features	No
	30.0'	2.0'	Brown with gray to black bedding features, lighter brown near top. Silty, some clay, trace glass, black organic debris.	No
	40.0'	1.8'	Brown with interbedded black Silt some clay. Black layers appear to be fibrous organic rich layers (leaf litter, stems)	No
	50.0'	2.6'	Brown Silt with organic material (roots). Dark Gray with depth - 1.3'	No
	60.0'	1.7'	Dark Brown to brown Silt, some clay. Very prominent layering, high organic content in black layers.	No
	70.0'	0.8'	Black to Brown Silt, some clay. Black material more organic, some bivalves, roots, leaf litter	No
TS-03	80.0'	1.0'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
	90.0'	0.9'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
	100.0'	0.4'	Brown and black Silty Clay, trace plastic (thin mil), disturbed structure patterns.	No
	110.0'	0.4'	Brown and black Silty Clay, trace bivalves, disturbed structure patterns.	No
	120.0'	0.7'	Brown and black Silty Clay, disturbed structure patterns.	No
	130.4'	4.2'	Rock Talus with Silty Clay matrix.	No
	0.0'	5.5'	Rock Talus with Silty Clay matrix.	No
	10.0'	5.0'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus	No
	20.0'	3.7'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	30.0'	3.0'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
TS-03	40.0'	2.1'	Approximately 6" Brown Silt, underlain by black organic silt, stems, roots and leaf detritus, trace bivalve shells.	No
	50.0'	0.8'	Approximately 6" Brown Silt, underlain by black organic silt with bivalve shells	No
	60.0'	0.6'	Light Brown Silt underlain by Gray organic Silt with bivalve shells	No
	70.0'	0.4'	Light Brown Silt underlain by Gray organic Silt, some fine to medium gravel and bivalve shells.	No
	80.0'	0.4'	Light Brown Silt underlain by Gray organic Silt and fine to medium gravel and bivalve shells, trace plant stems. Swampy odor.	No
	90.0'	0.5'	Light Brown-Gray Silty Clay with bivalve shells and cobbles/boulders	No
	100.0'	0.6'	Brown-Gray Silt, some clay, soft, with bivalves (live)	No
	110.0'	0.6'	Dark Gray organic silt, varved silt, trace fine sand	No
	120.0'	2.9'	Mottled Dark Gray and Brown Silty Clay, plastic, fine varves.	No
	130.0'	9.3'	Medium Brown Silt, trace clay over Rock Talus	No

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-04	0.0'	4.7'	Rock Talus with Silty Clay matrix.	No
	10.0'	3.2'	Brown-Gray soft Silt with black organics	No
	20.0'	2.5'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus	No
	30.0'	2.6'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus.	No
	40.0'	2.8'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus.	No
	50.0'	2.8'	Brown Silt, some clay (~6") underlain by Dark Gray-Black organic leaf detritus.	No
	60.0'	0.6'	Dark Gray Silt, some clay varves, plant stems, trace angular to sub-rounded fine gravel	No
	70.0'	0.8'	Light Gray-Brown Gravelly Silt (Gravel is shell and rock fragments)	No
	80.0'	0.5'	Gray Silt and bivalve shells, trace clay and fine gravel	No
	90.0'	0.5'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel	No
	100.0'	0.7'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel.	No
	110.0'	1.1'	Dark Gray Varved Silt with Bivalve Shells, some fine angular gravel	No
	120.0'	2.5'	Dark Gray Varved Silt with Bivalve Shells and plant detritus, some fine angular gravel and fine sand	No
	130.0'	8.8'	Rock Talus with Silty Clay matrix	No
	0.0'	7.8'	Rock Talus with Silty Clay matrix.	No
	10.0'	5.6'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments	No
	20.0'	3.8'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments.	No
	30.0'	2.6'	Brown to Dark Brown Silt, some plant detritus, trace shell fragments.	No
	40.0'	1.8'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present	No
	50.0'	1.7'	Brown Gray Silt and Bivalves with organic detritus. No evident structure.	No
TS-05	60.0'	0.5'	Brown Gray Silt and Bivalves with organic detritus. No evident structure. Overlain by Algae.	No
	70.0'	0.2'	Brown Gray Silt and Bivalves with organic detritus. No evident structure.	No
	80.0'	0.2'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure	No
	90.0'	0.3'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure. Overlain by Algae.	No
	100.0'	1.9'	Brown Gray Silt and Bivalves with significant organic detritus. No evident structure. Overlain by Algae	No
	110.0'	3.2'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present	No
	120.0'	3.4'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present	No
	130.0'	4.5'	Brown Silt (~6") underlain by Dark Brown to Black organic rich Silt with plant detritus/stems present.	No
	136.0'	7.8'	Rock Talus with Silty Clay matrix.	No

