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NYSEG

Feasibility Study Report

Dansville Former Manufactured Gas Plant Site
Operable Unit No. 2
Dansville, New York
Site No. 8-26-012

September 2016

Certification Statement

I, Jason Brien, P.E. certify that I am currently a NYS registered professional engineer and that this *Feasibility Study Report* was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation *Technical Guidance for Site Investigation and Remediation* (DER-10) (NYSDEC, 2010a).

______________________________ Date 09/12/16

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Acronyms and Abbreviations

BTEX	benzene, toluene, ethylbenzene, and xylene
bgs	below ground surface
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CFR	Code of Federal Regulations
COC	constituent of concern
cy	cubic-yard
DAR	Division of Air Resources
DER	Division of Environmental Remediation
DO	dissolved oxygen
DPW	Department of Public Works
ECL	Environmental Conservation Law
FEMA	Federal Emergency Management Association
FER	Final Engineering Report
FS	feasibility study
FWIA	Fish and Wildlife Impact Assessment
GHG	greenhouse gas
GRA	general response action
HASP	Health and Safety Plan
HHRA	Human Health Risk Assessment
IRM	interim remedial measure
ISS	in-situ soil solidification
LDR	land disposal regulation
LTTD	low-temperature thermal desorption
ug/m^3	microgram per cubic meter
ug/L	microgram per liter
mg/kg	milligram per kilogram
MGP	manufactured gas plant
MNA	monitored natural attenuation
NAPL	non-aqueous phase liquid
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operation and maintenance
ORM	oxygen releasing material
OSHA	Occupational Safety and Health Administration
OU	operable unit

PAH	polycyclic aromatic hydrocarbon
PPE	personal protective equipment
PCE	tetrachloroethene
PDI	pre-design investigation
POTW	publicly-owned treatment works
PRB	permeable reaction barrier
PVC	polyvinyl chloride
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
RD/RA	remedial design/remedial action
RI	remedial investigation
ROD	Record of Decision
SCG	standard, criteria, and guidance
SCO	soil cleanup objective
SMP	Site Management Plan
SSDS	sub-slab depressurization system
SVI	soil vapor intrusion
TCE	trichloroethylene
TCLP	toxicity characteristic leaching procedure
USDOT	United States Department of Transportation
UST	underground storage tank

Executive Summary

Introduction

This *Feasibility Study Report* (FS Report) presents an evaluation of remedial alternatives to address environmental impacts identified at Operable Unit No. 2 (OU-2) of the former manufactured gas plant (MGP) site (the site) located in the Village of Dansville, New York (New York State Department of Environmental Conservation [NYSDEC] Site No. 8-26-012). This FS Report has been prepared by Arcadis of New York, Inc. (Arcadis) on behalf of NYSEG in accordance with an Order on Consent (Index Number D0-0002-9309) between NYSEG and the NYSDEC.

The NYSDEC Record of Decision (ROD) for the *NYSEG Dansville MGP Site Operable Unit No. 1* (OU-1) (NYSDEC, 2008) indicates that Operable Unit No. 1 (OU-1) of the former MGP site consists of the soil lying above and below the groundwater table within the portion of the former MGP property located at 50 Ossian Street that was remediated from 2014 to 2015. The ROD also indicates that MGP OU-2, the focus of this FS Report, consists of the remainder of impacted soil and groundwater on the NYSEG-owned property at 50 Ossian Street, and soil and groundwater in off-site areas impacted by MGP-related residuals.

As part of the evaluation and identification of potential remedial alternatives for OU-2, this FS Report presents relevant information related to OU-1 and OU-2 of the site, as well as the information regarding the adjacent Pappas Dry Cleaners site (NYSDEC Site No. 8-26-018).

Nature and Extent of Impacts

Remedial activities completed at OU-1 in 2014 to 2015 included the excavation and off-site treatment and/or disposal of the MGP-related source material (i.e., soil that contained visible tar or oil, and/or the presence of sheens or odors with total polycyclic aromatic hydrocarbons (PAHs) concentrations greater than 1,000 milligrams per kilogram [mg/kg], or total benzene, toluene, ethylbenzene, and xylene (BTEX) concentrations greater than 10 mg/kg).

Based on the May 2006 *Final Supplemental Remedial Investigation Report for Operable Unit 2* (OU-2 MGP SRI Report) prepared by Ish, Inc. (Ish, 2006c), evidence of MGP-related non-aqueous phase liquid (NAPL), in the form of sheens and small NAPL globules, was observed in the subsurface soil within OU-2. In general, the small

NAPL globules were reddish-brown in color, located at depths ranging from approximately 11 to 17 feet below ground surface (bgs), generally spanning vertical intervals of 2 feet or less, and were intermixed with water within the pore spaces of the loose, sandy gravel in the shallow aquifer above the silty clay layer. The NAPL observed in OU-2 did not saturate the soil matrix such that soil grossly impacted with MGP-related NAPL was not encountered in OU-2.

Soil boring locations where soil samples contained BTEX and/or PAHs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use soil cleanup objectives (unrestricted use SCOs) generally corresponded to locations containing small NAPL globules and were typically located at depths at or greater than 12 feet below grade (i.e., immediately above the silty clay confining unit).

Dissolved phase concentrations of MGP-related impacts (i.e., BTEX and PAHs) only exceeded NYSDEC's *Class GA Division of Water, TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (TOGS 1.1.1 Class GA standards and guidance values) in groundwater samples collected from the isolated locations in OU-2, generally between Battle and Franklin Streets. Based on the results of natural attenuation evaluations completed at the site, anaerobic conditions were present in the subsurface and natural attention processes were occurring within the MGP-related dissolved phase plume. Additionally, the natural degradation processes for chlorinated solvents (namely trichloroethylene [TCE]) is known to consume benzene. At many locations, MGP-related constituent concentrations are only slightly greater than the standards and guidance values, are detected sporadically, or have been generally decreasing since 2005 (i.e., prior to OU-1 remedial construction activities that removed a majority of the source material).

Non-MGP-related chlorinated volatile organic compounds (CVOC) originating from the adjacent Pappas Dry Cleaners property were found to be comingled with MGP-related compounds detected in groundwater collected from within OU-2. Sub-slab soil vapor samples contained non-MGP-related chlorinated compounds at concentrations up to four orders of magnitude greater than MGP-related compounds. Consequently, the NYSDEC, as part of a State-funded investigation of the Pappas Dry Cleaners took lead in investigating the soil vapor intrusion (SVI) pathway associated with the two sites. The NYSDEC subsequently implemented an interim remedial measure (IRM) consisting of sub-slab depressurization systems (SSDSs) at seven residential structures to address SVI concerns associated with the chlorinated impacts.

Risk Assessment Summary and RAOs

A qualitative Human Health Risk Assessment (HHRA) and a Fish and Wildlife Impact Assessment (FWIA) were conducted as part of the MGP OU-2 SRI to evaluate potential exposures to MGP-related impacts. A vast majority of MGP-related impacts in soil and groundwater are located at depths greater than 10 feet bgs. Furthermore, drinking water is currently (and for the foreseeable future, will continue to be) provided by a local municipal supply. Therefore, as indicated in the MGP OU-2 SRI Report, the potential for resident, utility worker, or construction worker exposures to MGP-related impacts in soil and groundwater is extremely unlikely. Additionally, the FWIA concluded that OU-2 does not contain fish or wildlife habitats or populations. The MGP OU-2 SRI Report indicated that, based on the dissolved phase concentrations of benzene and naphthalene, the potential exists for resident exposure via vapor intrusion into the homes located above the dissolved phase plume. However, concentrations of benzene and naphthalene in groundwater samples collected from OU-2 were less than United States Environmental Protection Agency (USEPA) screening values for potential soil gas-to-indoor air attenuation. Additionally, as indicated previously, sub-slab vapor concentrations of non-MGP-related chlorinated compounds were orders of magnitude greater than MGP-related compounds and NYSDEC subsequently installed and operates SSDSs to mitigate this potential exposure pathway associated with the non-MGP-related chlorinated compounds.

Remedial action objectives (RAOs) were developed on a media-specific basis with consideration for MGP-related constituents of concern (COCs) identified in OU-2, as well as the potential exposure pathways and receptors evaluated as part of the HHRA. The RAOs developed for OU-2 are presented in Table 3.1 and are generally consistent with the generic RAOs provided on NYSDEC's website (http://www.dec.ny.gov/regulations/67560.html).

Remedial Technology Screening

The objective of technology screening is to identify general response actions (GRAs), associated remedial technology types and technology process options, and then narrow the universe of process options to those that have had documented success at achieving similar RAOs at former MGP sites to identify options that are implementable and potentially effective at addressing identified impacts. Based on this screening, remedial technology types and technology process options were eliminated or retained and subsequently combined into potential remedial alternatives for further, more detailed evaluation. This approach is consistent with the screening and selection process provided in Division of Environmental Remediation (DER) *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10) (NYSDEC, 2010a).

Based on the results of the technology screening, the following potential remedial alternatives were developed:

- Alternative 1 – No Action
- Alternative 2 – Groundwater Monitoring
- Alternative 3 – Enhanced Natural Attention and NAPL Monitoring
- Alternative 4 – Soil Removal to Unrestricted Use SCOs

Detailed Evaluation of Alternatives

Following the development of the remedial alternatives, a detailed evaluation of the alternatives was completed using the following criteria presented in DER-10:

- Short-Term Impacts and Effectiveness
- Long-Term Effectiveness and Permanence
- Land Use
- Reduction of Toxicity, Mobility, or Volume through Treatment
- Implementability
- Compliance with Standards, Criteria, and Guidance (SCGs)
- Overall Protection of Public Health and the Environment
- Cost Effectiveness

These evaluation criteria encompass statutory requirements and include other gauges such as overall feasibility.

Comparative Analysis of Alternatives

Following the detailed evaluation of each alternative, a comparative analysis of the alternatives was completed using the DER-10 evaluation criteria. The comparative analysis identified the advantages and disadvantages of each alternative relative to each other and with respect to the evaluation criteria. The results of the comparative analysis were used as a basis for recommending the preferred remedy for achieving the RAOs established for OU-2.

Preferred Remedial Alternative

Based on the comparative analysis of the remedial alternatives, Alternative 3 is the preferred remedial alternative for OU-2. This alternative would cost-effectively achieve the best balance of the NYSDEC evaluation criteria for addressing MGP-related impacts. The primary components of the preferred remedial alternative consist of the following:

- Installing new groundwater monitoring wells to re-establish a monitoring network in OU-2 in support of long-term groundwater monitoring.

- Installing new NAPL monitoring wells to determine the presence and facilitate the removal of mobile NAPL (if any remains in OU-2).

- Conducting pre-design investigation (PDI) groundwater sampling to evaluate current dissolved phase concentrations of BTEX and PAHs in OU-2 groundwater and to identify the presence of a microbial community and the community's effectiveness at attenuating MGP-related dissolved phase groundwater impacts.

- Installing application wells to facilitate groundwater amendment application as part of long-term site activities.

- Developing and implementing a site management plan (SMP) that would document the following:

    - The institutional controls that will be maintained for the NYSEG-owned portion of OU-2.

    - Protocols and requirements for conducting the periodic groundwater and NAPL monitoring/recovery, as well as groundwater amendment applications.

- Protocols for addressing significant changes in MGP-related COC concentrations in groundwater based on the results of the periodic monitoring activities.

- Known locations of soil containing MGP-related COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs.

- Protocols, including health and safety requirements, for conducting invasive (i.e., subsurface) activities at depths potentially containing impacted media and managing potentially impacted material encountered during these activities.

- Protocols and requirements for a soil vapor intrusion evaluation if new occupied structures are built in OU-2.

- Verifying that institutional controls remain in-place and are effective (i.e., annually).

- Conducting periodic groundwater and NAPL monitoring and groundwater amendment applications (assumed to be conducted for 30 years).

Alternative 3 is the preferred alternative based on the following:

- The excavation activities completed at OU-1 have removed a majority of the material that served as a source for dissolved phase MGP-related impacts. Only limited quantities of NAPL (i.e., small globules), located at depths greater than 10 feet bgs, remain in OU-2.

- The extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values is limited. At many locations, COC concentrations are only slightly greater than the standards and guidance values, are detected sporadically, or have been generally decreasing since 2005.

- Natural degradation processes are already occurring in OU-2 groundwater. The groundwater amendment applications that would be conducted under Alternative 3 would enhance the naturally-occurring degradation processes.

- MGP-related soil vapor concerns have not been identified to date in OU-2. As indicated in Section 1, the CVOC-related soil vapor concerns related to the Pappas Dry Cleaning site have been addressed through the installation of a SSDS IRMs at select homes as part of the remedial activities implemented for Pappas OU-2, which coincidently addressed any potential SVI concerns associated with MGP OU-2. The SMP that would be prepared as part of Alternative 3 would provide requirements for evaluating potential soil vapor intrusion concerns in new occupied structures built within OU-2.

- As indicated in the OU-2 MGP SRI Report (and the Pappas OU-2 ROD), the potential for future exposure to remaining residual impacts (e.g., during the installation of new utilities or repair existing utilities) is limited and unlikely based on the depths of the remaining residual impacts (i.e., greater than 10 feet bgs). Potential exposures to soil and groundwater containing residual MGP-related impacts would be mitigated through implementation of an SMP.

- The community is serviced with a municipal water supply. Therefore, as indicated in the OU-2 MGP SRI Report (and the Pappas OU-2 ROD), residential exposure to potentially impacted groundwater is not a complete exposure pathway.

- The NYSDEC-selected remedy for Pappas OU-2 is a “No Further Action” alternative that includes continued groundwater monitoring and implementation of an SMP (NYSDEC, 2013). As discussed in Section 1, Pappas OU-2 contains elevated concentrations of dissolved phase CVOCs, as well as potentially CVOC-related NAPL. The preferred remedial alterative for OU-2 of the MGP site (i.e., Alternative 3) is both consistent with (i.e., through periodic groundwater monitoring) and more aggressive (i.e., through NAPL monitoring/recovery and groundwater amendment application) than the NYSDEC-selected remedial alternative for Pappas OU-2.

1. Introduction

This *Feasibility Study Report* (FS Report) presents an evaluation of remedial alternatives to address environmental impacts identified at Operable Unit No. 2 (OU-2) for the former manufactured gas plant (MGP) site (the site) located in the Village of Dansville, New York (New York State Department of Environmental Conservation [NYSDEC] Site No. 8-26-012). This FS Report has been prepared by Arcadis of New York, Inc. (Arcadis) on behalf of NYSEG in accordance with an Order on Consent (Index Number D0-0002-9309) between NYSEG and the NYSDEC.

1.1 Regulatory Framework

This FS Report has been prepared to evaluate remedial alternatives to address identified environmental impacts consistent with the requirements of the Order on Consent and guidance provided in NYSDEC's Division of Environmental Remediation (DER) *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10) (NYSDEC, 2010a). This FS Report has also been prepared in consideration of applicable provisions of the New York State Environmental Conservation Law (ECL) and associated regulations, including Title 6 of the New York Code of Rules and Regulations (NYCRR) Part 375-6 (6 NYCRR Part 375-6) (NYSDEC, 2006).

1.2 Purpose

The purpose of this FS Report is to identify and evaluate remedial alternatives that are:

- Protective of public health and the environment
- Appropriate for site-specific conditions
- Consistent with relevant sections of NYSDEC guidance

The overall objective of this FS Report is to recommend a suitable remedy that achieves the site-specific remedial action objectives (RAOs) and best balance of the NYSDEC evaluation criteria.

1.3 Report Organization

This FS Report is organized as described in the following table.

Table 1.1 Report Organization

Section	Purpose
Section 1 – Introduction	Provides the regulatory framework, purpose, background information, and site characteristics relevant to the development of remedial alternatives evaluated in this FS Report.
Section 2 – Identification of Standards, Criteria, and Guidance	Identifies standards, criteria, and guidance (SCGs) that govern the development and selection of remedial alternatives.
Section 3 – Development of Remedial Action Objectives	Presents a summary of the risk assessment and develops site-specific RAOs that are protective of public health and the environment.
Section 4 – Technology Screening and Development of Remedial Alternatives	Presents the results of the screening process to identify potentially applicable remedial technologies and assembles remedial alternatives that have the potential to meet the RAOs.
Section 5 – Detailed Evaluation of Remedial Alternatives	Presents a detailed description and evaluation of each potential remedial alternative using the NYSDEC evaluation criteria.
Section 6 – Comparative Analysis of Alternatives	Presents a comparative analysis of each remedial alternative using the NYSDEC evaluation criteria.
Section 7 – Preferred Remedial Alternative	Identifies the preferred remedial alternative for addressing the environmental concerns.
Section 8 – References	Provides a list of references used to prepare this FS Report.

1.4 Background Information

This section summarizes background information relevant to the development and evaluation of remedial alternatives, including location, physical setting, and history of the former MGP, as well as summary of the previously completed investigations. While the purpose of this FS Report is to evaluate and identify potentially suitable remedial alternatives for OU-2 of the former MGP site, the discussions presented in the following subsections also include relevant background information collected from OU-1, as well as pertinent information collected from the Pappas Dry Cleaners site (NYSDEC Site No. 8-26-018).

1.4.1 Site Location and Physical Setting

The Dansville former MGP site is located at 50 Ossian Street in the Village of Dansville, Livingston County, New York (Figure 1). During the remedial investigation, the NYSDEC and NYSEG agreed to separate the site into two operable units. The NYSDEC Record of Decision (ROD) for the *NYSEG Dansville MGP Site Operable Unit No. 1* (OU-1) (NYSDEC, 2008) indicates that OU-1 consists of soil lying above and below the groundwater table within a portion of the former MGP property (i.e., that was remediated from 2014 to 2015). OU-2, the focus of this FS Report, consists of the remainder of the NYSEG-owned property at 50 Ossian Street and soil and groundwater in off-site areas impacted by MGP-related residuals. A site plan map showing the limits of the OU-1 excavation is shown on Figure 2. OU-2 is comprised of a mixed industrial use (i.e., at the NYSEG property) and residential neighborhood, with private residences to the north, south, east, and west of OU-1. A church and a child care facility are also located to the north of OU-1, across Battle Street. The current zoning for OU-2 consists of industrial and residential use.

A former dry cleaning facility (Pappas Dry Cleaners site) is located at 46 Ossian Street, immediately to the southeast of OU-1, and hydraulically upgradient from OU-2 of the MGP site. As indicated in the NYSDEC ROD for the *Pappas Dry Cleaners Site, Operable Unit No. 1* (NYSDEC, 2009), OU-1 of the Pappas Dry Cleaners site consists of the soil and groundwater on the former dry cleaners property and OU-2 of the Pappas Cleaners site consists of off-site groundwater and soil vapor. Based on close proximity of the former MGP and Pappas Dry Cleaners sites (i.e., adjacent properties) and the direction of groundwater flow, OU-2 for both sites are co-located north/northwest of the sites.

1.4.2 Site History

As presented in the May 2006 *Final Supplemental Remedial Investigation Report for Operable Unit 2* (OU-2 MGP SRI Report) prepared by Ish, Inc. (Ish, 2006c), the gas works operations began in 1861 and continued for approximately 70 years, ceasing in January of 1930. The gas manufacturing process and the feed fuels were changed several times during the operational life of the MGP. Oil, coal, and coke were used as feed fuels at various times during the plant's operation. Blue gas, and later carbureted water gas, were manufactured at the plant. Gas production generally increased during the operating life of the plant. Little is known about the generation and disposal practices of wastes at the site, except that a tar storage vessel was present in the subsurface and rail cars were likely used to transport wastes from the property for refining or for burning as boiler fuel. Also, purifier wastes were stored in burlap bags along the west side of the gas house for periodic removal. NYSEG acquired the 50 Ossian Street property through its merger with New York Central Electric Company in 1937 (seven years after gas manufacturing operations ceased).

Photographs from 1930 show that at least two holders were present on the property, but the gas holders were no longer present in a 1938 aerial photograph. Additionally, site maps and photos from circa 1930 show a former canal as a weed-choked ditch paralleling the south side of Battle Street. Historical pictures from circa 1933 show a small substation on the 50 Ossian Street property. In later years, NYSEG used a portion of the property for electrical equipment storage, including transformers. Electricity was also produced on-site from 1895 to 1925. In the years after plant operations had ceased, the gas house was used as a meter department and was later removed in 1958. Also, in later years after gas production ceased, the former electricity generator building was renovated, enlarged, and used as the regional service center for NYSEG. Service center operations ceased in 2010 and the remaining building was demolished in 2012.

As indicated in the OU-1 Pappas ROD (NYSDEC, 2009), the dry cleaning business located at 46 Ossian Street operated from 1952 to 2002. At an unknown time, tetrachloroethene (PCE) was disposed of or released during one or more spills.

1.4.3 Summary of Investigations and Remedial Efforts

The site has been subject to several environmental investigations and remedial measures including the following:

- 1986 to 1991 – Preliminary Site Evaluation – TRC Environmental Consultants (TRC) conducted a preliminary site evaluation for the NYSEG property. The preliminary investigation included: excavation of test pits; drilling soil borings; collection and analysis of soil, groundwater, surface water, soil gas, and sediment samples; and completing a risk assessment.

- 1988 – Paving Excavation – Excavation and off-site disposal of approximately 1,500 cubic-yards (cy) of surface and shallow subsurface soil to facilitate paving on the NYSEG property.

- 1990 – UST Closure – Closure of two underground storage tanks (USTs) on the NYSEG property.

- 2003 to 2005 – OU-1 MGP Remedial Investigation – Ish, Inc. completed remedial investigation activities at the NYSEG property, including: drilling soil borings; excavation of test pits; installation of monitoring wells and piezometers; and collection and analysis of soil and groundwater samples; and completing a qualitative Human Health Risk Assessment (HHRA) and a Fish and Wildlife Impact Assessment (FWIA). OU-1 remedial investigation activities and results were presented in the January 2006 *Final Supplemental Remedial Investigation Report for Operable Unit 1 (OU-1)* (OU-1 MGP SRI Report) (Ish, 2006a).

- 2004 to 2005 – OU-2 MGP Investigation – Ish, Inc. completed remedial investigation activities hydraulically downgradient of the NYSEG property, including: drilling soil borings; installation of piezometers; and collection and analysis of soil, groundwater, and surface water samples. OU-2 remedial investigation activities and results were presented in the OU-2 SRI Report (Ish, 2006c).

- 2005 – Site-Wide Groundwater Sampling – Ish, Inc. collected groundwater samples from OU-1 and OU-2. Site-wide groundwater sampling activities and results were presented in the April 2006 *Draft Synoptic Groundwater Sampling Report for Operable Units 1 (OU-1) and 2 (OU-2) at the Dansville Former MGP Site* (Draft Synoptic Sampling Report) (Ish, 2006b).

- 2014 to 2015 – *MGP OU-1 Remediation* – NYSEG completed excavation and off-site treatment and/or disposal of approximately 29,000 tons of soil containing MGP-related impacts from the 50 Ossian Street property. As part of the remedial excavation approximately 157 tons of CVOC-impacted soil was also excavated from the NYSEG property and transported for off-site disposal. The limits of the soil excavation completed on the NYSEG property are illustrated on the figures that support this FS Report. Details regarding the 2014/2015 remedial activities are presented in the September 2015 *Draft Construction Completion Report* (CCR) (Arcadis, 2015).

The adjacent Pappas Dry Cleaning site has also been subject to several environmental investigations and remedial measures, including the following:

- 2007 to 2010 – Vapor Mitigation System Installation – Sub-slab depressurization systems (SSDSs) were installed by the NYSDEC in 2007 and 2010 as interim remedial measures (IRMs) at select private residences located within OU-2 to address chlorinated solvent-related impacts based on the results of soil vapor intrusion (SVI) sampling completed in 2006, 2009, and 2010.

- 2007 to 2008 – Pappas OU-1 Remedial Investigation – EA Engineering, Science, and Technology, Inc. (EA) completed remedial investigation activities on the former Pappas Dry Cleaners property, including: drilling soil borings; installation of monitoring wells; and collection and analysis of soil, groundwater, soil vapor, and indoor air samples. Pappas OU-1 remedial investigation activities and results were presented in the October 2008 *Final Remedial Investigation Report for OU-1* (Pappas OU-1 RI Report) (EA, 2008).

- 2007 to 2012 – Pappas OU-2 Remedial Investigation – EA completed remedial investigation activities downgradient of the former Pappas Dry Cleaners property, including: installation of monitoring wells and piezometers; and collection and analysis of groundwater, soil vapor, and sub-slab vapor samples. Pappas OU-2 remedial investigation activities and results were presented in the February 2013 *Remedial Investigation Report for Operable Unit 2* (Pappas OU-2 RI Report) (EA, 2013).

- 2012 – Pappas OU-1 Remediation – The NYSDEC, under the State Superfund Program, conducted the OU-1 remediation that included excavation and off-site disposal of approximately 8,200 tons of chlorinated volatile organic compound- (CVOC-) impacted soil from the former dry cleaning property located immediately east of the NYSEG property. Details regarding the completed remedial construction activities were presented in the June 2013 *Final Engineering Report* (FER) (OU-1 FER) (HDR, 2013). The limits of the soil excavation completed on the dry cleaners property are illustrated on the figures that support this FS Report.

- 2013 – Pappas OU-2 Remediation – NYSDEC issued the ROD for OU-2 of the Pappas Dry Cleaners site. Based on the excavation of soil at the Pappas property (i.e., OU-1) and the SSDS IRMs installed in OU-2, “No Further Action” was the NYSDEC selected remedy for OU-2. As stated in the ROD, PCE and its daughter products from the former dry cleaner have impacted groundwater in OU-2. The “No Further Action” remedy will include a site management plan (SMP) (that is currently being prepared by NYSDEC) that will require; continued operation, maintenance, and monitoring (OM&M) of the SSDSs; implementation of any prescribed controls that have been identified as being part of the remedy for the site; and groundwater monitoring in OU-2. Detailed requirements for the selected remedy are presented in NYSDEC's March 2013 *ROD for the Pappas Dry Cleaning, Operable Unit Number 02: Off-Site Groundwater* (Pappas OU-2 ROD) (NYSDEC, 2013).

The excavation activities completed at the NYSEG property (and at the former dry cleaning property) have addressed (through removal) a majority of the material that served as a source of dissolved phase impacts in OU-2 of the former MGP. As discussed in Section 1.5, only residual MGP-related impacts remain in OU-2 soil.

1.5 Site Characterization

This section presents an overall characterization of OU-2 and a summary of the nature and extent of impacted media based on the results obtained during the investigation activities conducted to date (as described in Section 1.4.3). The characterization consists of a summary of geology and hydrogeology and the nature and extent of impacts.

1.5.1 Geology

In descending order, overburden materials within OU-2 consist of fill (where present), alluvium sediment, and Quaternary glacial lacustrine deposits. Geologic cross-sections presented in the OU-2 MGP SRI Report (SRI Figures A-7 through A-11) are included in Appendix A. The fill unit is generally encountered in and immediately north of OU-1 at thicknesses up to 10 feet. The fill material is located above the water table and consists of medium to coarse-grain sands, trace amounts of silt, some gravel, and other debris. The top of the alluvium was encountered at depths near the ground surface to approximately 10 feet below ground surface (bgs), with the bottom of the alluvium extending to depths ranging from approximately 11 to 24 feet bgs. The alluvium at OU-2 consists of three units. The upper unit consists of silt, sand and gravel with angular rock clasts. This upper unit overlies a brown, wet, gravel and medium to coarse-grained sands, cobbles and a trace amount of silt. A vast majority of the visual MGP-related impacts observed in OU-2 were encountered within this unit (discussed in greater detail below). A third, less consistent layer, was present beneath the upper unit in some areas and consisted of interbedded, brown, fine sand and silt.

The top of the lacustrine deposit was encountered at depths ranging from approximately 11 to 24 feet bgs. The unit consists of gray, stiff, silty clay with some layers of interbedded fine sand and silt. The top of silty clay unit serves as a continuous confining layer beneath the overlying shallow aquifer. A top of silty clay unit contour map (OU-2 MGP SRI Report Figure A-12) is included in Appendix A. As shown on the figure, the top of the silty clay unit generally slopes to the northwest, with undulations throughout OU-2. The contour is generally consistent with the groundwater flow direction of the shallow unconfined hydrostratigraphic unit.

1.5.2 Hydrogeology

Shallow groundwater in the area of OU-1 and OU-2 flows generally to the northwest. Figure A-13 (from the OU-2 MGP SRI Report), Figure A-4 (from the Draft Synoptic Sampling Report), and Figure 3-6 (from the Pappas OU-2 RI Report) (all included in Appendix A) show water table contours developed from gauging data collected in May 2005, November 2005, and November 2012, respectively. The water table is typically encountered at depths ranging from 8 to 14 feet bgs throughout OU-2, but typically at depths greater than 10 feet bgs in the central portion of OU-1 (i.e., along OU-2 MGP SRI Report cross-section A-A’, see Figure A-8 in Appendix A). As shown on the cross-sections included in Appendix A, the saturated zone above the confining silty clay unit water table is typically 5 feet thick (or less).

In the shallow groundwater bearing zone, the average horizontal hydraulic gradient for the aquifer in OU-1 was calculated as 0.011 foot per foot (ft/ft) and the average horizontal hydraulic gradient for the aquifer in OU-2 was calculated as 0.014 ft/ft. As reported in the OU-2 MGP SRI Report, the estimated specific discharge for the off-site groundwater plume was 2.46 feet per year (ft/yr), while the average estimated groundwater seepage velocity was 7 ft/yr. However, as indicated in the OU-1 MGP SRI Report, the hydraulic conductivity values used to calculate groundwater seepage velocity in OU-1 were likely significantly underestimated. Given the distance of observed groundwater impacts from the former MGP and dry cleaners properties, the actual average groundwater seepage velocity within the alluvial unit is likely on the order of 50 to 100 ft/yr, which is consistent with a sand and gravel unit (i.e., as discussed below, where the majority of residual MGP-related impacts are located with OU-2).

1.5.3 Nature and Extent of Impacts

As indicated in the OU-2 MGP SRI Report, soil and groundwater within OU-2 (and OU-1) contained MGP-related impacts, as well as impacts associated with the former dry cleaners located immediately east of OU-1. The extent of MGP-related impacts are approximately limited to Franklin Street (located approximately 500 feet northwest of the former MGP) while dissolved phase impacts associated with the Pappas Dry

Cleaners site extends approximately 3,000 feet downgradient from the former dry cleaning property. While comingling of chlorinated impacts does exist, the summary of the nature and extent of impacts presented below for OU-2 focuses on MGP-related impacts. Chlorinated impacts associated with the Pappas Dry Cleaner site that are present downgradient from the former MGP property (i.e., within OU-2) are being managed under the Pappas OU-2 ROD (NYSDEC, 2013).

Manufactured gas-production byproducts, typically dense non-aqueous phase liquid (NAPL) (i.e., coal tar), often account for the majority of the environmental impacts at former MGP sites. Principal components of coal tar that are routinely analyzed for at MGP sites are benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, which are volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs), which are semi-volatile organic compounds (SVOCs). Because coal tar typically contains elevated levels of these compounds, soil samples and groundwater monitoring wells that contain visual evidence of coal tar are typically assumed to contain concentrations of BTEX and PAHs concentrations greater than applicable standards, criteria, and guidelines (SCGs).

1.5.3.1 NAPL Distribution and Characterization

Remedial activities completed at MGP OU-1 in 2014 to 2015 included the removal of the MGP-related source material (i.e., soil that contained visible tar or oil, and/or the presence of sheens or odors with total PAHs concentrations greater than 1,000 milligrams per kilogram [mg/kg], or total BTEX concentrations greater than 10 mg/kg). Based on observations documented as part of the investigation activities completed in 2005, residual impacts remaining within OU-1 consist of:

- Small globules of NAPL within subsurface soil along the northern portion of the NYSEG property at locations TP-17 (5 feet), TP-101 (11 feet), TP-18 and MW03S (10 to 12 feet), and TP-113, and MW04S/SB20 (11 feet).

- Sheens within subsurface soil in the southern portion of the property at locations SB-12 (11 to 12 feet and 16 to 18 feet) and SB19 (7 to 8 feet).

MGP-type odors were noted on soil spoils along the northern alignment of Removal Area B (Figure 2) during sheet pile removal when screening soil with a photoionization detector. However, sheens or staining were not observed during extraction of sheet piles.

Based on the OU-2 MGP SRI Report, evidence of MGP-related NAPL, in the form of sheens and small NAPL globules, was observed in the subsurface soil within OU-2 located immediately to the west (i.e., at DP30) and northwest of MGP OU-1 and Battle Street (11 soil borings/piezometers). Locations of observed visual impacts in OU-2 are shown on Figure 3. Locations of observed visual impacts in OU-2 are also shown on the SRI Report cross-sections included in Appendix A.

In general, the NAPL globules observed in OU-2 were reddish-brown in color and were intermixed with water within the pore spaces of the loose, sandy gravel in the shallow aquifer at thicknesses of generally 2 feet or less, at depths ranging from approximately 11 to 17 feet bgs. Where present, visual impacts were quantified as "small NAPL globules"; soil grossly impacted with NAPL was not encountered in OU-2. The coal tar NAPL observed in OU-2 did not saturate the soil matrix, but rather was present in small globules within the sandy gravel matrix present above the silty clay layer. Additionally, visual impacts were not observed within the silty clay unit, which indicates that the unit is acting as a confining layer, with respect to the vertical migration of coal tar NAPL.

As shown on Figure 3, the distribution of visual impacts generally follows the northwest groundwater flow direction. NAPL globules were observed as far north as location PZ21/DP32 (at depths of 13 to 15.5 feet bgs during piezometer installation in 2004). However, BTEX and PAHs were not detected in groundwater samples collected from PZ21 during both the MGP OU-2 SRI (2004) and the synoptic (2005) sampling events. Additionally, the groundwater sample collected from PZ21 during the MGP OU-2 SRI contained elevated concentrations of chlorinated solvents (i.e., 1,2-dichloroethene, tetrachloroethene, and trichloroethene). Therefore, the reported NAPL impacts observed at PZ21 are not considered to be MGP-related.

1.5.3.2 Soil Quality

Soil boring locations where soil samples contained BTEX and/or PAHs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use soil cleanup objectives (unrestricted use SCOs) are shown on Figure 4; soil sample analytical results are summarized in Table 1. Locations of soil samples containing exceedances (11 samples from 8 soil borings) generally corresponded to locations containing small NAPL globules and were typically located at depths at or greater than 12 feet below grade (i.e., immediately above the silty clay unit).

In addition to only being found at depth, as shown in Table 1, unrestricted use SCO exceedances were typically limited to select BTEX and/or PAH compounds that only slightly exceeded their respective SCOs. Soil samples collected from OU-2 did not contain total BTEX and total PAHs at concentrations greater than 10 or 500 mg/kg, respectively; total BTEX and total PAH concentrations were typically less than 1 and 80 mg/kg, respectively.

1.5.3.3 Groundwater Quality

The extent of groundwater impacts documented in the OU-2 MGP SRI Report included MGP-related impacts, as well as CVOC-related impacts (primarily PCE), based on groundwater samples collected in June 2004 and May 2005. Following the completion of the OU-2 MGP SRI groundwater sampling, a complete round of groundwater sampling was completed for OU-1 and OU-2 of the MGP in November 2005 to evaluate the extent of MGP-related impacts (i.e., BTEX and PAHs) in site groundwater and to evaluate natural attention processes at the site. Results of the November 2005 groundwater sampling were presented in the Draft Synoptic Sampling Report. Additionally, as part of the Remedial Investigation for Pappas OU-2, groundwater samples were collected from select monitoring wells and piezometers downgradient of the MGP and Pappas Dry Cleaners sites (from 2005 to 2012).

Locations where groundwater samples contained BTEX and PAHs and/or CVOCs at concentrations greater than NYSDEC Class GA standards and guidance values are shown on Figure 5, which was developed using the most recent groundwater data available for each well/piezometer (MGP OU-1, MGP OU-2, or Pappas OU-2). A summary of the analytical results for groundwater samples collected as part of the various investigations from 2004 to 2012 is presented as Table 2.

As documented in Pappas OU-2 ROD, CVOCs (i.e., PCE and/or daughter products associated with the former dry cleaners) has been detected at concentrations exceeding its NYSDEC Class GA standard (i.e., 5 micrograms per liter [ug/L]) in groundwater samples collected more than 3,000 feet northwest of the Pappas Dry Cleaners site. However, as shown on Figure 5 and based on the most recent data available for each location, dissolved phase concentrations of MGP-related impacts (i.e., BTEX and PAHs) only exceeded NYSDEC's *Class GA Division of Water, TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (TOGS 1.1.1 Class GA standards and guidance values) (NYSDEC, 2004) in groundwater samples collected from the following locations beyond the NYSEG-owned property:

- One piezometer located north of Franklin Street (i.e., PZ25, last sampled in 2005).

- Three piezometers located between Franklin and Battle Streets (i.e., PZ05 [last sampled in 2005], PZ06 [last sampled in 2007], and PZ36 [last sampled in 2012]).

- One piezometer located west of the former MGP property (i.e., PZ18, last sampled in 2005).

Other key results from the groundwater sampling activities include the following:

- Of the 34 piezometers located in OU-2 that were sampled during the 2005 synoptic groundwater sampling event, groundwater samples collected from 10 locations contained concentrations of either benzene or naphthalene greater than NYSDEC Class GA standards and guidance values.

- CVOCs were detected at concentrations up to three orders of magnitude greater than NYSDEC Class GA standards and guidance values at numerous locations throughout OU-2 (compared to MGP-related BTEX concentrations that were typically detected at concentrations one order of magnitude greater than standards and guidance values). As indicated previously, chlorinated solvent dissolved phase impacts have been identified at locations approximately 3,000 feet downgradient from the former Pappas Dry Cleaners property.

- Groundwater samples collected from monitoring well MW-03S (located in the northwest corner of the NYSEG property, immediately downgradient of the former MGP and the location source material prior to the 2014 remedial construction activities) from 2007 to 2011 contained decreasing BTEX concentrations; BTEX concentrations in the 2011 sample were only slight above NYSDEC Class GA standards and guidance values.