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-06	0.0'	7.3'	Rock Talus with Silty Clay matrix	No
	10.0'	4.2'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor.	No
	20.0'	4.2'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor	No
	30.0'	4.0'	Brown Silt to Clayey Silt (~6"), underlain by Dark Gray Silty Clay, organic rich, swampy odor	No
	40.0'	1.3'	Dark Gray Clayey Silt, trace organics.	No
	50.0'	0.7'	Dark Gray Silt to Clayey Silt, trace coarse angular gravel.	No
	60.0'	0.3'	~1" Brown Silt to Clayey Silt over ~1" Dark Gray Organic detritus (leaf litter).	No
	70.0'	0.0'		No
	80.0'	0.2'	Brown Silt some clay Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	90.0'	0.3'	Brown Silt some clay, Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	100.0'	1.3'	Brown Silt some clay, Gray to Dark Gray with depth, some organic decayed leaf litter, some coarse angular gravel.	No
	110.0'	2.4'	Brown Silt some clay, Gray to Dark Gray with depth, some organic decayed leaf litter, trace coarse angular gravel.	No
	120.0'		Brown Silt some clay Gray to Dark Gray with depth, some organic decayed leaf litter, Underlain by Rock Talus.	No
	130.0'		Rock Talus with Silty Clay matrix.	No
	134.0'	7.6'	Rock Talus with Silty Clay matrix.	No
TS-07	0.0'	6.4'	Rock Talus with Silty Clay matrix.	No
	10.0'	3.2'	~4.5" Brown Clayey Silt over Dark Gray Silt with leaf litter and swampy odor.	No
	20.0'	3.0'	~4.5" Brown Clayey Silt over Dark Gray Silt with leaf litter and swampy odor.	No
	30.0'	3.5'	5" Brown Clayey Silt, some fine angular rock and shell fragments over Dark Gray organic rich Silt.	No
	40.0'	4.5'	6" Brown Silt, some fine angular rock and shell fragments over Dark Gray organic rich Silt.	No
	50.0'	2.6'	6" Brown Silt, some fine angular rock and shell fragments over Dark Gray organic rich Silt, trace brick and tile fragments	No
	60.0'	0.6'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt.	No
	70.0'	0.2'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt.	No
	80.0'	0.1'	Brown Silt, some angular rock and shell fragments over Dark Gray organic rich Silt.	No
	90.0'	0.3'	~1" Brown Silt, trace angular line to coarse gravel rock fragments, over Dark Gray organic rich Silt (leaf litter).	No
	100.0'	0.2'	1" Brown Silt and angular fine to coarse gravel rock fragments and cobbles, over Dark Gray organic rich Silt (leaf litter)	No
	110.0'	1.9'	0.3' Brown Silt with fine to coarse gravel, brick and shell fragments over Dark Gray organic rich Silt (leaf litter).	No
	120.0'		Rock Talus with Silty Clay matrix.	No
	130.0'	8.8'	Rock Talus with Silty Clay matrix.	No
TS-08	0.0'	7.2'	Rock Talus with Silty Clay matrix.	No
	10.0'	0.6'	Rock Talus with Silty Clay matrix.	No
	20.0'	0.2'	Brown Silt and Bivalve shell fragments.	No
	30.0'	0.4'	Brown Silt and Bivalve shell fragments.	No
	40.0'	0.6'	Brown Silt and Bivalve shell fragments	No
	50.0'	0.0'		No
	60.0'	0.1'	Brown Silt and Bivalve shell fragments	No
	70.0'	0.4'	Brown Silt to Clayey Silt, some organic plant detritus (decayed), some fine to coarse gravel sized shell fragments.	No
	80.0'	0.3'	Brown Silt to Clayey Silt, some organic plant detritus (decayed), some fine to coarse gravel sized shell fragments.	No
	90.0'	1.4'	Brown Silt, trace clay, over Gray organic rich silt (plant detritus).	No
	100.0'		Rock Talus with Silty Clay matrix	No
	106.0'	7.1'	Rock Talus with Silty Clay matrix.	No

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-09	0'0"	9.5'	Rock Talus with Silty Clay matrix.	No
	10'0"		Rock Talus with Silty Clay matrix.	No
	20'0"	0.3'	Brown Silt and Bivalve Shell Fragments.	No
	30'0"	0.8'	Brown Silt and Bivalve Shell Fragments.	No
	40'0"	0.4'	Brown Silt and Bivalve Shell Fragments.	No
	50'0"	0.3'	Gray-Brown organic rich Silt with Coarse Sand to Fine Gravel sized Shell Fragments.	No
	60'0"	0.1'	Gray-Brown Silt with Coarse Sand to Fine Gravel sized Shell Fragments.	No
	70'0"	0.1'	Brown Silt and Bivalve Shell Fragments	No
	80'0"	0.4'	0.2' Brown Silt and Bivalve Shell Fragments over Dark Gray Organic Rich Silty Clay	No
	80'0"	0.8'	Brown Silt and Bivalve Shell Fragments.	No
	100'0"		Rock Talus with Silty Clay matrix, trace bivalve shells/shell fragments.	No
	104'0"	5.3'	Rock Talus with Silty Clay matrix, trace bivalve shells/shell fragments.	No
TS-10	0'0"	10.4'	Rock Talus with Silty Clay matrix.	No
	10'0"		Rock Talus with Silty Clay matrix.	No
	20'0"	2.6'	Brown fine to coarse Silty Gravel over Dark Gray Silt, with slight undifferentiated petroleum odor.	Yes, odor.
	30'0"	0.7'	Brown-Gray fine to coarse Gravel and Silt, some cobbles.	No
	40'0"	1.6'	Gray to Dark Gray Bivalve Shells and Silt, some cobbles and boulders and fine to coarse gravel	No
	50'0"	2.4'	Bivalve Shells and Brown Silt over Silty Gray Silt with fine sand to boulder sized rock fragments.	No
	60'0"	1.7'	Bivalve Shells and Brown Silt over Silty Gray Silt with fine sand to boulder sized rock fragments.	No
	70'0"	0.1'	Bivalve Shells and Brown Silt.	No
	80'0"	0.3'	Brown-Gray Fine to medium angular Gravel, trace sand. Agitation produces sheen. Slight MGP odor.	Yes, odor and sheen.
	90'0"	0.7'	Dark, Brown, stained Fine Gravel to Boulder and silt. Agitation produces sheen. Slight MGP odor	Yes, odor and sheen.
	100'0"		Rock Talus with Silty Clay matrix. Dark brown staining. Near 12" outfall. Swampy/sewer and MGP odor	Yes, odor.
	109'5"	3.7'	Rock Talus with Silty Clay matrix. Dark brown staining. Near 12" outfall. Swampy/sewer and MGP odor	Yes, odor and sheen/seeps.
TS-11	0'0"	8.1'	Rock Talus with Silty Clay matrix.	No
	10'0"	4.5'	0.5' Brown Silt with gravel, over Dark Gray organic silt with swampy odor.	No
	20'0"	1.9'	0.5' Brown Silt with gravel, over Dark Gray to black organic silt with swampy odor.	No
	30'0"	0.6'	0.1' Brown Silt with gravel, over 0.5' Dark Gray silt Silty Clay	No
	40'0"	1.4'	Gray Silty to Clayey Silt, slight MGP odor.	Yes, odor.
	50'0"	2.0'	Dark Gray Silt and Gravel. Slight MGP odor, slight sheen visible with disturbance.	Yes, odor and sheen.
	60'0"	0.6'	0.1' Brown Silt with fine gravel and shell fragments, over Dark Gray Silty Clay, some coarse gravel to cobble. Slight MGP odor, slight sheen visible with disturbance	Yes, odor and sheen.
	70'0"	0.3'	Brown-Gray Fine to coarse angular gravel and Silt.	No
	80'0"	0.1'	Gray Fine to coarse angular gravel.	No
	90'0"	0.4'	Gray-Brown Fine to coarse Angular Gravel to Boulders with Interstitial Silt.	No
	100'0"		Rock Talus with Silty Clay matrix.	No
	105'0"	5.7'	Rock Talus with Silty Clay matrix. MGP odor at Canal Wall.	Yes, odor.

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-12	0.0'	8.4'	Rock Talus with Silty Clay matrix.	No
	10.0'	4.6'	6.5" Shale Fragments with Ash, over Brown Silt, some clay with Rock Fragments.	No
	20.0'	2.9'	4" Brown Clayey Silt, some fine to coarse angular gravel. 4"-1.0' Gray Silt Silt with slight undifferentiated petroleum odor and abundant bivalve shells	Yes odor
	30.0'	2.6'	Olive Gray Brown Silt with Clay above Silty Gray Clay (ML), with some fine to coarse angular gravel. Slight undifferentiated petroleum odor	Yes odor
	40.0'	1.5'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some gravel. Slight undifferentiated petroleum odor.	Yes odor
	50.0'	1.2'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some gravel. Slight undifferentiated petroleum odor	Yes odor
	60.0'	1.5'	2" Brown Silt and angular Gravel over Gray Silt, some clay (ML), some bivalve shells and angular gravel. Slight undifferentiated petroleum odor	Yes odor
	70.0'	0.0'		No
	80.0'	0.0'		No
	90.0'	0.0'		No
	100.0'		Rock Talus with Silty Clay matrix	No
	102.0'	5.2'	Rock Talus with Silty Clay matrix.	No
TS-13	0.0'	4.3'	Rock Talus with Silty Clay matrix.	No
	8.0'	3.0'	Brown Silt (ML), very soft, trace Gravel and bivalve shells	No
	18.0'	2.2'	Brown Silt (ML), very soft, trace Gravel and bivalve shells.	No
	28.0'	0.0'		No
	38.0'	0.0'		No
	48.0'	1.2'	Gray Clayey Silt (ML) with organic swampy odor	No
	58.0'	0.0'	Trace Silt	No
	68.0'	0.6'	8" Rounded gravel with angular rock fragments and brown silt matrix, some organic matter (GM) over Gray Brown Silt some Clay.	No
	78.0'	0.7'	8" Rounded gravel with angular rock fragments some brown silt matrix, some organic matter (GW) over Gray Brown Silt some Clay.	No
	88.0'	0.5'	Brown Silt with rock fragments and angular gravel (GW/GM)	No
	98.0'	0.0'		No
	108.0'	0.0'		No
	118.0'	0.0'		No
	128.0'	0.0'		No
	140.0'	7.0'	Rock Talus with Silty Clay matrix	No