- As part of the Pappas OU-2 Remediation Investigation, 11 piezometers located in MGP OU-2 were sampled in 2012. Piezometer PZ36 (located immediately north of Battle Street) was the only location where a groundwater sample contained elevated concentrations of BTEX and PAHs (as well as CVOCs). Historically, groundwater samples collected from piezometer PZ36 contained some of the greatest BTEX and CVOC concentrations in OU-2. Note that soil boring log for piezometer PZ36/DP51 indicates the presence of slight odors, but no visual impacts, and soil samples collected during the installation of the piezometer did not contain BTEX, PAH, or CVOC compounds at concentrations greater than unrestricted use SCOs.

- Groundwater samples collected from piezometer PZ31 (located approximately 120 feet downgradient of PZ36) have contained elevated concentrations of CVOCs, but BTEX or PAHs at concentrations below NYSDEC Class GA standards and guidance values. Similarly, groundwater samples collected from piezometer PZ32 (located approximately 200 feet downgradient of PZ36) have contained elevated concentrations of CVOCs, with BTEX compounds at concentrations only slightly exceeding NYSDEC Class GA standards and guidance values in 2 of the last 7 samples collected (last exceedance in 2011).

- Although deep monitoring wells or piezometers were not installed in OU-2, groundwater samples collected from deep monitoring wells in OU-1 did not contain BTEX or PAHs at concentrations greater than NYSDEC Class GA standards and/or guidance values, further indicating that the silty clay unit serves a barrier to the downward migration of impacts.

- Natural attenuation evaluations were conducted as part of the Synoptic Sampling for the MGP and as part of the Pappas OU-2 Remediation Investigation.

  - For OU-2 of the MGP, based on dissolved oxygen (DO), sulfate, nitrate/nitrite, and iron concentrations detected in groundwater samples collected from shallow monitoring wells in OU-1 and piezometers in OU-2, the Draft Synoptic Sampling Report concluded that anaerobic conditions were present in the subsurface and natural attention processes were occurring within the MGP-related dissolved phase plume.

  - For OU-2 of Pappas Dry Cleaners, although microbial communities were present, they were not present in significant size and natural attenuation parameters indicated that anaerobic degradation was only occurring at locations containing comingled BTEX and CVOC compounds. However, biodegradation from natural processes is not significant for CVOCs.

1.5.3.4 Soil Vapor Quality

In March 2006, soil vapor samples were collected from MGP OU-2, at depths generally ranging from 6 to 8 feet below grade (i.e., above impacted groundwater). The results of the March 2006 soil vapor sampling were presented in the October 2006 *Soil Gas Sampling at Operable Unit 2* Report (Ish, 2006d). Based on the results of the 2006 study, which indicated the presence of CVOCs in soil vapor samples at elevated concentrations, the NYSDEC, as part of a State-funded investigation of the Pappas Dry Cleaners site took lead in investigating and addressing the soil vapor intrusion (SVI) pathway associated with the two sites. Analytical results for subsequent indoor sampling (completed by NYSDEC) were presented in the Pappas OU-2 RI Report. No further soil vapor investigation activities for MGP OU-2 were required by the NYSDEC.

Analytical results from the various investigations completed for OU-2 indicated the following:

- Concentrations of MGP-related constituents (i.e., benzene and naphthalene) in groundwater samples collected from OU-2 were less than United States Environmental Protection Agency (USEPA) screening values for potential soil gas-to-indoor air attenuation, as presented in Table 2a of *OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)* (USEPA, 2002). Therefore, the vapor intrusion pathway in OU-2 may not be significant, as it pertains to MGP-related impacts.

- Benzene was detected in soil vapor samples at concentrations up to 28 micrograms per cubic meter (ug/m^3); naphthalene was not detected soil vapor samples. However, sub-slab and indoor air samples did not contain benzene at concentrations greater than the 90th Percentile for Volatile Organic Chemicals in Air of Fuel Heated Homes (i.e., 15 ug/m^3), as presented in New York State Department of Health's (NYSDOH's) *Guidance for Evaluating Vapor Intrusion in New York State* (NYSDOH, 2006).

- Non-MGP-related chlorinated constituents originating from the adjacent Pappas Dry Cleaners property were detected in soil vapor samples at concentrations 2 to 3 orders of magnitude greater than MGP-related compounds.

- PCE was detected in sub-slab and indoor air samples at concentrations greater than the NYSDOH 90th Percentile for Volatile Organic Chemicals in Air of Fuel Heated Homes (i.e., 2.9 ug/m^3).

Based on the results of this study, NYSDEC implemented an IRM consisting of installing SSDSs at seven residential structures.

2. Identification of Standards, Criteria, and Guidance

This FS Report was prepared in general conformance with the applicable guidance, criteria and considerations set forth in the DER-10 and 6 NYCRR Part 375 Environmental Remediation Programs. This section presents the SCGs that have been identified for OU-2.

2.1 Definition of Standards, Criteria, and Guidance

"Standards and criteria" are cleanup standards, standards of control and other substantive environmental protection requirements, criteria or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance.

"Guidance" is non-promulgated criteria, advisories and/or guidance that are not legal requirements and do not have the same status as "standards and criteria;" however, remedial programs should be designed with consideration given to guidance documents that, based on professional judgment, are determined to be applicable to the project (6 NYCRR 375-1.8[f][2][ii]).

Standards, criteria and guidance will be applied so that the selected remedy will conform to standards and criteria that are generally applicable, consistently applied and officially promulgated; and that are either directly applicable, or that are not directly applicable but relevant and appropriate, unless good cause (as defined in 6 NYCRR 375-1.8 [f][2][i]) exists why conformity should be dispensed with.

2.2 Types of Standards, Criteria, and Guidance

Potential SCGs considered in this FS Report were categorized in the following classifications:

- *Chemical-Specific SCGs* – These SCGs are health- or risk-based numerical values or methodologies that, when applied to site-specific conditions, result in the establishment of numerical values for each COC. These values establish the acceptable amount or concentration of chemical constituents that may be found in, or discharged to, the ambient environment.

- *Action-Specific SCGs* – These SCGs are technology- or activity-based requirements or limitations on actions taken with respect to hazardous waste management and remediation.

- *Location-Specific SCGs* – These SCGs are restrictions placed on the concentration of hazardous substances or the conduct of activities solely because they occur in specific locations.

2.3 Standards, Criteria, and Guidance

The SCGs identified for the evaluation of remedial alternatives are presented in the following subsections. These SCGs have been identified as potentially applicable; their actual applicability will be determined during the evaluation of a particular remedy, and further described during development of the remedial design (i.e., after the final remedy has been selected).

2.3.1 Chemical-Specific SCGs

The potential chemical-specific SCGs for the project area are summarized in Table 3. Chemical-specific SCGs are the criteria that typically drive the remedial efforts at former MGP sites because they are most directly associated with addressing potential human exposures. The primary chemical-specific SCGs that exist for impacted soil and groundwater are briefly summarized below.

The SCOs presented in 6 NYCRR Part 375-6 are chemical-specific SCGs that are relevant and appropriate. Specifically, the SCOs for the protection of human health, assuming unrestricted use are applicable for surface soil and subsurface soil, respectively. Additionally, CP-51 *Soil Cleanup Guidance* (NYSDEC, 2010b) allows for a subsurface soil total PAH SCO of 500 mg/kg at non-residential sites (i.e., commercial and industrial use sites, namely the NYSEG-owned property).

Chemical-specific SCGs that potentially apply to the waste materials generated during remedial activities are the Resource Conservation and Recovery Act (RCRA) and New York State regulations regarding identifying and listing hazardous wastes outlined in 40 Code of Federal Regulations (CFR) 261 and 6 NYCRR Part 371, respectively. Included in these regulations are the regulated levels for the Toxicity Characteristic Leaching Procedure (TCLP) constituents. The TCLP constituent levels are a set of numerical criteria at which solid waste is considered a hazardous waste by the characteristic of toxicity. In addition, the hazardous characteristics of ignitability, reactivity and corrosivity may also apply, depending upon the results of waste characterization analyses.

Groundwater within the project area is classified as Class GA and, as such, the NYSDEC TOGS 1.1.1 Class GA standards and guidance values are potentially applicable. These standards identify acceptable levels of constituents in groundwater based on potable use.

NYSDOH's *Guidance for Evaluating Vapor Intrusion in New York State* (NYSDOH, 2006) provides screening criteria for indoor air samples. As discussed previously, based on the results of the completed indoor air sampling at OU-2, MGP-related BTEX and PAH compounds were not identified as COCs, while several CVOCs related to the former Pappas Dry Cleaner site were identified as COCs for indoor air.

2.3.2 Action-Specific SCGs

Potential action-specific SCGs are summarized in Table 4. Action-specific SCGs include general health and safety requirements, and general requirements regarding handling and disposal of waste materials (including transportation and disposal, permitting, manifesting, disposal and treatment facilities), discharge of water generated during implementation of remedial alternatives, and air monitoring requirements (including permitting requirements for on-site treatment systems). Action-specific criteria will be identified for the selected remedy in the remedial design work plan; compliance with these criteria will be required. Several action-specific SCGs that may be applicable are briefly summarized below.

The NYSDEC Division of Air Resources (DAR) policy document *DAR-1: Guidelines for the Control of Toxic Ambient Air Contaminants* (formerly issued as Air Guide 1) (NYSDEC, 1997), incorporates applicable federal and New York State regulations and requirements pertaining to air emissions, which may be applicable for soil or groundwater alternatives that result in certain air emissions. Community air monitoring may be required in accordance with the NYSDOH *Generic Community Air Monitoring Plan* (included in DER-10). New York Air Quality Standards provides requirements for air emissions (6 NYCRR Parts 257). Emissions from remedial activities will meet the air quality standards based on the air quality class set forth in the New York State Air Quality Classification System (6 NYCRR Part 256) and the permit requirements in New York Permits and Certificates (6 NYCRR Part 201).

One set of potential action-specific SCGs consists of the land disposal regulations (LDRs), which regulate land disposal of hazardous wastes. LDRs are applicable to alternatives involving the disposal of hazardous waste (if any). Because MGP wastes resulted from historical operations that ended before the passage of RCRA, material containing MGP-related impacts is only considered a hazardous waste in New York State if it is removed (generated) and it exhibits a characteristic of a hazardous waste. However, if the impacted material only exhibits the hazardous characteristic of toxicity for benzene (D018), it is conditionally exempt from the hazardous waste management requirements (6 NYCRR Parts 370-374 and 376) when destined for thermal treatment, in accordance with the requirements set forth in NYSDEC's TAGM HWR-4061, *Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment from Former Manufactured Gas Plants* (DER-4) (NYSDEC, 2002). If MGP-related hazardous wastes are destined for land disposal in New York State, the state hazardous waste regulations apply, including LDRs and alternative LDR treatment standards for hazardous waste soil.

The NYSDEC will no longer allow amendment of soil at MGP sites with lime kiln dust/ quick lime containing greater than 50% calcium and/or magnesium oxide (Ca/MgO) due to vapor issues associated with free oxides. Guidance issued in the form of a letter from the NYSDEC to the New York State utility companies, dated May 20, 2008, indicated that lime kiln dust/quick lime will not be permitted for use during future remedial activities.

The United States Department of Transportation (USDOT) and New York State rules for the transport of hazardous materials are provided in 49 CFR Parts 107 and 171.1 through 172.558 and 6 NYCRR 372.3, respectively. These rules include procedures for packaging, labeling, manifesting and transporting hazardous materials and are potentially applicable to the transport of hazardous materials under any remedial alternative. New York State requirements for waste transporter permits are included in 6 NYCRR Part 364, along with standards for collection, transport and delivery of regulated wastes within New York State. Contractors transporting waste materials off-site during the selected remedial alternative must be properly permitted.

Remedial alternatives must comply with applicable requirements outlined under the Occupational Safety and Health Administration (OSHA). General industry standards are outlined under OSHA (29 CFR 1910) that specify time-weighted average concentrations for worker exposure to various compounds and training requirements for workers involved with hazardous waste operations. The types of safety equipment and procedures to be followed during remediation are specified under 29 CFR 1926, and record keeping and reporting-related regulations are outlined under 29 CFR 1904.

In addition to OSHA requirements, the RCRA (40 CFR 264) preparedness and prevention procedures, contingency plan and emergency procedures are potentially relevant and appropriate to those remedial alternatives that include generation, treatment or storage of hazardous wastes.

2.3.3 Location-Specific SCGs

Potential location-specific SCGs are summarized in Table 5. Examples of potential location-specific SCGs include regulations and federal acts concerning activities conducted in floodplains, wetlands and historical areas, and activities affecting navigable waters and endangered/threatened or rare species.

Based on the Federal Emergency Management Agency (FEMA) National Flood Insurance Program Map Number 3603830015B, dated April 5, 2010, the site is located outside the limits of a 100-year floodplain.

Location-specific SCGs also include local requirements, such as local building permit conditions for permanent or semi-permanent facilities constructed during the remedial activities (if any), Village of Dansville Department of Public Works (DPW) street work permits, and influent/pre-treatment requirements for discharging water to the publicly-owned treatment works (POTW).

3. Development of Remedial Action Objectives

This section summarizes the qualitative human health risk assessment (HHRA) performed during the MGP OU-2 SRI and presents the RAOs for impacted media. These RAOs represent medium-specific goals that are protective of public health and the environment that have been developed through consideration of the results of the investigation activities and with reference to potential SCGs, as well as current and foreseeable future anticipated uses of the site. RAOs are developed to specify the COCs, and to assist in developing goals for cleanup of COCs in each medium that may require remediation.

3.1 Risk Assessment Summary

A qualitative HHRA of the current and future potential human receptors within MGP OU-2 (including evaluating potential exposure pathways) was conducted as part of the MGP OU-2 SRI. The following potential transport mechanisms whereby chemicals could potentially migrate from the former MGP property to off-site locations were identified and evaluated:

- Discharge of storm water to off-site surface water bodies.

- Groundwater flowing from the former MGP property to off-site locations.

Storm sewer sampling results indicated that the former MGP site is not contributing chemicals to the sewers (Ish, 2006c).

As described in Section 1.5.3.3, MGP-related constituents (i.e., BTEX and PAHs) were present in OU-2 groundwater at concentrations exceeding NYSDEC Class GA standards and guidance values. The MGP OU-2 SRI Report indicated the following:

- The local water authority supplies drinking water to the residences, thus the groundwater use pathway is incomplete and does not need to be considered further.

- There are no receptors or exposure pathways associated with groundwater that originates beneath OU-1 and eventually discharges to Canaseraga Creek (located 3,500 feet west of the MGP site).

- Due to the depth of soil containing exceedances of unrestricted use SCOs (i.e., greater than 10 feet bgs), and the depth to groundwater (i.e., 8 to 14 feet bgs), exposures to utility workers and construction workers are unlikely.

- The evaluation of potential current and future human receptors and exposure pathways identified inhalation from SVI into residences as the only potentially complete exposure pathway. However, as stated in Section 1.5.3.4, concentrations of benzene in indoor air samples (i.e., collected following the completion of the SRI) were less than the NYSDOH 90th percentile for Volatile Organic Chemicals in Air of Fuel Heated Homes. Elevated concentrations of CVOCs were detected in indoor air samples. The NYSDEC subsequently installed SSDSs at select residences as an IRM to mitigate this potential exposure pathway to CVOCs.

An FWIA was conducted as part of the MGP OU-2 SRI and concluded that, as OU-2 is a developed area, it does not contain suitable fish and wildlife habitats (Ish, 2006c) and MGP-related impacts to not pose an ecological risk.

3.2 Remedial Action Objectives

The qualitative HHRA and the FWIA were conducted as part of the MGP OU-2 SRI to evaluate potential exposures to MGP-related impacts in OU-2. A vast majority of MGP-related impacts in soil and groundwater are located at depths greater than 10 feet bgs. Furthermore, as indicated previously, drinking water is currently (and for the foreseeable future, will continue to be) provided by a local municipal supply. Therefore, as indicated in the MGP OU-2 SRI Report, the potential for resident, utility worker, or construction worker exposures to MGP-related impacts in soil and groundwater is extremely unlikely. MGP-related COCs were not detected in indoor air samples collected from OU-2. However, based on elevated CVOC concentrations in indoor air samples, NYSDEC subsequently installed (and operates) SSDSs at OU-2 residences to address SVI concerns associated with the Pappas property.

RAOs were developed on a media-specific basis considering the MGP-related COCs identified in OU-2, as well as the potential exposure pathways and receptors evaluated as part of the HHRA (including the potential vapor intrusion pathway). The RAOs developed for OU-2 are presented in the following table and are generally consistent with the generic RAOs provided on NYSDEC's website (http://www.dec.ny.gov/regulations/67560.html).

Table 3.1 – Remedial Action Objectives

RAOs for Soil
1. Prevent, to the extent practicable, ingestion/direct contact with soil containing MGP-related COCs and/or NAPL. 2. Prevent, to the extent practicable, inhalation of or exposure to MGP-related COCs volatilizing from MGP-impacted soil. 3. Prevent, to the extent practicable, migration of MGP-related COCs and/or NAPL that could result in impacts to groundwater.
RAOs for Groundwater
1. Prevent, to the extent practicable, ingestion of groundwater containing MGP-related COCs at concentrations exceeding NYSDEC groundwater quality standards and guidance values. 2. Prevent, to the extent practicable, contact with, or inhalation of volatiles, from groundwater containing MGP-related COCs at concentrations exceeding NYSDEC groundwater quality standards and guidance values. 3. Restore groundwater quality to pre-disposal/pre-release conditions, to the extent practicable. 4. Address, to the extent practicable, the source of groundwater impacts.
RAO for Soil Vapor
1. Mitigate impacts to public health resulting from soil vapor intrusion of MGP-related impacts into OU-2 residences.

As stated in Section 3.1, the MGP OU-2 SRI Report and the Pappas OU-2 ROD indicates that exposures to impacted soil and groundwater are unlikely due to the depth of remaining impacts. The Pappas OU-2 ROD only presents RAOs related to mitigating exposures to impacted groundwater and soil vapor. Both reports indicate that exposure via soil vapor intrusion was the only potentially complete pathway (because residents are provided with a municipal water supply and therefore there is no exposure to impacted groundwater). The potential for soil vapor exposure has since been addressed through the SSDS IRMs.

Therefore, the above-listed RAOs for MGP OU-2 have largely been achieved by the remedial activities completed at MGP OU-1 and the IRM installed in Pappas OU-2.

4. Technology Screening and Development of Remedial Alternatives

The objective of the technology screening conducted as a part of this FS Report is to present general response actions (GRAs) and associated remedial technology types and technology process options that have documented success at achieving similar RAOs at MGP sites, and to identify options that are implementable and potentially effective at addressing site-specific concerns. Based on this screening, remedial technology types and technology process options were eliminated or retained and subsequently combined into potential remedial alternatives for more detailed evaluation. This approach is consistent with the screening and selection process provided in DER-10.

This section identifies potential remedial alternatives to address impacted media. As an initial step, GRAs potentially capable of addressing media containing MGP-related residuals were identified. GRAs are medium-specific and may include various non-technology specific actions such as treatment, containment, institutional controls, and excavation. Based on the GRAs, potential remedial technology types and process options were identified and screened to determine the technology types and associated technology process options that were the most appropriate. Technology types/process options that were retained through the screening were used to develop potential remedial alternatives. Detailed evaluations of these assembled remedial alternatives are presented in Section 5.

According to DER-10, the term “technology type” refers to a general category of technologies appropriate to the site-specific conditions and impacts, such as chemical treatment, immobilization, biodegradation, capping. The term “technology process option” refers to a specific process within a technology type. For each GRA identified, a number of technology types and associated technology process options were identified. In accordance with DER-10, each remedial technology type and associated technology process options are briefly described and screened, on a medium-specific basis, to identify those that are technically implementable and potentially effective given site-specific conditions.