TABLE 1
Transect Sediment Profile Summary
NYSEG - Lockport MGP Sites

Transect ID	Sediment Probe Location (From North Wall)	Sediment Thickness	Description	MGP or Other Undifferentiated Petroleum Indicators (Y/N)
TS-14	0.0'		Large Boulders/Rip Rap with fine to medium Brown Sand to 6". Dark Gray Silt with old petroleum odor. Produces sheen.	Yes: Odor and Sheen
	10.0'	2.3'	4" Brown Sand and Gravel over Dark Gray Silt with slight diesel odor.	Yes: Odor and Sheen
	20.0'	2.3'	5" Brown fine to medium Sand and fine to coarse gravel, over Gray to Dark Gray Silt with slight diesel odor.	Yes: Odor and Sheen
	30.0'	3.3'	6" Brown fine to medium Sand, fine gravel, trace wood, over Gray to Dark Gray Silt trace Clay with slight diesel odor. Produces sheen	Yes: Odor and Sheen
	40.0'	1.9'	6" Brown fine to medium Sand and silt, some fine to medium gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes: Odor and Sheen
	50.0'	4.8'	Produces sheen.	Yes: Odor and Sheen
	60.0'	5.6'	Produces sheen	Yes: Odor and Sheen
	70.0'	5.5'	Produces sheen	Yes: Odor and Sheen
	80.0'	2.3'	8" Brown fine to medium Sand and silt, some fine to medium gravel with cobbles/boulders, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes: Odor and Sheen
	90.0'	1.8'	Produces sheen	Yes: Odor and Sheen
	100.0'	2.6'	Produces sheen	Yes: Odor and Sheen
	110.0'	2.7'	Produces sheen	Yes: Odor and Sheen
	120.0'	1.3'	Produces sheen.	Yes: Odor and Sheen
	130.0'	>9.3'	Produces sheen	Yes: Odor and Sheen
	140.0'	>9.25'	8" Brown fine to medium Sand and Gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen.	Yes: Odor and Sheen
	150.0'	>9.2'	Produces sheen.	Yes: Odor and Sheen
	160.0'	>10'	Produces sheen.	Yes: Odor and Sheen
	170.0'	7.2'	Produces sheen.	Yes: Odor and Sheen
	180.0'	6.6'	8" Brown fine to medium Sand and Gravel, over Dark Gray Silt, trace clay with slight diesel odor. Produces sheen	Yes: Odor and Sheen
	190.0'	1.0'	Produces sheen	Yes: Odor and Sheen
	200.0'	0.9'	Produces sheen.	Yes: Odor and Sheen
	204.0'	0.0'	Concrete Apron.	No

C:\DOCUMENTS - 1\Gurman_MLOCALS-1\Temp\incies08F134\LOCKPORT Canal Sediment Summary Tables\K2.xls|Table 1

TABLE 2
Bucket Auger Sample Summary
NYSEG-Lockport MGP Sites

Boring ID	Sediment Interval (feet)	Headspace PID (ppm)	Description
BA-1	0.0-0.5	ND	0.0-0.9: Gray-Brown Clayey Silt to Silt, some fine to coarse angular rock fragments, gravel size, trace angular cobbles
	0.5-1.0	ND	
	1.0-1.5	ND	0.9-2.2: Med Gray, well laminated Silty Clay, trace fine to coarse gravel rock fragments.
	1.5-2.0	ND	
	2.0-2.5	3.4	
	2.5-3.0	5.6	2.2-3.7: As above with some dark gray laminations increasing with depth. Slightly moist, stiff.
	3.0-3.5	29.6	
	3.5-4.0	35.7	3.7-5.0: Mostly Dark gray to black lamination.
	4.0-4.5	-	
	4.5-5.0	87.3	
	5.0-5.5	101	2.0-5.8: More brown coloration, minor black lamination. Strong undifferentiated petroleum odor.
	5.5-5.8	75.6	
BA-2	0.0-0.5	ND	0.0-0.2: Leaf Litter
	0.5-1.0	ND	0.2-0.8: Brown Clayey Silt, some fine angular gravel, moist.
	1.0-1.5	ND	0.8-1.5: Light Gray brown Fine angular Gravel
	1.5-2.0	ND	1.5-2.3: Brown Clayey Silt, wet, soft.
	2.0-2.5	18.4	
	2.5-3.0	32.3	2.3-3.5: Dark Gray to Gray Silty Clay, strong undifferentiated petroleum odor.
	3.0-3.5	21.6	
	0.0-0.5	ND	0.0-0.4: Leaf Litter
BA-3	0.5-1.0	ND	0.4-0.6: Brown Silt, wet.
	1.0-1.5	ND	0.6-2.1: Gray Silty Clay, trace fine to coarse angular gravel
	1.5-2.0	ND	
	2.0-2.5	ND	2.1-2.7: Fine to coarse angular to sub angular gravel and cobble.
	2.5-3.0	2.3	2.7-3.5: Gray Silty Clay, some black staining, slight undifferentiated petroleum odor.
	3.0-3.5	4.1	
	0.0-0.5	ND	0.0-0.8: Leaf Litter
	0.5-1.0	ND	0.8-1.6: Brown Silt, trace fine to coarse gravel, wet.
BA-4	1.0-1.5	ND	
	1.5-2.0	ND	1.6-2.3: Gray Silty Clay, wet.
	2.0-2.5	ND	
	2.5-3.0	ND	2.3-4.5: Gray Silty Clay, very moist, swells.
	3.0-3.5	ND	
	3.5-4.0	ND	
	4.0-4.5	ND	