4.1 Identification of Remedial Technologies

Remedial technology types that are potentially applicable for addressing the impacted media that were identified through a variety of sources, including vendor information, engineering experience, and review of available literature that included, but not limited to, the following documents:

- *Technical Guidance for Site Investigation and Remediation* (DER-10) (NYSDEC, 2010a).

- "Management of Manufactured Gas Plant Sites" (Gas Research Institute [GRI], 1996).

- *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (USEPA, 1988).

Section 4.3(a)(3)(iv) of DER-10 indicates that GRAs should be established such that they give preference to presumptive remedies. Although each former MGP site offers its own unique site characteristics, the evaluation of remedial technology types and process options that are applicable to MGP-related impacts, or have been implemented at other MGP sites, is well documented. Therefore, this collective knowledge and experience, and regulatory acceptance of previous feasibility studies performed on MGP sites with similar impacts, was used to reduce the universe of potentially applicable process options to those with documented success in achieving similar RAOs.

4.2 General Response Actions

Based on the RAOs identified in Section 3, the following GRAs have been established for soil and groundwater:

- No Action

- Institutional Controls

- In-Situ Containment/Control

- In-Situ Treatment

- Removal

- Ex-Situ On-Site Treatment/Disposal

- Off-Site Treatment/Disposal

4.3 Remedial Technology Screening Criteria

Potentially applicable remedial technology types and technology process options were identified for each of the GRAs, and were screened on a medium-specific basis to retain the technology types and process options that could be implemented and would potentially be effective at achieving the site-specific RAOs. Screening was conducted to identify potential technology types and technology process options that could address impacted soil and groundwater.

Technology process options were evaluated relative to other technology process options of the same remedial technology type using the following criteria:

- *Implementability* – This criterion evaluates the ability to construct and reliably operate the technology process option, as well as the availability of specific equipment and technical specialists to design, install, and operate and maintain the remedy.

- *Effectiveness* – This criterion is focused on the process option’s ability to meet the site-specific RAOs, either as single technology or when used in combination with other technologies.

Combined, these criteria are used to evaluate the feasibility of a technology, as defined in 6 NYCRR 375-1.2(s), i.e., “suitable to site conditions, capable of being successfully carried out with available technology, implementable and cost effective,”

4.4 Remedial Technology Screening

The objective of this FS Report is to briefly present GRAs and associated technology types; however, quickly focus on the remedial technology types and associated process options that have documented success at achieving similar RAOs at former MGP sites. The identified remedial technologies for addressing impacted soil and groundwater are presented in Tables 6 and 7, respectively. Remedial technologies retained for soil and groundwater are summarized in the following tables.

Table 4.1 – Retained Soil Technologies

Soil GRAs	Technology Type	Technology Process Option
No Action	No Action	No Further Action
Institutional Controls/ Engineering Controls	Institutional Controls	Deed Restrictions, Environmental Land Use Restrictions, Enforcement and Permit Controls, Informational Devices
Removal	Excavation NAPL Removal	Excavation Active Removal, Passive Removal
Off-Site Treatment and/or Disposal	Extraction Disposal	Low-Temperature Thermal Desorption (LTTD) Solid Waste Landfill

Table 4.2 – Retained Groundwater Technologies

Groundwater GRAs	Technology Type	Technology Process Option
No Action	No Action	No Further Action
Institutional Controls/ Engineering Controls	Institutional Controls	Deed Restrictions, Groundwater Use Restrictions, Environmental Land Use Restrictions, Enforcement and Permit Controls, Informational Devices
In-Situ Treatment	Biological Treatment	Groundwater Monitoring/Monitored Natural Attenuation (MNA), Enhanced MNA

As indicated in Table 7, there are many technical challenges associated with implementing in-situ treatment technologies in OU-2.

- For active treatment systems (e.g., biosparging, chemical oxidation, etc.) delivery of the gas/chemicals to the relatively thin (i.e., 5 feet thick or less) saturated zone would be difficult.

- In-situ treatment technologies could also result in volatilization of MGP- and CVOC-related impacts and an associated increased potential for soil vapor intrusion into utility corridors or residential structures located throughout OU-2 and therefore may require additional vapor recovery/mitigation systems to be installed as part of the remedy to eliminate potential exposure pathways.

- Permeable reactive barriers (PRBs) are not considered implementable as the walls would need to be installed within or adjacent to roadways (i.e., through utilities corridors) or on private property, which would cause a significant disruption to the neighborhood during initial installation and change out of PRB media.

Additionally, although excavation is retained to satisfy the DER-10 requirement of evaluating an alternative that restores OU-2 to pre-release/pre-disposal conditions, other excavation or in-situ soil solidification (ISS) alternatives are not warranted or retained. As discussed in Section 1, small NAPL globules in OU-2 were observed within the pore spaces of the loose, sandy gravel in the shallow aquifer at thicknesses of generally 2 feet or less, at depths ranging from approximately 11 to 17 feet bgs. Grossly impacted soil with NAPL (i.e., source material) was not encountered in OU-2. Therefore, these intrusive technologies are not an effective or reasonable means to achieve the RAOs presented in Section 3 based on the minimal potential for exposure to the limited impacts that currently remain and significant disruption to the community that would result from implementing these technologies (including the relocation of subsurface gas distribution lines and associated gas regulator station, and overhead electric lines located along the northern portion of the NYSEG-owned property). The RAOs for OU-2 have largely been achieved through the remedial construction activities completed at OU-1 and can be further enhanced/achieved through non-intrusive activities at OU-2, as presented in Section 5.

4.5 Assembly of Remedial Alternatives

Retained remedial technology types and technology process options were combined into remedial alternatives that have the potential to achieve or work toward achieving site-specific RAOs. DER-10 requires an evaluation of the following alternatives:

- The “No-Action” alternative
- An alternative that would restore the site to pre-disposal conditions

Additional alternatives were developed based on:

- Current, intended and reasonably anticipated future use of the site
- Removal of MGP-related source areas of contamination

These remedial considerations require varying levels of remediation but provide protection of public health and the environment by preventing or minimizing exposure to the COCs through the use of institutional controls; removing MGP-related COCs to the extent possible thereby minimizing the need for long-term management; and treating COCs, but vary in the degree of treatment employed and long-term management required.

Remedial alternatives that have been assembled and developed for addressing the impacted media are presented in the following subsections. Technical descriptions and detailed evaluations of the remedial alternatives are presented in Section 5.

4.5.1 Alternative 1 – No Action

The "No Action" alternative was retained for evaluation as required by DER-10. Under this alternative, no remedial activities would be completed to address MGP-related impacts in OU-2. The "No Action" alternative serves as the baseline for comparison of the overall effectiveness of the other remedial alternatives. The "No Action" alternative would not include implementation of any remedial activities to address the COCs (i.e., BTEX and PAHs) in the soil or groundwater and OU-2 would be allowed to remain in its current condition; no effort would be made to change or monitor future site conditions.

4.5.2 Alternative 2 – Groundwater Monitoring

Alternative 2 would include re-establishing a monitoring well network and conducting periodic groundwater monitoring to confirm the extent of dissolved phase impacts and document the trends in COC concentrations now that the source material within OU-1 has been removed. As part of this alternative, a pre-design investigation (PDI) would be conducted to assess the conditions of the existing monitoring well network, identify locations and install additional monitoring wells, as appropriate and feasible, to delineate and monitor dissolved BTEX and PAHs. The monitoring wells installed during the PDI would facilitate long-term periodic sampling. During the PDI, groundwater samples would be collected from the monitoring well network to evaluate current dissolved phase concentrations of BTEX and PAHs in OU-2 groundwater. This alternative assumes that groundwater monitoring would be conducted over a 30-year period. Alternative 2 would also include institutional controls in the form of an SMP for OU-2 and an environmental easement for the NYSEG-owned property. However, deed restrictions or environmental easements are not anticipated to be feasible for non-NYSEG-owned property.

4.5.3 Alternative 3 – Enhanced Natural Attenuation and NAPL Monitoring

Alternative 3 is similar to Alternative 2; however, would also include a means to enhance the natural degradation processes already occurring in OU-2 and passive NAPL recovery. Similar to Alternative 2, Alternative 3 would include a PDI to assess the conditions of the existing monitoring wells and network and the install new monitoring wells to evaluate current dissolved concentrations of BTEX and PAHs in

OU-2 groundwater, as well as to identify the presence of a microbial community and the potential to enhance the community's effectiveness at attenuating MGP-related dissolved phase groundwater impacts.

Under Alternative 3, the natural degradation would be enhanced through the passive application of a groundwater amendment via application wells installed within roadways, right-of-ways, on the NYSEG-owned property, or at select locations on private property. Groundwater amendments would potentially include an oxygen releasing material (ORM) to promote aerobic degradation on a local level (i.e., in the immediate vicinity of the application wells) or nutrients such as a sulfate/nitrate product to enhance the already occurring anaerobic degradation processes, as would be determined during the remedial design phase for this alternative. NAPL monitoring (and removal, if recoverable quantities are encountered) would also be conducted as part of periodic site activities.

4.5.4 Alternative 4 – Soil Removal to Unrestricted Use SCOs

Alternative 4 includes excavating soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs. Excavation activities would include the removal of an estimated 102,000 cy of soil at depths up to 17 feet bgs (or the top of the silty clay unit), to address an estimated 44,000 cy subsurface soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs from depths generally ranging from 11 to 17 feet below grade. Based on available data, approximately 14 private homes would require demolition/removal/relocation to facilitate the excavation activities. This alternative would require significant coordination and cooperation between NYSDEC, the Village of Dansville, NYSEG, and the private property owners.

5. Detailed Evaluation of Alternatives

This section presents detailed descriptions of the remedial alternatives developed to address environmental impacts identified to date. Each of the retained remedial alternatives is evaluated with respect to the criteria presented in DER-10. The results of the detailed evaluation of the remedial alternatives are used to aid in the recommendation of a preferred remedial alternative for addressing impacted media.

5.1 Description of Evaluation Criteria

Consistent with DER-10, the detailed evaluation of remedial alternatives presented in this section consists of an evaluation of each assembled alternative (presented in Section 4.5) against the following criteria:

- Short-Term Impacts and Effectiveness
- Long-Term Effectiveness and Permanence
- Land Use
- Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment
- Implementability
- Compliance with SCGs
- Overall Protectiveness of the Public Health and the Environment
- Cost Effectiveness

Descriptions of the evaluation criteria are presented in the following subsections. Additional criteria, including community acceptance, will be addressed following submittal of this FS Report, after the decision document is subject to public comment per Section 4.2(a)(2) of DER-10.

Per DER-10, sustainability and green remediation will also be considered in the remedial evaluation with the goal of minimizing ancillary environmental impacts such as greenhouse gas emissions (GHGs) during the implementation of remedial programs. The evaluation will consider the alternative's ability to reduce energy use; reduce greenhouse gas and other emissions; maximize reuse of land and recycling of materials; and preserve, enhance, or create natural habitats, etc. Sustainability and green remediation will be discussed under the short-term impacts and effectiveness criterion.

5.1.1 Short-Term Impacts and Effectiveness

The short-term impacts and effectiveness criterion is used to evaluate the remedial alternative relative to its potential effect on public health and the environment during construction and/or implementation of the alternative. The evaluation of each alternative with respect to its short-term impacts and effectiveness considers the following:

- Potential short-term adverse impacts and nuisances to which the public and environment may be exposed during implementation of the alternative.
- Potential impacts to workers during implementation of the remedial actions and the effectiveness and reliability of protective measures.
- Amount of time required to implement the remedy and the time until the remedial objectives are achieved.
- The sustainability and use of green remediation practices utilized during implementation of the remedy.

5.1.2 Long-Term Effectiveness and Permanence

The evaluation of each remedial alternative relative to its long-term effectiveness and permanence is made by considering the risks that may remain following completion of the remedial alternative. The following factors will be assessed in the evaluation of the alternative's long-term effectiveness and permanence:

- Potential impacts to human receptors, ecological receptors, and the environment from untreated waste or treatment residuals remaining at the completion of the remedial alternative.
- The adequacy and reliability of institutional and/or engineering controls (if any) that will be used to manage treatment residuals or remaining untreated impacted media.

5.1.3 Land Use

This criterion evaluates the current and intended future land use of the site relative to the cleanup objectives of the remedial alternative when unrestricted use cleanup levels would not be achieved. This evaluation considers local zoning laws, proximity to residential property, accessibility to infrastructure, and proximity to natural resources including groundwater drinking supplies.

5.1.4 Reduction of Toxicity, Mobility or Volume of Contamination through Treatment

This evaluation criterion addresses the degree to which the remedial alternative will permanently reduce the toxicity, mobility, or volume of the constituents present in the media through treatment.

5.1.5 Implementability

This criterion addresses the technical and administrative feasibility of implementing the remedial alternative, including the availability of the various services and materials required for implementation. The following factors will be considered during the implementability evaluation:

- *Technical Feasibility* – This factor considers the remedial alternative's constructability, as well as the ability to monitor the effectiveness of the remedial alternative.

- *Administrative Feasibility* – This factor refers to the availability of necessary personnel and material along with potential difficulties in obtaining approvals for long-term operation of treatment systems, access agreements for construction, and acquiring necessary approvals and permits for remedial construction.

5.1.6 Compliance with SCGs

This criterion evaluates the remedial alternative’s ability to comply with SCGs that were identified in Section 2. Compliance with the following items is considered during evaluation of the remedial alternative:

- Chemical-specific SCGs

- Action-specific SCGs

- Location-specific SCGs

Potentially applicable chemical-, action-, and location-specific SCGs are presented in Tables 3, 4 and 5, respectively.

5.1.7 Overall Protectiveness of the Public Health and Environment

This criterion evaluates whether the remedial alternative provides adequate protection of public health and the environment based on the following:

- How the alternative would eliminate, reduce, or control (through removal, treatment, containment, other engineering controls, or institutional controls) any existing or potential human exposures or environmental impacts that have been identified.

- The ability of the remedial alternative to meet the site-specific RAOs.

- A combination of the above-listed criteria including: long-term effectiveness and permanence; short-term impacts and effectiveness; and compliance with SCGs.

5.1.8 Cost Effectiveness

This criterion evaluates the overall cost of the alternative relative to the effectiveness of the alternative (i.e., cost compared to long-term effectiveness and permanence, short-term impacts and effectiveness, and reduction of toxicity, mobility, and volume through treatment).

The estimated total cost to implement the remedial alternative is based on a present worth analysis of the sum of the direct capital costs (i.e., materials, equipment, and labor), indirect capital costs (i.e., engineering, licenses/permits, and contingency allowances), and operation and maintenance (O&M) costs. O&M costs may include future site management, operating labor, energy, chemicals, and sampling and analysis. These costs will be estimated with an anticipated accuracy between -30% to +50%. A 20% contingency factor is included to cover unforeseen costs incurred during implementation of the remedial alternative. Present-worth costs are calculated for alternatives expected to last more than 2 years. A 4% discount (i.e., interest) rate is used to determine the present-worth factor.

5.2 Detailed Evaluation Remedial Alternatives

This subsection presents the detailed analysis of each of the alternatives previously identified in Section 4.

- Alternative 1 – No Action
- Alternative 2 – Groundwater Monitoring
- Alternative 3 – Enhanced Natural Attention and NAPL Monitoring
- Alternative 4 – Soil Removal to Unrestricted Use SCOs

Each alternative is evaluated against the evaluation criteria described in Section 5.1 (as indicated, public acceptance will be evaluated following submittal of this FS Report).

5.2.1 Alternative 1 – No Action

The "No Action" alternative was retained for evaluation as required by DER-10. The "No Action" alternative serves as the baseline for comparison of the overall effectiveness of the other remedial alternatives. The "No Action" alternative would not involve implementation of any remedial activities to address MGP-related impacts. OU-2 would be allowed to remain in its current condition and no effort would be made to change or monitor the current or future conditions. However, the remedial activities that have been completed at OU-1 have removed the source of MGP-related impacts and only residual impacts remain in OU-2.

5.2.1.1 Short-Term Impacts and Effectiveness – Alternative 1

No remedial actions would be implemented to address impacted environmental media. Therefore, there would be no short-term environmental impacts, nor risks associated with remedial activities posed to the community.

5.2.1.2 Long-Term Effectiveness and Permanence – Alternative 1

Under the "No Action" alternative, the COCs in media or the potential for on-going releases and/or migration of residual impacts would not be directly addressed. However, as discussed in Section 1, grossly impacted MGP-related source material has been remediated in OU-1. Only residual quantities of MGP-related impacts remain in OU-2 and natural degradation process are occurring. Therefore, dissolved phase impacts in OU-2 groundwater could be reduced over time. Additionally, the community is serviced with a municipal water supply and the need to conduct future intrusive activities at depths where residual impacts could be present (i.e., greater than 10 feet bgs) is highly unlikely.

5.2.1.3 Land Use – Alternative 1

The current zoning for OU-2 consists of industrial and residential use. The NYSEG-owned property and areas to the north and east are zoned for Light Industrial (I-1). Areas west of the NYSEG-owned property are zoned for Low Density Residential (LR-2). The current and foreseeable future use of the OU-2 is industrial and residential. The majority of OU-2 will continue to be used for residential homes.

No remedial actions would be completed under this alternative and OU-2 would remain in its current condition. The “No Action” alternative would not alter the anticipated future intended use of properties within OU-2.

5.2.1.4 Reduction of Toxicity, Mobility or Volume of Contamination through Treatment – Alternative 1

Under the “No Action” alternative, environmental media would not be treated, recycled, or destroyed. As discussed in Section 1, MGP-related source material has been addressed in OU-1 and natural degradation process are occurring in OU-2, thereby reducing the toxicity and volume of groundwater containing MGP-related impacts. However, without any monitoring, the degree of degradation and reduction of impacts would not be documented.

5.2.1.5 Implementability – Alternative 1

The “No Action” alternative does not require implementation of any remedial activities, and therefore is technically and administratively implementable.

5.2.1.6 Compliance with SCGs – Alternative 1

- *Chemical-Specific SCGs* – Because removal or treatment is not included as part of this alternative, the chemical-specific SCGs for soil would not be met by this alternative. However, groundwater SCGs could be achieved over a prolonged period of time, given that natural degradation of dissolved phase impacts is already occurring in OU-2.

- *Action-Specific SCGs* – This alternative does not involve implementation of any remedial activities; therefore, the action-specific SCGs are not applicable.

- *Location-Specific SCGs* – Because no remedial activities would be conducted under this alternative, the location-specific SCGs are not applicable.

5.2.1.7 Overall Protectiveness of the Public Health and the Environment – Alternative 1

MGP-related source material has been addressed by the remedial activities completed at OU-1. The “No Action” alternative would rely on the already-occurring natural degradation processes to reduce the toxicity and volume of groundwater containing MGP-related dissolved phase impacts.

Although Alternative 1 does not include any active remedial measures; engineering controls; or institutional controls, future exposure to media containing residual MGP-related impacts is unlikely. Therefore, based on the depth to residual impacts, Alternative 1 would work toward preventing exposures (i.e., direct contact, ingestion, and inhalation) to MGP-related impacts in soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2). Additionally, SSDSs have been installed to address CVOC soil vapor concerns, but MGP-related soil vapor concerns have not been identified in OU-2. Potential future MGP-related soil vapor concerns (although not anticipated) would be addressed by the existing SSDSs (soil vapor RAO #1).

While the excavation activities completed at OU-1 have addressed a majority of the source for dissolved phase impacts in OU-2 and mobile impacts likely do not remain (soil RAO #3), Alternative 1 would not actively address residual NAPL or impacted soil (groundwater RAO #4), but the already-occurring natural attention processes could restore groundwater to pre-release/pre-disposal conditions (groundwater RAO #3) over time.

5.2.1.8 Cost Effectiveness – Alternative 1

The “No Action” alternative does not involve implementation of any active remedial activities or monitoring conditions; therefore, there are no costs associated with this alternative.

5.2.2 Alternative 2 – Groundwater Monitoring

The major components of Alternative 2 include the following:

- *Installing a groundwater monitoring well network, as appropriate and feasible*
- *Conducting long-term groundwater monitoring*
- *Preparing and implementing an SMP*
- *Establishing institutional controls on the NYSEG-owned property*

Alternative 2 is consistent with the NYSDEC-selected remedy of "No Further Action" for Pappas OU-2, as presented in the Pappas OU-2 ROD (NYSDEC, 2013).

New Groundwater Monitoring Wells

Alternative 2 would include installing monitoring wells and conducting periodic groundwater monitoring to confirm the extent of dissolved phase impacts and document the trends in COC concentrations now that the source material within OU-1 has been removed. As part of this alternative, a PDI would be conducted to assess the conditions of the existing monitoring well network, identify locations and install additional monitoring wells, as appropriate and feasible, to delineate and monitor dissolved phase concentrations of BTEX and PAHs. Most of the monitoring wells on the NYSEG property were decommissioned during the 2014 remedial construction activities and many of the piezometers installed within Franklin Street and at private homes have been abandoned or destroyed. Only select piezometers remain between Battle and Franklin Street, north of Franklin Street at private homes, and in Morse Street. The monitoring wells installed during the PDI would facilitate long-term periodic sampling. For the purpose of developing this alternative, the PDI is assumed to consist of the installation of 10 new groundwater monitoring wells. The final number and location of new wells would be evaluated as part of the PDI/remedial design. Wells would be constructed with 2-inch diameter polyvinyl chloride (PVC) and screened in the saturated zone above the silty clay confining unit (e.g., 10 to 20 feet bgs).

Groundwater Monitoring

As discussed in Section 1, dissolved phase concentrations of MGP-related impacts (i.e., BTEX and PAHs) only exceeded NYSDEC Class GA standards and guidance values in groundwater samples collected from a limited number of locations. Additionally, analytical data results for groundwater samples collected during the Pappas OU-2 Remedial Investigation indicated that BTEX or PAH concentrations only slightly exceeding NYSDEC Class GA standards and guidance values and occurrences have been either sporadic or concentrations are steadily decreasing. Historically, groundwater samples collected from piezometer PZ36 typically contained some of the highest BTEX (and CVOC) concentrations in OU-2. However, given the extent of soil removal completed south of Battle Street (i.e., during the 2014 remedial construction activities at the MGP and during the 2012 remedial construction at the Pappas Dry Cleaners site), the source of dissolved phase impacts has been removed and dissolved phase concentrations hydraulically downgradient are anticipated to decrease over time.

During the PDI, groundwater samples would be collected from the monitoring well network to evaluate dissolved phase concentrations of BTEX and PAHs in OU-2. Following the initial groundwater sampling/installation of new monitoring wells, groundwater sampling would be conducted periodically (e.g., annually) for an assumed 30-year period to document changes in groundwater conditions. Groundwater samples would be submitted for laboratory analysis for BTEX and PAHs. The results of the groundwater monitoring would be presented to NYSDEC in periodic reports. Based on the results of the monitoring activities, NYSEG may propose to modify the quantity of wells sampled or the frequency of sampling events.

It can be reasonably anticipated that natural attention processes are occurring within the MGP-related dissolved phase plume in OU-2 based on the following:

- Anaerobic conditions were present in the subsurface at OU-1 (i.e., based on observed nitrate reduction, manganese and iron reduction, and sulfate reduction) (as indicated in the Draft Synoptic Sampling Report).

- Anaerobic degradation was only occurring at locations containing comingled BTEX and CVOC compounds (as indicated in the Pappas OU-2 RI Report).

- The natural degradation processes for chlorinated solvents (namely TCE) is known to consume benzene.

Therefore, the degradation of the CVOCs present in OU-2 could be supplementing the natural attention processes already occurring for the MGP-related dissolved phase impacts.

Site Management Plan

Alternative 2 would also include institutional controls in the form of an SMP. The SMP would document the following:

- The institutional controls that have been established will be maintained for the NYSEG-owned portion of OU-2.
- Protocols and requirements for conducting periodic groundwater monitoring.
- Protocols for addressing significant changes in COC concentrations in groundwater based on the results of the periodic monitoring activities.
- Known locations of soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs.
- Protocols, including health and safety requirements, for conducting invasive (i.e., subsurface) activities at depths potentially containing impacted media and managing potentially impacted material encountered during these activities.
- Protocols and requirements for a soil vapor intrusion evaluation if new occupied structures are built in OU-2.

Institutional Controls

Alternative 2 would also include establishing institutional controls on the NYSEG-owned property in the form of deed restrictions or environmental easements to control intrusive (i.e., subsurface) activities that could result in potential exposures to subsurface soil and groundwater containing residual MGP-related impacts at concentrations greater than applicable standards and guidance values. Additionally, the institutional controls would prohibit the use of groundwater from the NYSEG-owned property. As OU-2 also included of properties not owned by NYSEG, deed restrictions and environmental easements are not anticipated to be feasible for non-NYSEG-owned private property. To the extent feasible, new monitoring wells would be installed in public areas (i.e., roadways). However, if monitoring wells were required on private property, NYSEG would need to obtain access agreements (i.e., sidebar agreements) with the property owners to initially install, and then access the monitoring wells during the periodic monitoring activities.

5.2.2.1 Short-Term Impacts and Effectiveness – Alternative 2

Implementation of this alternative could result in short-term exposure to the surrounding community and field personnel. Potential short-term exposures to impacted soil, groundwater, and/or NAPL could occur during installation of new wells. Potential exposure mechanisms could include ingestion of, or dermal contact with, impacted soil, groundwater, and NAPL and/or inhalation of volatile organic vapors.

Potential exposures to field personnel would be minimized through the use of proper training and personal protective equipment (PPE), as specified in a site-specific health and safety plan (HASP) that would be developed as part of the remedial design for this alternative. Air monitoring would be performed during well installation activities to confirm that volatile organic vapors are within acceptable levels (to be specified in the site-specific HASP). Potentially impacted soil and groundwater generated during well installation activities would be properly managed to minimize potential exposures to the surrounding community. While considered unlikely, potential risks to the community could occur during periodic groundwater monitoring activities via exposure to purged groundwater, groundwater samples, and/or NAPL. Potential exposures to the community would be minimized by following appropriate procedures and protocols that would be described in the SMP.

Although this alternative does not employ green remediation practices, implementation of this alternative would utilize minimal non-renewable resources and is not anticipated to negatively impact the environment (i.e., consume non-renewable resources and energy). The relative carbon footprint of Alternative 2 (compared to the other alternatives) is considered minimal. The greatest contribution to greenhouse gases would occur as a result of equipment used during well installation activities.

Well installation activities could be completed in less than one month and monitoring would be conducted over an assumed 30-year period.

5.2.2.2 Long-Term Effectiveness and Permanence – Alternative 2

Under Alternative 2, soil and groundwater in OU-2 that contains residual MGP-related COCs would not actively be addressed. However, as previously discussed, the excavation activities completed at OU-1 removed a majority of the material that served as a source for dissolved phase MGP-related impacts. Soil and groundwater containing residual MGP-related impacts would remain in OU-2 (i.e., at depths generally greater than 10 feet below grade). However, the community is serviced with a municipal water supply. The need to conduct subsurface activities (e.g., installation of new utilities) is limited, but based on the depth of remaining impacts (i.e., generally greater than 10 feet bgs), exposure to impacted media is unlikely. Regardless, work activities (including handling potentially impacted material) would be conducted in accordance with the procedures described in the SMP to reduce the potential for exposures to impacted media.

Alternative 2 would include the establishment of institutional controls on the NYSEG-owned property, establishment of access agreements with property owners (as necessary), and development of a long-term groundwater monitoring program. Additionally, although OU-2 is serviced with a municipal water supply, the institutional controls would prohibit potable uses of groundwater at the NYSEG-owned property. Annual verification of the institutional controls would be completed to document that the controls are maintained and remain effective.

As discussed in Section 1, the extent of MGP-related dissolved phase impacts is limited and natural attenuation processes are already occurring in OU-2. Periodic groundwater monitoring would be conducted to document the extent of dissolved phase impacts and the anticipated continued reduction of COC concentrations in OU-2 groundwater. Potential exposures to field personnel and the community during long-term groundwater monitoring activities would be reduced by following appropriate procedures and protocols that would be established in the SMP.

5.2.2.3 Land Use – Alternative 2

Alternative 2 would not affect the current or anticipated future land use of OU-2. Institutional controls (e.g., an environmental easement) would be placed on the NYSEG-owned property. If the NYSEG property were to be redeveloped and/or sold to another party, the SMP would be provided to potential future site owners and institutional controls would remain in place. Future property owners/operators would be required to conduct activities in accordance with the SMP and institutional controls established for the property based on the continued presence of residual soil and groundwater containing MGP-related COCs. Although groundwater monitoring would be conducted in the non-NYSEG-owned portion of OU-2 for an assumed 30 years, the periodic monitoring activities would not alter the current or potential future use of the properties.

5.2.2.4 Reduction of Toxicity, Mobility or Volume of Contamination through Treatment – Alternative 2

Alternative 2 does not include direct treatment or containment of impacted in OU-2. However, the excavation activities completed in OU-1 removed a majority of the material that served as a source for dissolved phase impacts. As discussed in Section 1, the extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values is limited. At many locations, COC concentrations only slightly exceeded the standards and guidance values, are detected sporadically, or have been generally decreasing since 2005. Therefore, Alternative 2 includes periodic groundwater monitoring to document the extent and anticipated long-term reduction (i.e., toxicity and volume) of dissolved phase groundwater impacts.

5.2.2.5 Implementability – Alternative 2

This remedial alternative would be both technically and administratively implementable. From a technical implementability aspect, equipment and personnel qualified to install groundwater monitoring wells and conduct groundwater monitoring activities are readily available. Administratively, institutional controls would be established for the NYSEG-owned property in OU-2. Institutional controls are not anticipated to be feasible for non-NYSEG-owned properties. As discussed previously, new monitoring wells would be installed in public areas (i.e., roadways), to the extent feasible. If monitoring wells were required on private property, NYSEG would need to obtain access agreements with the property owners to install the wells during the PDI and access the wells during the subsequent periodic monitoring activities.

5.2.2.6 Compliance with SCGs – Alternative 2

- *Chemical-Specific SCGs* – Chemical-specific SCGs are presented in Table 3. Potentially applicable chemical-specific SCGs for soil include 6 NYCRR Part 375-6 soil cleanup objectives and 40 CFR Part 261 and 6 NYCRR Part 371 regulations for the identification of hazardous materials. Potentially applicable chemical-specific SCGs for groundwater include NYSDEC Class GA standards and guidance values.

  Alternative 2 would not address soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 SCOs. Subsurface soil containing residual MGP-related impacts would remain in place beneath surface materials (e.g., pavement, concrete, buildings, and vegetated surfaces). Process residuals generated during the implementation of this alternative (e.g., drilling waste and development/purge water from well installation) would be managed and characterized in accordance with 40 CFR 261 and 6 NYCRR Part 371 to determine off-site treatment/disposal requirements. NYS LDRs would apply to any materials that are characterized as a hazardous waste.

As indicated in Section 1, OU-2 groundwater contains MGP-related COCs at concentrations greater than NYSDEC Class GA standards and guidance values. However, where exceedances occurred, concentrations only slightly exceed standards and guidance values at most sampling locations. Based on the extent of excavation activities completed at OU-1, this alternative could achieve groundwater SCGs through the continued natural degradation of residual dissolved phase impacts.

- *Action-Specific SCGs* – Action-specific SCGs are presented in Table 4. Potentially applicable action-specific SCGs include health and safety requirements and regulations associated with handling impacted media. Work activities would be conducted in accordance with OSHA requirements that specify general industry standards, safety equipment and procedures, and record keeping and reporting regulations. Compliance with these action-specific SCGs would be accomplished by following a site-specific HASP.

  Process residuals would be subject to USDOT requirements for packaging, labeling, manifesting, and transporting hazardous or regulated materials. Compliance with these requirements would be achieved by following a NYSDEC-approved Remedial Design/Remedial Action (RD/RA) Work Plan and using licensed waste transporters and permitted disposal facilities. If any of the materials are characterized as a hazardous waste, NYS LDRs could be applicable.

- *Location-Specific SCGs* – Location-specific SCGs are presented in Table 5. Potentially applicable location-specific SCGs generally include local building codes and sewer discharge and construction permits. Remedial activities would be conducted in accordance with Village of Dansville building/construction codes and ordinances.

5.2.2.7 Overall Protectiveness of the Public Health and the Environment – Alternative 2

Alternative 2 would mitigate the potential for long-term exposures residual MGP-related impacts by monitoring groundwater conditions and implementing institutional controls on the NYSEG-owned property. This alternative would not utilize containment, treatment, or removal to address soil or groundwater containing residual MGP-related COCs at concentrations greater than applicable standards and guidance values. However, as discussed in Section 1: only small NAPL globules remain in OU-2; the extent of groundwater containing dissolved impacts is limited; and natural attenuation of dissolved phase impacts is already occurring.

Soil and groundwater containing residual MGP-related impacts are generally located at depths greater than 10 feet bgs and potable water is obtained from a municipal water supply. Although exposure is unlikely (based on the depth to residual impacts), future intrusive activities (e.g., utility installation) in OU-2 would be conducted in accordance with an SMP. Therefore, Alternative 2 would prevent exposures (i.e., direct contact, ingestion, and inhalation) to MGP-related impacts in soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2) through the implementation of institutional controls (e.g., following the procedures that would be established in the SMP). MGP-related soil vapor concerns have not been identified in OU-2. However, the SMP would provide requirements and protocols for evaluating the potential for soil vapor intrusion and addressing soil vapor intrusion concerns in future occupied buildings in OU-2 (soil vapor RAO #1).

Based on the results of the completed investigation activities, MGP-related COCs and source materials are not migrating (beyond their current extent) and natural attenuation of dissolved phase impacts and small NAPL globules is occurring (i.e., dissolved phase concentrations of MGP-related COCs have decreased over time). However, Alternative 2 does not include active measures to address the potential for further migration of MGP-related COCs and the small NAPL globules (soil RAO #3). While the excavation activities completed at OU-1 have addressed a majority of the source for dissolved phase impacts in OU-2, Alternative 2 would not actively address residual NAPL or impacted soil (groundwater RAO #4), but the already-occurring natural attention processes could restore groundwater to pre-release/pre-disposal conditions (groundwater RAO #3) over time.

5.2.2.8 Cost Effectiveness – Alternative 2

The estimated costs associated with Alternative 2 are presented in Table 8. The total estimated 30-year present worth cost for this alternative is approximately $700,000. The estimated capital cost, including costs for installing new groundwater monitoring wells (as part of the PDI) and establishing institutional controls, is approximately $180,000. The estimated 30-year present worth cost of O&M activities associated with this alternative, including conducting annual groundwater monitoring, is approximately $542,000.

5.2.3 Alternative 3 – Enhanced Natural Attenuation and NAPL Monitoring

The major components of Alternative 3 would include the following:

- *Installing a monitoring well network, as appropriate and feasible*
- *Installing NAPL monitoring wells, as appropriate*
- *Enhancing the natural degradation of dissolved phase impacts*
- *Conducting long-term groundwater and NAPL monitoring/recovery*
- *Developing and implementing an SMP*
- *Establishing institutional controls*

Alternative 3 is similar to Alternative 2; however, would also include a means to enhance the natural degradation processes already occurring in OU-2 and recover mobile NAPL (if any remains).

<u>New Groundwater and NAPL Monitoring Wells</u>

Similar to Alternative 2, Alternative 3 would include installation of new monitoring wells to evaluate dissolved concentrations of BTEX and PAHs in OU-2 groundwater, as well as to identify the presence of a microbial community and the community's effectiveness at attenuating MGP-related dissolved phase impacts. Additionally, based on the extent of NAPL observed in soil samples collected during installation of the monitoring wells (if any), the monitoring wells could be constructed and used as NAPL monitoring locations and/or new NAPL monitoring wells could be installed as part of the new network. Although potentially mobile NAPL was addressed by the remedial activities completed in OU-1, the NAPL monitoring wells would be used to determine if any mobile/recoverable quantities of NAPL remain in OU-2.

Similar to Alternative 2, for the purpose of developing this alternative, the PDI is assumed to consist of installing 10 new groundwater monitoring wells. In addition, six NAPL monitoring wells would be installed as part of Alternative 2. The final number and location of new wells would be evaluated as part of the PDI/remedial design. Wells would be constructed with 2-inch and 4-inch diameter PVC (i.e., for groundwater and NAPL monitoring wells, respectively) and screened in the saturated zone at or above the silty clay confining unit.

Groundwater and NAPL Monitoring/Recovery

Following installation of the monitoring wells and initial groundwater sampling, groundwater sampling and NAPL monitoring/recovery would be conducted periodically for an assumed 30-year period to document changes in site groundwater conditions. Although mobile NAPL is not anticipated to remain in OU-2, if recoverable quantities of NAPL are observed in the monitoring wells, the NAPL would be recovered from the wells via passive removal (e.g., bailing or pumping), containerized, and transported off-site for treatment/disposal. The results of the groundwater sampling and NAPL monitoring would be presented to NYSDEC in periodic reports. Based on the results of the monitoring activities, NYSEG may propose to modify the quantity of wells sampled or the frequency of sampling events.

Enhancing Natural Degradation

Under Alternative 3, the PDI would also include analysis of groundwater samples for various geochemical characteristics (e.g., DO, carbon dioxide, iron, sulfate, nitrite, methane, etc.) to identify the presence of a microbial community and the community's effectiveness at attenuating MGP-related dissolved phase groundwater impacts. The evaluation will ultimately conclude whether natural attenuation is occurring and if natural attenuation (with or without enhancement) is an effective means for addressing dissolved phase groundwater impacts.

For the purpose of developing this alternative, it's assumed that the results of the PDI would indicate that an appropriate microbial community is present and could be enhanced through the addition of a groundwater amendment (i.e., oxygen and/or nutrients). It can be reasonably anticipated that natural attention processes are occurring within the MGP-related dissolved phase plume in OU-2 based on the following:

- Anaerobic conditions were present in the subsurface at OU-1 (i.e., based on observed nitrate reduction, manganese and iron reduction, and sulfate reduction) (as indicated in the Draft Synoptic Sampling Report).

- Anaerobic degradation was occurring at locations containing MGP-related compounds (as indicated in the Pappas OU-2 RI Report).

- The natural degradation processes for chlorinated solvents (namely TCE) is known to consume benzene.