TABLE 3
SURFACE WATER AND SEDIMENT ANALYSIS PROGRAM
NYSEG - TRANSIT STREET
FORMER MCP SITE

Analytical Method ¹	Matrix ⁴	No. of Field Samples	Bedrock Interface/ Vertical Samples	Vertical Profile/Con-tingency Samples	Field Duplicates ⁵	Equipment Blanks ⁶	Trip Blanks ⁷	MS/MSD (Pairs) ⁸	Total No. of Samples
Surface Water and Sediment Sampling									
TCL VOCs (USEPA Method 8260B)	SW	10	0	0	1	1	1	1	15
TCL SVOCs (USEPA Method 8270C)		10	0	0	1	1	0	1	14
TCL PCBs (USEPA Method 8082)		10	0	0	1	1	0	1	14
Total Phenols (USEPA Method 9065/420)		10	0	0	1	1	0	1	14
TAL Metals (USEPA Method 6010B/7470A)		10	0	0	1	1	0	1	14
BTEX (USEPA Method 8260B)		27	33	0	3	3	0	3	72
TCL SVOCs (USEPA Method 8270C)	Sed	27	33	0	3	3	0	3	72
Wide-range High Resolution Fingerprint/Extended PAH Profiles (Modified Methods 8100/8270C)		15	0	17	0	2	0	0	34
TCL PCBs (USEPA Method 8082)		27	33	0	3	3	0	3	72
Total Phenols (USEPA Method 9065)		27	33	0	3	3	0	3	72
TAL Metals (USEPA Method 6010B/7470A/7470A)		27	33	0	3	3	0	3	72
Total Cyanide (USEPA Method 9012A) ⁹		10	10	0	1	1	0	1	23
Free Cyanide (ASTM Method D4282-95)		10	10	0	1	0	0	1	23
Iron Cyanide Speciation (ASTM D6994-04)		27	33	0	3	0	0	1	65
Total Organic Carbon (Lloyd Kahn)									

1. Test Methods for Evaluating Solid Waste, Physical Chemical Methods (SW-846) USEPA Final Update (1), June 1997

Standard Methods (SM) for the Examination of Water and Wastewater, 20th Edition, 1998

Methods for Chemical Analysis of Water and Wastes, EPA-600/a-79-020, USEPA, Revised March 1983

Determination of Total Organic Carbon in Sediment, Lloyd Kahn, USEPA Region II, July 1988

American Society of Testing Materials (ASTM), Annual Book of ASTM Standards

TCL/TAL - USEPA Superfund Target Compound List/Target Analyte List

TCLP - Toxicity Characteristic Leaching Procedure

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

PCBs - Polychlorinated Biphenyls

BTEX - Benzene, toluene, ethylbenzene, and xylenes

PAHs - Polycyclic aromatic hydrocarbons

2. GW - groundwater, Sed - sediment, SW - surface water

3. Assumes a 5% frequency (one per 20 field samples)

4. Approximate - Assumes one per day of field sampling for water samples only

5. Total cyanide price based on 7-day TAT (Unit price \$18.54 + 20% premium)

6. These "other" unit costs are not included in the Master Services Procurement Agreement between EEMCO and URS.

7. A 5% markup has been added to selected parameters for ASP Category B deliverable.

Note: Split samples for forensic (fingerprint/extended PAH) analysis to be collected at all locations and depths.

Equipment blanks for forensic (fingerprint/extended PAH) analysis to be collected in unpreserved 40 mL VOA vials.



Table 4
Proposed Surface Water and Sediment Sampling Rationale
Lockport MGP, Remedial Investigation

Location ID	Type	Rationale	Proposed Depth (Ft)	Vertical Profile Samples For Forensic Parameters	Forensic Parameters For Sediment Samples
SW/SED-01	Surface Water/Sediment Sample	Assess Canal sediments and surface water upstream from both sites approximately 2,500 feet upstream of High Street bridge.	0.0'-1.0'	NO	YES
SW/SED-02	Surface Water/Sediment Sample	Assess Canal sediments and surface water near SPDES outfall #11 (SPDES # NY0027057) near TS-01 along the north side of the Canal.	0.0'-1.0'	YES. South wall of TS-02	YES
SED-03	Sediment Sample	Assess Canal sediments along the north side of the Canal between TS-03 and TS-04 where several groundwater seeps were noted (see Figure 2).	0.0'-1.0'	NO	YES
SW/SED-04	Surface Water/Sediment Sample	Assess Canal sediments and surface water along the south side of the Canal between TS-04 and TS-05 where several groundwater seeps were noted (see Figure 2) adjacent to the State Road site.	0.0'-1.0'	NO	NO
SED-05	Sediment Sample	Assess Canal sediments along the north side of the Canal near TS-07 in a sediment accumulation area just downstream from the State Road Site.	0.0'-1.0'	NO	YES
SW/SED-06	Surface Water/Sediment Sample	Assess Canal sediments and surface/seep water along the south side of the Canal near TS-10 where MGP impacted seeps have been observed.	0.0'-1.0'	YES	YES
SED-07	Sediment Sample	Assess Canal sediments along the north side of the Canal near TS-10 across from where MGP impacted seeps have been observed. Undifferentiated Petroleum odor was noted in this area.	0.0'-1.0'	NO	YES
SED-08	Sediment Sample	Assess Canal sediments along the south side of the Canal near TS-11 immediately downstream from the observed tar seeps.	0.0'-1.0'	NO	YES
SED-09	Sediment Sample	Assess Canal sediments along the north side of the Canal near TS-11 immediately downstream from the observed tar seeps.	0.0'-1.0'	NO	NO

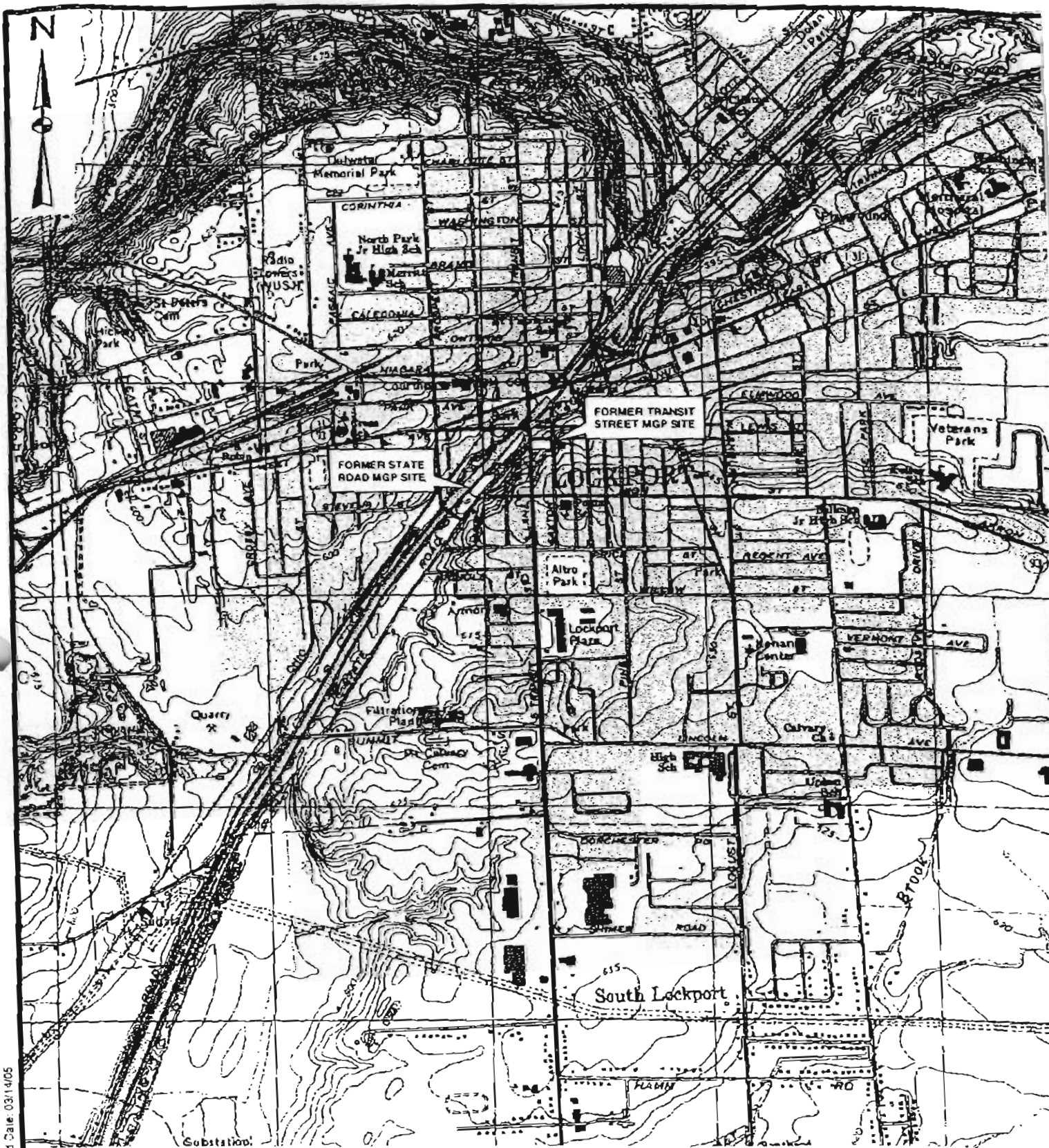
Table 4 (Con't)
Proposed Surface Water and Sediment Sampling Rationale
Lockport MGP, Remedial Investigation

Location ID	Type	Rationale	Proposed Depth (Ft)	Vertical Profile Samples For Forensic Parameters	Forensic Parameters For Sediment Samples
SW/SED-11	Surface Water/Sediment Sample	Assess Canal sediments and surface water along the north side of the Canal in the sediment accumulation area approximately 200 feet east of TS-12 beneath the "Big Bridge". Several Storm water discharges are associated with the bridge.	0.0'-1.0'	NO	NO
SED-13	Sediment Sample	Assess Canal sediments along the north side of the Canal in the sediment accumulation near the existing spillway where undifferentiated petroleum odors were noted at depth in bucket auger profiles.	2.5'-3.5'	YES	YES
SW/SED-14	Surface Water/Sediment Sample	Assess Canal sediments and surface water beneath the locks near TS-14 along the north side of the Canal below the existing spillway where undifferentiated petroleum odors and sheens were noted during the qualitative investigation.	0.5'-1.5'	NO	YES
SED-15	Sediment Sample	Assess Canal sediments beneath the locks near TS-14 along the south side of the Canal where undifferentiated petroleum odors and sheens were noted during the qualitative investigation.	0.5'-1.5'	NO	YES
SED-16	Sediment Sample	Assess Canal sediments and southwestern extent of MGP impacts upstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO
SED-17	Sediment Sample	Assess Canal sediments and southwestern extent of MGP impacts upstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO
SED-18	Sediment Sample	Assess Canal sediments and southwestern extent of MGP impacts upstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO
SED-19	Sediment Sample	Assess Canal sediment downstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO
SED-20	Sediment Sample	Assess Canal sediment downstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	YES
SED-21	Sediment Sample	Assess Canal sediment downstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO

Table 4 (Con't)
Proposed Surface Water and Sediment Sampling Rationale
Lockport MGP, Remedial Investigation