Therefore, the degradation of the CVOCs present in OU-2 could be supplementing the natural attention processes already occurring for the MGP-related dissolved phase impacts.

As indicated in Table 7, there are many technical challenges associated with implementing in-situ treatment technologies in OU-2. For active treatment systems (e.g., biosparging, chemical oxidation, etc.) delivery of the gas/chemicals to the relatively thin (i.e., 5 feet thick or less) saturated zone would be difficult. Additionally, active in-situ treatment technologies would be potentially unsafe given the presence of private homes throughout OU-2, as the technologies could volatize MGP-related compounds and CVOCs, which could lead to exposures to impacted soil vapor. Therefore, Alternative 3 assumes that natural degradation would be enhanced through the passive application of a groundwater amendment (that would be selected as part of the PDI) via wells installed within the roadways, right-of-ways, at select locations on private property, or at the NYSEG-owned property. Groundwater amendments would potentially include an ORM to promote aerobic degradation on a local level (i.e., in the immediate vicinity of the application wells) or nutrients such as a sulfate/nitrate product to enhance the already occurring anaerobic degradation processes.

For the purpose of developing this alternative, application wells are assumed to be installed at 14 locations throughout OU-2. Wells would be constructed with 4-inch diameter PVC and screened in the saturated zone above the silty clay confining unit (e.g., 10 to 15 feet bgs). Additionally, for the purpose of developing this alternative it is assumed that new groundwater amendment material would be placed in the wells every 6 months. The final number and location of application wells, the type of amendment, and the change out frequency of the selected amendment would be evaluated as part of the PDI/remedial design.

Site Management Plan and Institutional Controls

Alternative 3 would include the same SMP, institutional control, and access agreement (as necessary) components as described under Alternative 2.

5.2.3.1 Short-Term Impacts and Effectiveness – Alternative 3

Implementation of this alternative could result in short-term exposure to the surrounding community and field personnel. Potential short-term exposures to impacted soil, groundwater, and/or NAPL could occur during installation of new wells. Potential exposure mechanisms could include ingestion of or dermal contact with impacted soil, groundwater, and NAPL and/or inhalation of volatile organic vapors.

Potential exposures to field personnel would be minimized through the use of proper training and PPE, as specified in a site-specific HASP that would be developed as part of the remedial design for this alternative. Air monitoring would be performed during well installation activities to confirm that volatile organic vapors are within acceptable levels (to be specified in the site-specific HASP). Potentially impacted soil and groundwater generated during well installation activities would be properly managed to minimize potential exposures to the surrounding community. While considered unlikely, potential risks to the community could occur during periodic groundwater and NAPL monitoring/recovery activities via exposure to purged groundwater, groundwater samples, and/or NAPL. Potential exposures to the community would be minimized by following appropriate procedures and protocols that would be described in the SMP.

Although this alternative does not employ green remediation practices, implementation of this alternative would utilize minimal non-renewable resources and is not anticipated to negatively impact the environment (i.e., consume non-renewable resources and energy). The relative carbon footprint of Alternative 3 (compared to the other alternatives) is considered minimal. The greatest contribution to greenhouse gases would occur as a result of equipment used during well installation activities.

Well installation activities could be completed in less than one month and monitoring would be conducted over an assumed 30-year period.

5.2.3.2 Long-Term Effectiveness and Permanence – Alternative 3

As previously discussed, the excavation activities completed at OU-1 removed a majority of the material that served as a source for dissolved phase MGP-related impacts. Under Alternative 3, the natural degradation processes already occurring in OU-2 groundwater would be enhanced through the application of an appropriate amendment that would be identified during the PDI. Additionally, although mobile NAPL is not anticipated to be remain, if any is observed during the periodic NAPL monitoring activities, the NAPL would be removed. Periodic groundwater monitoring would be conducted to document the extent of dissolved phase impacts and the anticipated continued reduction of COC concentrations in OU-2 groundwater. Potential exposures to field personnel and the community during long-term monitoring activities would be reduced by following appropriate procedures and protocols that would be established in the SMP.

Soil and groundwater containing residual MGP-related impacts would remain in OU-2 (i.e., at depths generally greater than 10 feet below grade). However, the community is serviced with a municipal water supply. The need to conduct subsurface activities (e.g., installation of new utilities) is limited, but based on the depth of remaining impacts (i.e., generally greater than 10 feet bgs), exposure to impacted media is unlikely. Regardless, work activities (including handling potentially impacted material) would be conducted in accordance with the procedures described in the SMP to reduce the potential for exposures to impacted media.

Alternative 3 would include the establishment of institutional controls on the NYSEG-owned property, and development of a long-term groundwater and NAPL monitoring program. Although OU-2 is serviced with a municipal water supply, institutional controls would prohibit potable uses of groundwater at the NYSEG-owned property. Annual verification of the institutional controls would be completed to document that the controls are maintained and remain effective.

5.2.3.3 Land Use – Alternative 3

Alternative 3 would not affect the current or anticipated future land use of OU-2. Similar to Alternative 2, institutional controls (e.g., an environmental easement) would be placed on the NYSEG-owned property. If the NYSEG property were to be redeveloped and/or sold to another party, the SMP would be provided to potential future site owners and institutional controls would remain in place. Future property owners/operators would be required to conduct site activities in accordance with the SMP and institutional controls established for the property based on the continued presence of residual soil and groundwater containing MGP-related COCs. Although groundwater monitoring, NAPL monitoring/recovery, and groundwater amendment application would be conducted in the non-NYSEG-owned portion of OU-2 for an assumed 30 years, the periodic monitoring activities would not alter the current or potential future use of the properties.

5.2.3.4 Reduction of Toxicity, Mobility or Volume of Contamination through Treatment – Alternative 3

Alternative 3 does not include direct treatment or containment of impacts in OU-2. However, the excavation activities completed in OU-1 removed a majority of the material that served as a source for dissolved phase impacts. As discussed in Section 1, the extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values is limited. At many locations, MGP-related COC concentrations only slightly exceeded standards and guidance values, are detected sporadically, and/or have been generally decreasing since 2005. Additionally, although only residual quantities of NAPL have been observed in OU-2, Alternative 3 includes NAPL monitoring and recovery of mobile NAPL (if any) to further reduce the volume of material that may serve as source to dissolved phase impacts.

As discussed previously, natural attention processes (i.e., anaerobic degradation) are occurring within the dissolved phase plume containing MGP-related impacts in OU-2. Alternative 3 would enhance those occurring natural degradation processes through the addition of a groundwater amendment (i.e., oxygen and/or nutrients) via application wells. However, degradation on a local level (i.e., in the immediate vicinity of the application wells) would be completed aerobically. Alternative 3 includes periodic groundwater monitoring to document the extent and anticipated long-term reduction (i.e., toxicity and volume) of dissolved phase groundwater impacts.

5.2.3.5 Implementability – Alternative 3

This remedial alternative would be both technically and administratively implementable. From a technical implementability aspect, equipment and personnel qualified to install groundwater monitoring, NAPL monitoring, and amendment applications wells; and to conduct groundwater/NAPL monitoring and amendment application activities are readily available. Administratively, institutional controls would be established for the NYSEG-owned property in OU-2. Institutional controls are not anticipated to be feasible for non-NYSEG-owned properties. New groundwater monitoring wells, NAPL monitoring wells, and application wells would be installed in public areas (i.e., roadways), to the extent feasible. If wells were required on private property, NYSEG would need to obtain access agreements with the property owners to install the wells during the PDI and access the wells during the subsequent periodic monitoring activities.

5.2.3.6 Compliance with SCGs – Alternative 3

- *Chemical-Specific SCGs* – Chemical-specific SCGs are presented in Table 3. Potentially applicable chemical-specific SCGs for soil include 6 NYCRR Part 375-6 soil cleanup objectives and 40 CFR Part 261 and 6 NYCRR Part 371 regulations for the identification of hazardous materials. Potentially applicable chemical-specific SCGs for groundwater include NYSDEC Class GA standards and guidance values.

  Alternative 3 would not address soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 SCOs. Subsurface soil containing residual MGP-related impacts would remain in place beneath surface materials (e.g., pavement, concrete, buildings, and vegetated surfaces). Process residuals generated during the implementation of this alternative (e.g., drilling waste and development/purge water from well installation) would be managed and characterized in accordance with 40 CFR 261 and 6 NYCRR Part 371 to determine off-site treatment/disposal requirements. NYS LDRs would apply to any materials that are characterized as a hazardous waste.

  As indicated in Section 1, OU-2 groundwater contains MGP-related COCs at concentrations greater than NYSDEC Class GA standards and guidance values. However, where exceedances occurred, concentrations only slightly exceed standards and guidance values at most sampling locations. Alternative 3 includes means to potentially enhance the natural degradation processes already occurring (i.e., through groundwater amendment applications), as well as the removal of mobile NAPL (if any remains). Based on the extent of excavation activities completed at OU-1, as well as the enhancement of natural attenuation and NAPL removal activities, this alternative could achieve groundwater SCGs.

- *Action-Specific SCGs* – Action-specific SCGs are presented in Table 4. Potentially applicable action-specific SCGs include health and safety requirements and regulations associated with handling impacted media. Work activities would be conducted in accordance with OSHA requirements that specify general industry standards, safety equipment and procedures, and record keeping and reporting regulations. Compliance with these action-specific SCGs would be accomplished by following a site-specific HASP.

Process residuals would be subject to USDOT requirements for packaging, labeling, manifesting, and transporting hazardous or regulated materials. Compliance with these requirements would be achieved by following a NYSDEC-approved RD/RA Work Plan and using licensed waste transporters and permitted disposal facilities. If any of the materials are characterized as a hazardous waste, NYS LDRs could be applicable.

- *Location-Specific SCGs* – Location-specific SCGs are presented in Table 5. Potentially applicable location-specific SCGs generally include local building codes and sewer discharge and construction permits. Remedial activities would be conducted in accordance with Village of Dansville building/construction codes and ordinances.

5.2.3.7 Overall Protectiveness of the Public Health and the Environment – Alternative 3

As discussed in Section 1: only limited quantities of NAPL remain in OU-2; the extent of groundwater containing dissolved impacts is limited; and natural degradation of dissolved phase impacts is already occurring. Alternative 3 would mitigate the potential for long-term exposures to residual MGP-related impacts by monitoring groundwater conditions, enhancing the natural attenuation processes already occurring in OU-2, and implementing institutional controls on the NYSEG-owned property.

Soil and groundwater containing residual MGP-related impacts are generally located at depths greater than 10 feet bgs and potable water is obtained from a municipal water supply. Although exposure is unlikely (based on the depth to residual impacts), future intrusive activities (e.g., utility installation) in OU-2 would be conducted in accordance with an SMP. Therefore, Alternative 3 would prevent exposures (i.e., direct contact, ingestion, and inhalation) to MGP-related impacts in soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2) through the implementation of institutional controls (e.g., following the procedures that would be established in the SMP). MGP-related soil vapor concerns have not been identified in OU-2. However, the SMP would provide requirements and protocols for evaluating the potential for soil vapor intrusion and addressing soil vapor intrusion concerns in future occupied buildings in OU-2 (soil vapor RAO #1).

Based on the results of the completed investigation activities, MGP-related COCs and source material are not migrating (beyond their current extent) and natural degradation of dissolved phase impacts and small NAPL globules is occurring. Alternative 3 includes the application of a groundwater amendment to enhance the already-occurring natural attenuation processes, which would aid in restoring groundwater to pre-release/pre-disposal conditions (groundwater RAO #3), as it pertains to MGP-related impacts. Additionally, based on the excavation activities completed in OU-2, only residual quantities of NAPL (i.e., small globules) are anticipated to remain in OU-2. Although mobile NAPL is not anticipated to be present, Alternative 3 would include NAPL monitoring (and removal of mobile NAPL, if any remains), which would work toward addressing a source of dissolved phase impacts (groundwater RAO #4) and address the potential for the further migration of MGP-related COCs and NAPL (soil RAO #3).

5.2.3.8 Cost Effectiveness – Alternative 3

The estimated costs associated with Alternative 3 are presented in Table 9. The total estimated 30-year present worth cost for this alternative is approximately $1,100,000. The estimated capital cost, including costs for installing new groundwater monitoring wells, NAPL monitoring wells, and groundwater amendment application wells; and establishing institutional controls, is approximately $350,000. The estimated 30-year present worth cost of O&M activities associated with this alternative, including conducting periodic groundwater monitoring, NAPL monitoring/recovery, and groundwater amendment applications, is approximately $760,000.

5.2.4 Alternative 4 – Soil Removal to Unrestricted Use SCOs

The major components of Alternative 4 consist of the following:

- Demolition and removal of private homes/structures.
- Excavating soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs.

Remedial activities would include the excavation of an estimated 102,000 cy of soil at depths up to 17 feet bgs (or the top of the silty clay unit), to address an estimated 44,000 cy subsurface soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs from depths generally ranging from 11 to 17 feet below grade. The horizontal removal limits associated with Alternative 4 are shown on Figure 6.

Demolition and Utility Relocation

Based on available data, approximately 14 private homes (plus garages/storage buildings) would require demolition/removal/relocation to facilitate the excavation activities on an estimated 17 private properties. Additionally, numerous utilities (e.g., overhead electric; storm and sanitary sewers; potable water lines; and telecommunication lines, etc.) are present along/beneath Franklin and Battle Streets and would need to be relocated as part of this alternative. Temporary closure/re-routing of traffic flow around Battle and Franklin Streets would be required. This alternative would require significant coordination and cooperation between NYSDEC, the Village of Dansville, NYSEG, the private property owners, and local utility companies, which presents substantial logistical challenges.

Excavation

If implemented, the final limits of excavation activities that would be completed under this alternative would be delineated as part of a PDI. Excavation activities would be conducted using conventional construction equipment such as backhoes, excavators, front-end loaders, dump trucks, etc. Excavation support systems would be evaluated and developed during the design of this alternative. Consistent with the excavation activities completed at OU-1, excavation activities in OU-2 would be conducted using a temporary excavation enclosure and associated air handling/treatment system. For the purpose of developing this alternative, it has been assumed that water generated during remedial construction activities (e.g., excavation area dewatering, decontamination, etc.) would be treated on-site via a temporary water treatment system prior to discharge into the local sanitary sewer, in accordance with the POTW requirements.

Excavated material would be segregated based on the presence/absence of visual impacts and characterized to determine off-site treatment/disposal requirements. Although grossly impacted soil is not anticipated to be encountered (i.e., only sheens and small globules have been identified in OU-2), excavated material containing visual MGP-related impacts or elevated concentrations of BTEX and/or PAH compounds (based on analytical testing) would be transported off-site for treatment/disposal via LTTD. Remaining soil would be transported to solid waste landfill for disposal as a non-hazardous waste (assuming soil meets disposal requirements of the solid waste landfill). For the purpose of developing this alternative, all excavated material is assumed to be transported off-site for disposal and/or treatment. If excavated material contained COCs at concentrations less than unrestricted use SCOs, the material could be used as backfill within the excavation areas.

Excavation areas would be backfilled to previously existing lines and grades with clean imported fill material. Sidewalks, roadways, and vegetated surfaces would be restored to generally match pre-construction conditions. As all soil containing MGP-related impacts would be removed, Alternative 4 would not include long-term groundwater monitoring or institutional controls components. Additionally, Alternative 4 does not include replacing/rebuilding private residences removed to facilitate excavation activities.

5.2.4.1 Short-Term Impacts and Effectiveness – Alternative 4

Implementation of this alternative could result in short-term exposure of site workers and the surrounding community during excavation, material handling, and off-site transportation activities. The potential short-term exposures could include ingestion and dermal contact with impacted soil, groundwater, and NAPL and/or inhalation of volatile organic vapors or dust containing COCs during remedial construction. Potential exposure of remedial workers would be minimized through the use of appropriately trained field personnel and PPE, as specified in a site-specific HASP.

Community access to excavation and associated work areas would be restricted by temporary security fencing. Additionally, a temporary excavation enclosure would be utilized during excavation activities to minimize the potential for exposures to the surrounding community. A site-specific community air monitoring plan (CAMP) would be prepared during the remedial design and implemented during remedial construction activities. Implementation of the CAMP would be used to confirm that dust and volatilized organic vapors are within acceptable levels, and potential nuisance odors are minimized. Additional engineering controls (e.g., use of water sprays to suppress dust, use of sprays or long-lasting foams to suppress vapors and/or odors, modifying the rate of remedial construction activities, etc.) would be implemented, as necessary during remedial activities, in accordance with the CAMP.

Additional worker safety concerns include working with and around large construction equipment, noise generated from operating construction equipment, and increased vehicle traffic associated with transportation of excavated and delivery of fill materials. These concerns would be minimized by using engineering controls and appropriate health and safety practices.

Off-site transportation of excavated material and importation of fill materials would result in approximately 9,000 tractor trailer truck round trips (assuming 35 tons per truck). Transportation activities would be managed to minimize en-route risks to the community. Excavation and backfilling activities could be would require approximately 28 months to complete (if work was completed continuously); however, remedial construction activities would likely be conducted over a 3 year period to account for project phasing and seasonal shutdowns. As indicated previously, an estimated 14 private homes would require demolition and removal to complete excavation activities on an anticipated 17 private properties. Although additional homes may not be removed, based on the nature and duration of the excavation activities, this alternative would result in significant disruption to local residents.

Alternative 4 does not employ green remediation practices and the relative carbon footprint (as compared to the other alternatives) is considered significant. The greatest contribution to greenhouse gases would occur as a result of equipment operation during excavation, backfilling, and transportation activities, as well as off-site thermal treatment of excavated soil.

5.2.4.2 Long-Term Effectiveness and Permanence – Alternative 4

Under Alternative 4, soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs would be excavated and transported off-site for treatment and/or disposal. Based on the soil removal limits associated with Alternative 4, the potential for future long-term impacts from and exposures to MGP-related COCs in soil and groundwater would be eliminated through the implementation of this alternative.

5.2.4.3 Land Use – Alternative 4

Although Alternative 4 would result in the demolition and removal of private homes and would cause a significant disruption to the local community, following the completion of the excavation and backfilling activities, OU-2 would generally be restored to pre-construction conditions. The potential future use of OU-2 would not limited in any manner (with regards to MGP-related impacts).

5.2.4.4 Reduction of Toxicity, Mobility or Volume of Contamination through Treatment – Alternative 4

Alternative 4 would include the excavation of approximately 102,000 cy of material to permanently address an estimated 44,000 cy subsurface soil containing MGP-related

COCs at concentrations greater than unrestricted use SCOs. Excavated material would be transported off-site for treatment via LTTD or disposal as a non-hazardous waste. As a vast majority (if not all) of soil containing MGP-related impacts (i.e., residual NAPL throughout OU-2) would be permanently removed, the volume of material that may be serving as a source to dissolved phase groundwater impacts (although minor) would be reduced, if not eliminated.

5.2.4.5 Implementability – Alternative 4

Although Alternative 4 would be technically feasible, there are significant implementation challenges associated with this alternative. Excavation and off-site disposal of soil containing MGP-related impacts is technically feasible and remedial contractors capable of performing the excavation activities are readily available. Potential implementation challenges associated with this alternative include conducting excavation activities within public roadways, on private property, and immediately adjacent to existing structures (e.g., private homes) and in areas where overhead and subsurface utilities are present. Soil loading conditions from the roadway and buildings would be evaluated as part of the remedial design. Potential options to temporarily bypass or reroute the overhead and subsurface utilities located within the anticipated excavation limits would also be evaluated during the remedial design. Roadway closures would have to be implemented to conduct excavation activities in OU-2.