Location ID	Type	Rationale	Proposed Depth (Ft)	Vertical Profile Samples For Forensic Parameters	Forensic Parameters For Sediment Samples
SED-23	Sediment Sample	Assess Canal sediment downstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	NO
SED-24	Sediment Sample	Assess Canal sediment downstream of NAPL outbreaks in Canal rock cut.	0'-1.0'	NO	YES
SED-25	Sediment sample	Assess Canal sediment immediately downstream of NAPL outbreaks in Canal rock cut along TS-21.	0'-1.0'	NO	NO
SED-26	Sediment Sample	Assess Canal sediment immediately downstream of NAPL outbreaks in Canal rock cut along TS-21.	0'-1.0'	NO	NO
SED-27	Sediment Sample	Assess Canal sediment approximately 300 feet upstream from SW-01/SED-01 near surface water outfall near Route 93 bridge.	0'-1.0'	NO	NO
SW-08	Surface Water	Assess surface water outfall near Route 93 bridge crossing.	NO	NO	NO
SW-09	Surface Water	Assess SPDES outfall near TS-01.	NO	NO	NO
SW-10	Surface Water	Assess surface water outfall beneath Transit Street bridge crossing.	NO	NO	NO

FIGURES



SOURCE: USGS 7.5' Quadrangle: Lockport, New York - 1995

0 1,000 2,000 4,000
Feet

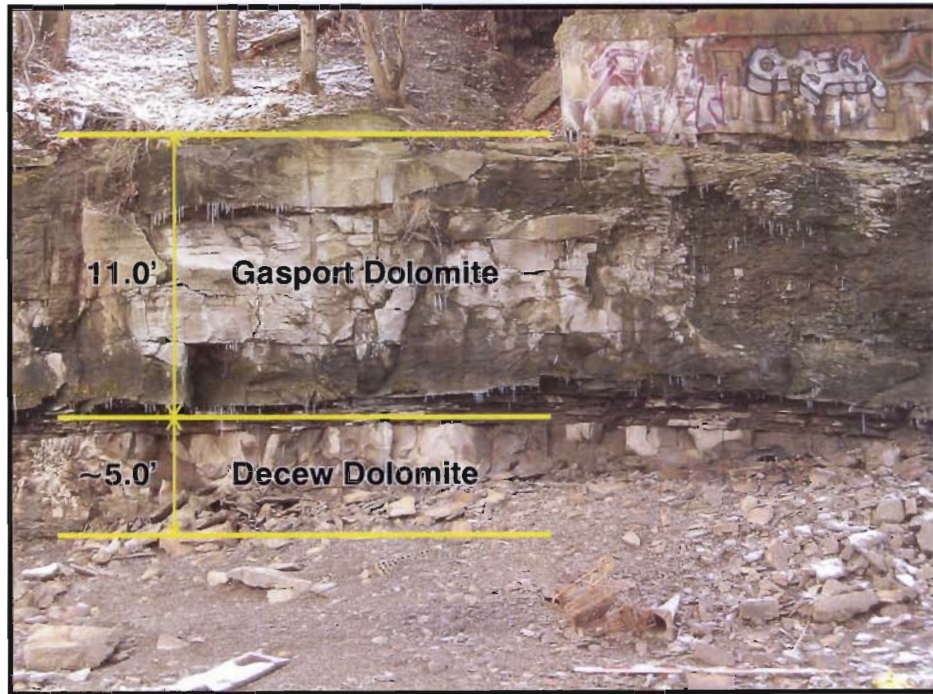
URS

NYSEG - TRANSIT STREET AND STATE ROAD
FORMER MGP SITES
SITE LOCATION MAP

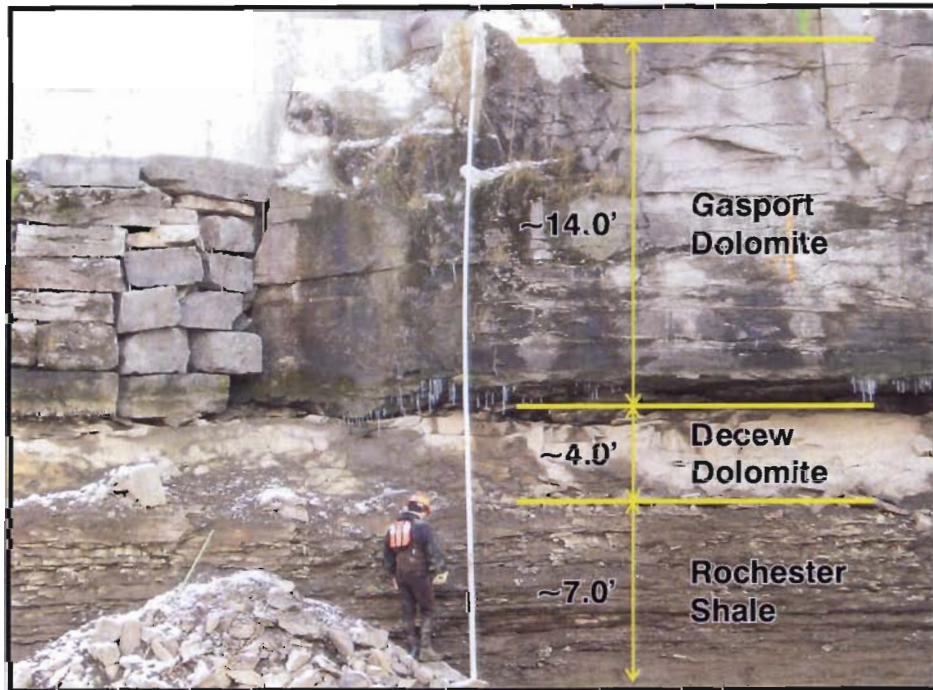
FIGURE 1

PHOTOGRAPHS

NYSEG - LOCKPORT MGP SITES

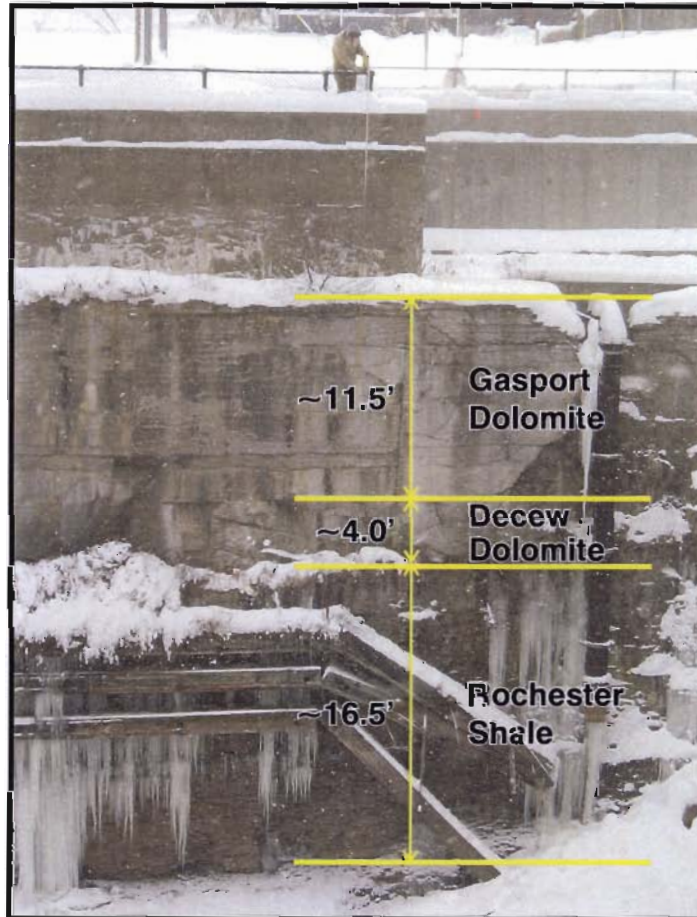


Photograph 1: Geologic section at Old Prospect Street Bridge near TS-01.



Photograph 2: Geologic section at New High Street Bridge near TS-03.

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Photograph 3: Geologic section at TS-10.

NYSEG - LOCKPORT MGP SITES



Photograph 4: Typical canal sediment.



Photograph 5: Sheen observed when sediments agitated in the vicinity of TS-10.

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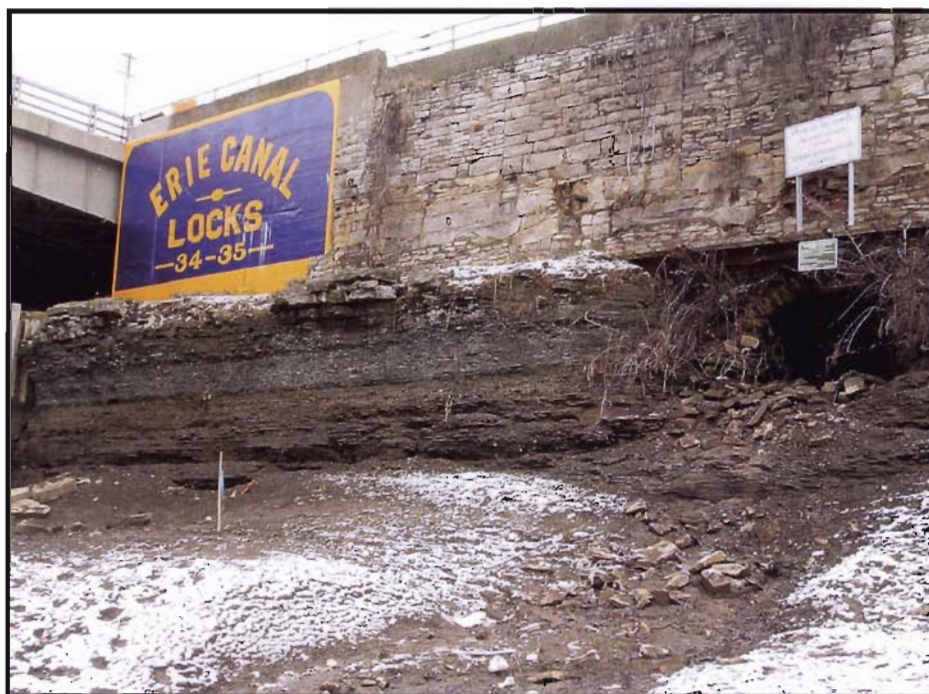


Photograph 6: MGP impacted seeps in the vicinity of TS-10.



Photograph 7: SPDES Outfall #11 near TS-01. Typical flow of 2-3 gallons per minute.

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Photograph 8: SPDES Outfall #6 near TS-13. Low flow during assessment, less than 1 gallon per minute.