As discussed previously, Alternative 4 would require the demolition and removal of approximately 14 private homes. Remedial construction activities would need to be coordinated with the private property owners to reduce impacts to the community (to extent possible). This alternative also presents significant administrative challenges, and may not be administratively feasible, given that NYSEG would likely be required to purchase the private properties where homes would be demolished and removed.

5.2.4.6 Compliance with SCGs – Alternative 4

- *Chemical-Specific SCGs* – Chemical-specific SCGs are presented in Table 3. Potentially applicable chemical-specific SCGs for soil include 6 NYCRR Part 375-6 soil cleanup objectives and 40 CFR Part 261 and 6 NYCRR Part 371 regulations for the identification of hazardous materials. Potentially applicable chemical-specific SCGs for groundwater include NYSDEC Class GA standards and guidance values.

Alternative 4 would include the removal soil containing MGP-related COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs. All excavated material and on-site water treatment process residuals would be managed and characterized in accordance with 40 CFR 261 and 6 NYCRR Part 371 regulations to determine off-site treatment/disposal requirements. NYS LDRs would apply to any materials that are characterized as a hazardous waste. As Alternative 4 would address a vast majority of MGP-related impacted material, the groundwater SCGs would likely be achieved.

- *Action-Specific SCGs* – Action-specific SCGs are presented in Table 4. Potentially applicable action-specific SCGs include health and safety requirements and regulations associated with handling impacted media. Work activities would be conducted in accordance with OSHA requirements that specify general industry standards, safety equipment and procedures, and record keeping and reporting regulations. Compliance with these action-specific SCGs would be accomplished by following a site-specific HASP.

  Excavated soil and process residuals would be subject to USDOT requirements for packaging, labeling, manifesting, and transporting hazardous or regulated materials. Compliance with these requirements would be achieved by following a NYSDEC-approved RD/RA Work Plan and using licensed waste transporters and permitted disposal facilities. Per DER-4 (NYSDEC, 2002), excavated material from a former MGP site that is characteristically hazardous for benzene only (D018) is conditionally exempt from hazardous waste management requirements when destined for thermal treatment (e.g., LTTD). All excavated material would be disposed of in accordance with applicable NYS LDRs.

- *Location-Specific SCGs* – Location-specific SCGs are presented in Table 5. Potentially applicable location-specific SCGs generally include local building codes and sewer discharge and construction permits. Remedial activities would be conducted in accordance with Village of Dansville building/construction codes and ordinances. Water generated during remedial construction activities would be treated on-site and discharged to the POTW under a local discharge permit.

5.2.4.7 Overall Protectiveness of the Public Health and the Environment – Alternative 4

Alternative 4 would address soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 commercial SCOs. Therefore, Alternative 4 would address media containing residual MGP-related impacts. Through excavation of soil in OU-2, Alternative 4 would eliminate the potential for long-term exposures to potentially impacted soil, groundwater, and soil vapor.

Through excavation, Alternative 4 would prevent future exposures to impacted soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2) and mitigate potential MGP-related impacts (if any) that may result from soil vapor intrusion (soil vapor RAO #1). Additionally, Alternative 4 would prevent further migration of NAPL (if any mobile NAPL remains) (soil RAO #3), address the source of dissolved phase impacts (groundwater RAO #4) and thereby restoring groundwater to pre-disposal/pre-release conditions (groundwater RAO #3), as it pertains to MGP-related impacts.

5.2.4.8 Cost Effectiveness – Alternative 4

The estimated costs associated with Alternative 4 are presented in Table 10. The total estimated 30-year present worth cost for this alternative is approximately $50.3M, which consists of the estimated capital cost for conducting soil removal and backfilling activities. As indicated previously, institutional control or post-remediation O&M activities are not included as part of Alternative 4.

6. Comparative Analysis of Alternatives

This section presents the comparative analysis of each remedial alternative using the evaluation criteria identified in Section 5. The comparative analysis identifies the advantages and disadvantages of each alternative relative to each other and with respect to the evaluation criteria.

6.1 Comparative Analysis

The alternatives evaluated in Section 5 consist of the following:

- *Alternative 1 – No Action*
- *Alternative 2 – Groundwater Monitoring*
- *Alternative 3 – Enhance Natural Attenuation and NAPL Monitoring*
- *Alternative 4 – Soil Removal to Unrestricted Use SCOs*

The comparative analysis of these alternatives is presented in the following subsections.

6.1.1 Short-Term Impacts and Effectiveness

Alternative 1 would not include any active remediation and subsequently would not present potential short-term impacts to remedial workers, the public, or the environment.

Alternatives 2 and 3 would each include installation of new groundwater monitoring wells (as part of PDI activities), and Alternative 3 includes the installation of NAPL monitoring wells and groundwater amendment application wells. These alternatives would pose minimal potential short-term risks to remedial workers and the surrounding community. Potential exposures to field personnel and the surrounding community would be minimized through the use of proper training and PPE, as specified in a site-specific HASP, and community air monitoring would be performed during well installation activities to confirm that volatile organic vapors are within acceptable levels.

Alternative 4 would include excavation (along with dewatering and backfilling) of a considerably large quantity of soil, thereby resulting in a significant potential for exposures and causing large disruption to the surrounding community. Nuisances to the surrounding community would include prolonged noise from the operation of construction equipment and an increase in local truck traffic from off-site transportation of excavated materials and the importation of fill materials. Based on the anticipated excavation limits of Alternative 4, portions of Battle and Franklin Streets would be closed during the remedial construction activities. Excavation activities would be conducted on an estimated 17 private properties and would require demolition and removal of an estimated 14 private homes. An excavation enclosure would be utilized to minimize the potential for exposures to the surrounding community during excavation and backfilling activities.

As Alternative 1 does not included any remedial activities, it requires no time to complete. The initial field work associated with Alternatives 2 and 3 (i.e., installation of new wells) would be completed in less than a month and O&M activities would require approximately one week to complete per year (over an assumed 30-year period). Alternative 4 is anticipated to require approximately 28 months to implement, which would be conducted over an assumed 3-year period (accounting for project phasing and seasonal shutdowns). Additionally, approximately 9,000 tractor trailer truck round trips (assuming 35 tons per truck) would be required for the off-site transportation of excavated material and importation of fill materials.

Alternative 1 would have no carbon footprint and Alternatives 2 and 3 have a minimal carbon footprint. Alternative 4 has the greatest carbon footprint compared to the other alternatives. The greatest contribution to greenhouse gases would occur as a result of equipment operation during excavation, backfilling, and transportation activities, as well as thermal treatment of excavated material.

Compared to the other remedial alternatives, Alternative 4 would be the most disruptive to the surrounding community, has the greatest potential for exposures to remedial workers and the public, would require the longest time to implement, and has the greatest carbon footprint. Therefore, Alternative 4 has the lowest level of short-term effectiveness (i.e., the greatest potential for exposure during implementation).

6.1.2 Long-Term Effectiveness and Permanence

As previously discussed, the excavation activities completed at OU-1 have removed a majority of the material that served as a source for dissolved phase MGP-related impacts. Soil and groundwater containing residual MGP-related impacts would remain in OU-2 (i.e., at depths generally greater than 10 feet below grade). The extent of

MGP-related dissolved phase impacts is limited and natural attenuation processes are already occurring in OU-2. Additionally, the community is serviced with a municipal water supply and the need to conduct subsurface activities (e.g., installation of new utilities) is limited, but based on the depth of remaining impacts, exposure to impacted media is unlikely.

Although Alternative 1 does not include any remedial activities, natural degradation process are occurring in OU-2 and dissolved phase impacts could be reduced over time. Additionally, given the depth of remaining impacts, exposure to remaining residual impacts is unlikely. Under Alternative 2, consistent with the NYSDEC-selected remedy for Pappas OU-2, groundwater monitoring would be conducted to document the extent of dissolved phase impacts and the reduction of MGP-related COC concentrations in OU-2 groundwater. Alternative 3 is more aggressive than Alternative 2 (and the NYSDEC-selected remedy for Pappas OU-2) by including provisions for the removal of mobile NAPL (if any remains) and a means to enhance the natural degradation processes that are already occurring at the site. Under both Alternatives 2 and 3, future intrusive activities would be conducted (and the potential for soil vapor intrusion would be evaluated) in accordance with the SMP that would be developed.

Although Alternative 4 would have the greatest degree of long-term effectiveness (based on the removal of soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs), based on the quantity/extent of the impacts remaining in OU-2 and the unlikely potential for exposure Alternative 1 could be effective in the long-term. However, Alternatives 2 and 3 are more effective than Alternative 1, given that the alternatives will monitor environmental conditions and provide controls for potential future exposures (although unlikely). As discussed in Section 1, MGP-related impacts remaining in OU-2 are limited and residual in nature, and natural degradation of dissolved phase impacts is already occurring.

6.1.3 Land Use

The current zoning for OU-2 consists of industrial and residential use. The NYSEG-owned property and areas north and east are zoned for Light Industrial (I-1). Areas west of the NYSEG-owned property are zoned for Low Density Residential (LR-2). The current and foreseeable future use of the OU-2 is industrial and residential. The majority of OU-2 will continue to be used for residential purposes.

Alternatives 2 and 3 would not affect the current or anticipated future land use of OU-2. Institutional controls (e.g., an environmental easement) would be placed on the

NYSEG-owned property. The SMP would be provided to potential future property owners (if the property were sold) and institutional controls would remain in place. Future property owners/operators would be required to conduct intrusive site activities in accordance with the SMP. Although groundwater monitoring (and NAPL monitoring/recovery under Alternative 3) would be conducted in the non-NYSEG-owned portion of OU-2 for an assumed 30 years, the periodic monitoring activities would not alter the current or potential future use of the private properties.

Although Alternative 4 would result in the demolition and removal of private homes, followed by excavation and backfilling activities, OU-2 would generally be restored to pre-construction conditions and the future use of OU-2 would not be limited in any manner (with regards to MGP-related impacts).

6.1.4 Reduction of Toxicity, Mobility or Volume of Contamination through treatment

As discussed in Section 1, the excavation activities completed in OU-1 removed a majority of the material that served as a source for dissolved phase impacts. Additionally, the extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values in OU-2 is limited. Natural attenuation process (i.e., anaerobic degradation) are occurring in OU-2. At many locations, COC concentrations are only slightly greater than the standards and guidance values, are detected sporadically, or have been generally decreasing since 2005.

Therefore, Alternative 1 could result in the reduction of toxicity and volume of groundwater containing MGP-related impacts. However, as discussed previously, Alternatives 2 and 3 both include periodic groundwater sampling to document the extent of dissolved phase impacts and the reduction of COC concentrations (i.e., toxicity and volume) in OU-2 groundwater. Additionally, although only residual quantities of NAPL have been observed in OU-2, Alternative 3 includes NAPL monitoring and recovery of mobile NAPL (if any remains) to further reduce the volume of material that may serve as source to dissolved phase impacts.

Alternative 4 would include the excavation of approximately 102,000 cy of material to permanently address an estimated 44,000 cy of soil containing MGP-related COCs at concentrations greater than unrestricted use SCOs. As a vast majority of soil containing MGP-related impacts would be permanently removed, the volume of material that may be serving as a source to dissolved phase groundwater impacts (although minor) would be reduced, if not eliminated. However, the MGP-related impacts remaining in OU-2 are residual in nature and as indicated above, extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values in OU-2 is limited.

6.1.5 Implementability

No remedial activities would be conducted as part of Alternative 1 and therefore, Alternative 1 is considered the most implementable. Alternatives 2 and 3 would be both technically and administratively implementable. From a technical implementability aspect, equipment and personnel qualified to install groundwater monitoring wells, NAPL monitoring wells (Alternative 3 only), and groundwater amendment application wells (Alternative 3 only) and conduct groundwater and NAPL monitoring and groundwater amendment application activities are readily available. Administratively, institutional controls would be established for the NYSEG-owned property in OU-2. Institutional controls are not anticipated to be feasible for non-NYSEG-owned properties. New groundwater monitoring wells, NAPL monitoring wells, and groundwater amendment application wells would be installed in public areas (i.e., roadways), to the extent feasible. If wells were required on private property, NYSEG would need to obtain access agreements with the property owners to install the wells during the PDI and access the wells during the periodic monitoring activities.

Although Alternative 4 would be technically feasible, there are significant implementation challenges associated with this alternative. Excavation and off-site disposal of soil containing MGP-related impacts is technically feasible and remedial contractors capable of performing the excavation activities are readily available. However, Alternative 4 would require the demolition and removal of approximately 14 private homes from 17 affected properties. Potential implementation challenges associated with Alternative 4 include conducting excavation activities within public roadways, on private property, and immediately adjacent to existing structures (e.g., private homes) and excavating in areas where overhead and subsurface utilities are present. Soil loading conditions from the roadway and buildings would be evaluated as part of the remedial design. Roadway closures would be implemented to conduct excavation activities in OU-2. Remedial construction activities would need to be coordinated with the private property owners to reduce impacts to community (to extent possible). Administratively, this alternative also presents significant administrative challenges, and may not be administratively feasible, given that NYSEG would likely be required to purchase the private properties where homes would be demolished.

6.1.6 Compliance with SCGs

- *Chemical-Specific SCGs* – Potentially applicable chemical-specific SCGs for soil include 6 NYCRR Part 375-6 soil cleanup objectives and 40 CFR Part 261 and 6 NYCRR Part 371 regulations for the identification of hazardous materials. Potentially applicable chemical-specific SCGs for groundwater include NYSDEC Class GA standards and guidance values.

  As discussed in Section 1, MGP-related impacts remaining in OU-2 are limited and residual in nature. However, Alternatives 1, 2, and 3 do not include intrusive remedial construction activities and therefore, would not achieve chemical-specific SCGs for soil in the foreseeable future. Only Alternative 4 would address soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs. As Alternative 4 would address a vast majority of impacted material, the groundwater SCGs would likely be achieved.

  OU-2 groundwater contains MGP-related COCs at concentrations greater than NYSDEC Class GA standards and guidance values. However, concentrations only slightly exceed standards and guidance values at most sampling locations. Based on the extent of excavation activities completed at OU-1, Alternatives 1, 2, and 3 could achieve groundwater SCGs through the continued natural degradation of residual dissolved phase impacts. Alternatives 2 and 3 include periodic monitoring to document further reduction of dissolved phase impacts in OU-2. Additionally, Alternative 3 includes means to potentially enhance the natural degradation processes already occurring (i.e., through groundwater amendment application), as well as the removal of mobile NAPL (if any remains).

- *Action-Specific SCGs* – Potentially applicable action-specific SCGs include health and safety requirements and regulations associated with handling impacted media. Work activities would be conducted in accordance with OSHA requirements that specify general industry standards, safety equipment and procedures, and record keeping and reporting regulations. Compliance with these action-specific SCGs would be accomplished by following a site-specific HASP.

  Excavated soil (generated under Alternative 4) and process residuals (generated under Alternatives 2 and 3) would be subject to USDOT requirements for packaging, labeling, manifesting, and transporting hazardous or regulated materials. Compliance with these requirements would be achieved by following a

NYSDEC-approved RD/RA Work Plan and using licensed waste transporters and permitted disposal facilities. Under Alternative 4, per DER-4 (NYSDEC, 2002), excavated material from a former MGP site that is characteristically hazardous for benzene only (D018) is conditionally exempt from hazardous waste management requirements when destined for thermal treatment (e.g., LTTD). All excavated material would be disposed of in accordance with applicable NYS LDRs.

- *Location-Specific SCGs* – Potentially applicable location-specific SCGs generally include local building codes and sewer discharge and construction permits. Remedial activities (i.e., that would be conducted under any of the alternatives) would be conducted in accordance with Village of Dansville building/construction codes and ordinances. Under Alternative 4, water generated during remedial excavation activities would be treated on-site and discharged to the POTW under a local discharge permit.

6.1.7 Overall Protectiveness of the Public Health and the Environment

As discussed in Section 1: only limited quantities of NAPL (i.e., small globules) remain in OU-2; the extent of groundwater containing dissolved impacts is limited; and natural attenuation of dissolved phase impacts is already occurring. The "No Action" alternative would rely on the already-occurring natural degradation processes to reduce the toxicity and volume of groundwater containing MGP-related dissolved phase impacts. Alternative 1 could restore groundwater to pre-lease/pre-disposal conditions over prolonged period of time (groundwater RAO #3), through the continued natural degradation of dissolved phase impacts, but Alternative 1 does not include any additional measures to achieve the remaining RAOs (i.e., for soil, groundwater, or soil vapor). As future exposure to remaining residual impacts is unlikely and because OU-2 is serviced with a municipal water supply, Alternative 1 could be protective of human health and the environment.

Soil and groundwater containing residual MGP-related impacts are generally located at depths greater than 10 feet below and potable water is obtained from a municipal water supply. Although exposure is unlikely (based on the depth to residual impacts), future intrusive activities (e.g., utility installation) in OU-2 would be conducted in accordance with an SMP. Therefore, Alternatives 2 and 3 would prevent exposures (i.e., direct contact, ingestion, and inhalation) to MGP-related impacts in soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2) through the implementation of institutional controls (although exposure is unlikely given the depth of remaining impacts). Additionally, although MGP-related soil vapor concerns have not been identified in OU-2, the SMP would provide requirements and protocols for evaluating the potential for soil vapor intrusion and addressing soil vapor intrusion concerns in future buildings in OU-2 (soil vapor RAO #1).

Based on the results of the completed investigation activities, MGP-related COCs and NAPL are not migrating (beyond their current extent). However, Alternative 3 would include NAPL monitoring (and removal) of mobile NAPL (if any remains), which would work toward addressing a source of dissolved phase impacts (groundwater RAO #4) and address the potential for the further migration of MGP-related COCs and NAPL (soil RAO #3). Additionally, Alternative 3 includes the application of a groundwater amendment to enhance the already-occurring natural attenuation processes, which would aid in restoring groundwater to pre-release/pre-disposal conditions (groundwater RAO #3), as it pertains to MGP-related impacts.

Through excavation of soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 commercial SCOs, Alternative 4 would prevent or eliminate future exposures/impacts to human health and the environment, thereby achieving the RAOs that have been established for OU-2.

6.1.8 Cost Effectiveness

The following table summarizes the estimated costs associated with implementing each of the remedial alternatives.

Table 6.1 Estimated Present Worth Costs

Alternative	Capital Cost	Yearly O&M Cost	Total Estimated 30-Year Present Worth
Alternative 1 – No Action	$ 0	$ 0	$ 0
Alternative 2 – Groundwater Monitoring	$ 177,525	$ 35,280	$ 700,000
Alternative 3 – Enhance Natural Attenuation and NAPL Monitoring	$ 347,625	$ 49,560	$ 1,100,000
Alternative 4 – Soil Removal to Unrestricted Use SCOs	$ 50,300,000	$ 0	$ 50,300,000

Notes:
1. Estimated present worth of O&M cost is over an assumed 30-year period.

As Alternative 4 includes the excavation of approximately 102,000 cy of material to address an estimated 44,000 cy of soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs, the cost to implement Alternative 4 is significantly greater relative to the other alternatives. The excavation activities completed at OU-1 have removed a majority of the material that served as a source for dissolved phase MGP-related impacts. For comparison purposes, the OU-1 remedial construction activities cost approximately $4,000,000. As indicated above, Alternative 4 would cost more than $50,000,000 to implement, and would largely only address residual impacts with low potential for future exposures. As discussed in Section 1, OU-2 only contains residual quantities of MGP-related impacts and the extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values is limited. Therefore, Alternative 4 is not a cost effective means to address the remaining (i.e., residual) MGP-related impacts in OU-2.

Under Alternative 2, the SMP and institutional control components (which are consistent with the NYSDEC-selected remedy for Pappas OU-2) provide a cost effective means to address potential exposures and impacts to human health. Periodic groundwater monitoring would be conducted to document the natural degradation of dissolved phase impacts. Soil and groundwater containing residual MGP-related impacts would remain in OU-2 at depths generally greater than 10 feet bgs. However, the community is serviced with a municipal water supply and the need to conduct subsurface activities (e.g., installation of new utilities) is limited, but based on the depth of remaining impacts, exposure to impacted media is unlikely. Therefore, Alternative 2 is considered a cost effective means to address the remaining (i.e., residual) MGP-related impacts in OU-2.

Although Alternative 3 has a higher cost that Alternative 2, Alternative 3 would enhance the natural degradation processes already occurring in OU-2 groundwater through the application of a groundwater amendment. Additionally, mobile NAPL (if any remains) would be removed during periodic NAPL monitoring activities. The relatively minimal cost increase from Alternative 2 to Alternative 3 (i.e., an estimated $400,000 over a 30-year period), compared to the $49M cost difference between Alternatives 3 and 4, represents added measures (i.e., NAPL monitoring and groundwater amendment application) that will achieve the RAOs and address the MGP-related impacts in OU-2.

6.2 Comparative Analysis Summary

The following table provides a summary of the remedial alternatives' abilities to meet the RAOs, as well as the mechanism for addressing remaining impacts and the associated volume addressed, relative short-term impacts, and estimated cost for each alternative.

Table 6.2 – Comparative Analysis Summary

Criteria	Alternative No.			
	1	2	3	4
Overall Protection (RAOs)				
Soil RAO 1	Partially	Yes	Yes	Yes
Soil RAO 2	Partially	Yes	Yes	Yes
Soil RAO 3	Partially	No	Yes	Yes
Groundwater RAO 1	Partially	Yes	Yes	Yes
Groundwater RAO 2	Partially	Yes	Yes	Yes
Groundwater RAO 3	Yes	Yes	Yes	Yes
Groundwater RAO 4	No	No	Partially	Yes
Soil Vapor RAO 1	Yes	Yes	Yes	Yes
Reduction of Toxicity, Mobility, and Volume				
Reduction Mechanism	Continued Natural Degradation	Continued Natural Degradation	Enhance Natural Attenuation, NAPL Monitoring	Excavate 102,000 cy to address 44,000 cy
Short Term Impacts				
Length of Disruption	None	< 1 month, 30 yrs O&M	< 1 month, 30 yrs O&M	28 months, over 3 yrs
Carbon Footprint	None	Minimal	Minimal	Significant
Cost				
Total Cost	$0	$800,000	$1,200,000	$50,300,000

7. Preferred Remedial Alternative

The results of the comparative analysis presented in Section 6 were used as a basis for identifying a preferred remedial alternative for OU-2. The components of the preferred remedial alternative, as well as the rationale for selecting the preferred remedial alternative, are presented in the following subsections.

7.1 Summary of Preferred Remedial Alternative

Based on the comparative analysis of the remedial alternatives presented in Section 6, Alternative 3 is the preferred remedial alternative for OU-2. This alternative would cost-effectively achieve the best balance of the NYSDEC evaluation criteria and achieves that RAOs that have been established for OU-2.

As described in Section 5 and Table 9, the primary components of the preferred remedial alternative consist of the following:

- Installing new groundwater monitoring wells to re-establish a monitoring network in OU-2 in support of long-term groundwater monitoring.
- Installing new NAPL monitoring wells to determine the presence and facilitate the removal of mobile NAPL (if any remains in OU-2).
- Conducting PDI groundwater sampling to evaluate current dissolved phase concentrations of BTEX and PAHs in OU-2 and to identify the presence of a microbial community and the community's effectiveness at attenuating MGP-related dissolved phase groundwater impacts.
- Installing application wells to facilitate groundwater amendment application as part of long-term site activities.
- Developing and implementing an SMP that would document the following:
    - The institutional controls that will be maintained for the NYSEG-owned portion of OU-2.
    - Protocols and requirements for conducting the periodic groundwater and NAPL monitoring/recovery, as well as groundwater amendment applications.

- Protocols for addressing significant changes in MGP-related COC concentrations in groundwater based on the results of the periodic monitoring activities.

- Known locations of soil containing MGP-related COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs.

- Protocols, including health and safety requirements, for conducting invasive (i.e., subsurface) activities at depths potentially containing impacted media and managing potentially impacted material encountered during these activities.

- Protocols and requirements for a soil vapor intrusion evaluation if new occupied structures are built in OU-2.

- Verifying that institutional controls remain in-place and are effective (i.e., annually).

- Conducting periodic groundwater and NAPL monitoring and groundwater amendment applications (assumed to be conducted for 30 years).

7.2 Rationale for the Selection of the Preferred Remedial Alternative

Monitoring and documentation activities are the primary components of the preferred alternative. Groundwater (and NAPL) monitoring is proven means for documenting the extent of residual impacts, has been successfully implemented at other MGP sites where a majority of source material has otherwise been addressed, and is considered technically and administratively implementable.

As indicated in Section 5.3.2.7, although exposure to remaining residual impacts in OU-2 is unlikely (based on the depth to residual impacts), future intrusive activities (e.g., utility installation/repair) would not encounter remaining residual impacts, but would be conducted in accordance with an SMP. Therefore, Alternative 3 would prevent exposures (i.e., direct contact, ingestion, and inhalation) to MGP-related impacts in soil and groundwater (soil RAOs #1 and #2 and groundwater RAOs #1 and #2) through the implementation of institutional controls. Additionally, the SMP would provide requirements and protocols for evaluating the potential for soil vapor intrusion and addressing soil vapor intrusion concerns in future buildings in OU-2 (soil vapor RAO #1) (although MGP-related soil vapor concerns have not been identified in OU-2).

Based on the results of the completed investigation activities, MGP-related COCs and NAPL are not migrating (beyond their current extent) and natural degradation of dissolved phase impacts is occurring. Alternative 3 includes the application of a groundwater amendment to enhance the already-occurring natural attenuation processes, which would aid in restoring groundwater to pre-release/pre-disposal conditions (groundwater RAO #3), as it pertains to MGP-related impacts. Additionally, based on the excavation activities completed in OU-2, only residual quantities of NAPL are anticipated to remain in OU-2. Although mobile NAPL is not anticipated to be present, Alternative 3 would include NAPL monitoring (and removal) of mobile NAPL (if any remains), which would work toward addressing a source of dissolved phase impacts (groundwater RAO #4) and address the potential for the further migration of MGP-related COCs and NAPL (soil RAO #3).

Alternative 3 is the preferred alternative based on the following:

- The excavation activities completed at OU-1 have removed a majority of the material that served as a source for dissolved phase MGP-related impacts. Only limited quantities of NAPL (i.e., small globules), located at depths greater than 10 feet bgs, remain in OU-2.

- The extent of groundwater containing dissolved phase MGP-related COCs at concentrations exceeding NYSDEC Class GA standards and guidance values is limited. At many locations, COC concentrations are only slightly greater that the standards and guidance values, are detected sporadically, or have been generally decreasing since 2005.

- Natural degradation processes are already occurring in OU-2 groundwater. The groundwater amendment applications that would be conducted under Alternative 3 would enhance the naturally-occurring degradation processes.

- MGP-related soil vapor concerns have not been identified to date in OU-2. As indicated in Section 1, the CVOC-related soil vapor concerns related to the Pappas Dry Cleaning site have been addressed through the installation of the SSDS IRMs at select homes as part of the remedial activities implemented for Pappas OU-2, which coincidently addressed any potential SVI concerns associated with MGP OU-2. The SMP that would be prepared as part of Alternative 3 would provide requirements for evaluating potential soil vapor intrusion concerns in new occupied structures built in OU-2.

- As indicated in the OU-2 MGP SRI Report (and the Pappas OU-2 ROD), the potential for future exposure to remaining residual impacts (e.g., during the installation of new utilities or repair existing utilities) is limited and unlikely based on the depths of the remaining residual impacts (i.e., greater than 10 feet bgs). Potential exposures to soil and groundwater containing residual MGP-related impacts would be mitigated through implementation of an SMP.

- The community is serviced with a municipal water supply. Therefore, as indicated in the OU-2 MGP SRI Report (and the Pappas OU-2 ROD), residential exposure to potentially impacted groundwater is not a completed exposure pathway.

- The NYSDEC-selected remedy for Pappas OU-2 is a “No Further Action” alternative that includes continued groundwater monitoring and implementation of an SMP (NYSDEC, 2013). As discussed in Section 1, Pappas OU-2 contains elevated concentrations of dissolved phase CVOCs, as well as CVOC-related NAPL. The preferred alternative for OU-2 of the MGP site (i.e., Alternative 3) is both consistent with (i.e., through periodic groundwater monitoring) and more aggressive (i.e., through NAPL monitoring/recovery and groundwater amendment application) than the NYSDEC-selected remedial alternative for Pappas OU-2.

7.3 Estimated Cost for Preferred Remedial Alternative

The total estimated cost associated with implementation of the preferred remedial alternative is summarized in the following table.

Table 7.1 – Cost Estimate for the Preferred Remedial Alternative

Alternative	Capital Cost	Yearly O&M Cost[1]	Total Estimated Cost
Alternative 3 – Enhance Natural Attenuation and NAPL Monitoring	$350,000	$49,560	$1,100,000

Notes:
1. Estimated present worth of O&M cost is over an assumed 30-year period.

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Tables

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP12 10 - 12 06/21/04	DP13 10 - 12 06/21/04	DP14 10 - 13 06/22/04	DP15 12 - 14 06/22/04	DP15 18 - 20 06/22/04	DP16 10 - 12 06/22/04	DP16 23 - 26 06/22/04	DP17 16 - 18.5 06/23/04	DP18 11 - 13 06/24/04
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.025 UJ	0.025 U	0.025 UJ	0.0060 J	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Benzene	0.06	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon disulfide	- -	mg/kg	0.0050 U	0.0050 U	0.0020 J	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	0.37	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Ethylbenzene	1	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.24	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	0.05	mg/kg	0.018 U	0.016 U	0.022 U	0.027 U	0.0080 UJ	0.033 UJ	0.024 UJ	0.034 UJ	0.027 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.020
Toluene	0.7	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0090	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene (TCE)	0.47	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl chloride	0.02	mg/kg	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U
Xylenes (total)	0.26	mg/kg	0.015 U	0.015 U	0.015 U	**0.35**	0.015 UJ	0.015 U	0.015 U	0.015 U	0.015 U
Total BTEX	- -	mg/kg	ND	ND	ND	0.60	ND	ND	ND	ND	ND
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	0.36 U	0.39 U	3.8 U	8.9 D	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Acenaphthene	20	mg/kg	0.36 UJ	0.39 UJ	12 J	6.2 DJ	0.40 UJ	0.38 U	0.44 U	0.41 U	0.37 U
Acenaphthylene	100	mg/kg	0.36 U	0.39 U	5.7	1.2	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Anthracene	100	mg/kg	0.36 U	0.39 U	4.6	5.2	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Benzo(a)anthracene	1	mg/kg	0.36 U	0.39 U	**14**	**2.6**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Benzo(a)pyrene	1	mg/kg	0.36 U	0.39 U	**9.8**	**1.9**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Benzo(b)fluoranthene	1	mg/kg	0.36 U	0.39 U	**4.4**	0.95	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Benzo(g,h,i)perylene	100	mg/kg	0.36 U	0.39 U	5.0	0.96	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Benzo(k)fluoranthene	0.8	mg/kg	0.36 U	0.39 U	**5.6**	**0.82**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Chrysene	1	mg/kg	0.36 U	0.39 U	**13**	**2.4**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.36 U	0.39 U	3.8 U	**0.35 J**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Dibenzofuran	7	mg/kg	0.36 U	0.39 U	3.8 U	0.27 J	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Fluoranthene	100	mg/kg	0.36 U	0.39 U	27	5.6	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Fluorene	30	mg/kg	0.36 U	0.39 U	16	4.0	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.36 U	0.39 U	**3.5 J**	**0.66**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Naphthalene	12	mg/kg	0.36 U	0.39 U	3.8 U	**15 D**	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Phenanthrene	100	mg/kg	0.36 U	0.39 U	**140 D**	15 D	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Pyrene	100	mg/kg	0.36 U	0.39 U	43	7.5 D	0.40 U	0.38 U	0.44 U	0.41 U	0.37 U
Total PAHs	- -	mg/kg	ND	ND	300 J	79 J	ND	ND	ND	ND	ND

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP18 20 - 22 06/24/04	DP19 11 - 13.5 06/24/04	DP20 11 - 13 06/24/04	DP23 19 - 19.5 09/20/04	DP23 24 - 26 09/20/04	DP24 15 - 16 09/21/04	DP24 19 - 20 09/21/04	DP25 14.5 - 15.2 09/21/04
Detected Volatile Organics										
1,2-Dichloroethene (total)	- -	mg/kg	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.025 UJ	0.025 UJ [0.025 UJ]	0.025 U	0.025 U	NA	0.025 U	0.025 U	0.025 U
Benzene	0.06	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	NA	0.0040 J	0.0050 U	0.0050 U
Carbon disulfide	- -	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Chloroform	0.37	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0020 J	NA	0.0050 U	0.0050 U	0.0050 U
Ethylbenzene	1	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	0.05	mg/kg	0.026 UJ	0.027 UJ [0.023 UJ]	0.011 UJ	0.0090 J	NA	0.0080 J	0.0090 J	0.0080 J
Tetrachloroethene (PCE)	1.3	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0030 J	0.0060	NA	0.0050 U	0.0050 U	0.0050 U
Toluene	0.7	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0020 J	NA	0.026	0.0050 U	0.0020 J
Trichloroethene (TCE)	0.47	mg/kg	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Vinyl chloride	0.02	mg/kg	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U
Xylenes (total)	0.26	mg/kg	0.015 U	0.015 U [0.015 U]	0.015 U	0.015 U	NA	0.015 U	0.015 U	0.015 U
Total BTEX	- -	mg/kg	ND	ND [ND]	ND	0.0020 J	NA	0.030 J	ND	0.0020 J
Detected Semivolatile Organics										
2-Methylnaphthalene	- -	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	0.42 U	0.42 U	0.42 U
Acenaphthene	20	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	5.3	0.42 U	0.42 U
Acenaphthylene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	1.4	0.42 U	0.42 U
Anthracene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	6.5 D	0.42 U	0.42 U
Benzo(a)anthracene	1	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**4.5**	0.42 U	0.42 U
Benzo(a)pyrene	1	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**3.1**	0.42 U	0.42 U
Benzo(b)fluoranthene	1	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**2.7**	0.42 U	0.42 U
Benzo(g,h,i)perylene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	1.8	0.42 U	0.42 U
Benzo(k)fluoranthene	0.8	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**3.2**	0.42 U	0.42 U
Chrysene	1	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**4.6**	0.42 U	0.42 U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**0.54**	0.42 U	0.42 U
Dibenzofuran	7	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	0.21 J	0.42 U	0.42 U
Fluoranthene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	6.2 D	0.42 U	0.42 U
Fluorene	30	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	4.1	0.42 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	**1.2**	0.42 U	0.42 U
Naphthalene	12	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	0.42 U	0.42 U	0.42 U
Phenanthrene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	20 D	0.42 U	0.42 U
Pyrene	100	mg/kg	0.41 U	0.40 U [0.40 U]	0.37 U	NA	0.42 U	10 D	0.42 U	0.42 U
Total PAHs	- -	mg/kg	ND	ND [ND]	ND	NA	ND	75	ND	ND

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP26 11 - 12 09/21/04	DP27 14 - 15 09/22/04	DP27 15 - 15.5 09/22/04	DV-DP28 11 - 12 09/22/04	DP29 11.2 - 11.7 09/22/04	DP29 12 - 12.5 09/22/04	DP30 11 - 12 09/22/04	DP30 18.5 - 20 09/22/04	DP31 12.8 - 13.2 09/23/04
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	0.010 U	0.010 U	NA	0.010 U	0.010 U	NA	1.4 U	1.7 U	0.010 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.025 U	0.025 U	NA	0.025 U	0.025 U	NA	3.4 U	4.2 U	0.025 U
Benzene	0.06	mg/kg	0.0020 J	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.68 U	**0.64**	0.0050 U
Carbon disulfide	- -	mg/kg	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.68 U	0.85 UJ	0.0050 U
Chloroform	0.37	mg/kg	0.0050 U	0.0010 J	NA	0.0050 U	0.0050 U	NA	0.68 U	0.85 U	0.0050 U
Ethylbenzene	1	mg/kg	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.17 J	**1.3**	0.0050 U
Methylene chloride	0.05	mg/kg	0.0090 J	0.0080 J	NA	0.0080 J	0.0080 J	NA	0.68 U	0.85 U	0.0090 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.68 U	0.85 U	0.0050 U
Toluene	0.7	mg/kg	0.0090	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.68 U	0.85 U	0.0050 U
Trichloroethene (TCE)	0.47	mg/kg	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	NA	0.68 U	0.85 U	0.0050 U
Vinyl chloride	0.02	mg/kg	0.010 U	0.010 U	NA	0.010 U	0.010 U	NA	1.4 U	1.7 U	0.010 U
Xylenes (total)	0.26	mg/kg	0.015 U	0.015 U	NA	0.015 U	0.015 U	NA	2.0 U	**0.89 J**	0.015 U
Total BTEX	- -	mg/kg	0.011 J	ND	NA	ND	ND	NA	0.17 J	2.8 J	ND
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	3.2	0.22 J	NA
Acenaphthene	20	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	4.2	0.26 J	NA
Acenaphthylene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	2.1	0.41 U	NA
Anthracene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	4.6	0.41 U	NA
Benzo(a)anthracene	1	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**4.8**	0.41 U	NA
Benzo(a)pyrene	1	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**3.9**	0.41 U	NA
Benzo(b)fluoranthene	1	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**3.0 J**	0.41 U	NA
Benzo(g,h,i)perylene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	1.7	0.41 U	NA
Benzo(k)fluoranthene	0.8	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**3.6 J**	0.41 U	NA
Chrysene	1	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**4.7**	0.41 U	NA
Dibenzo(a,h)anthracene	0.33	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**0.68**	0.41 U	NA
Dibenzofuran	7	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	0.37 U	0.41 U	NA
Fluoranthene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	7.4 D	0.41 U	NA
Fluorene	30	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	3.2	0.41 U	NA
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	**1.2**	0.41 U	NA
Naphthalene	12	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	0.65	1.3	NA
Phenanthrene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	11 D	0.41 U	NA
Pyrene	100	mg/kg	0.35 U	NA	0.38 U	0.37 U	NA	0.34 U	12 D	0.41 U	NA
Total PAHs	- -	mg/kg	ND	NA	ND	ND	NA	ND	72 J	1.8 J	NA

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP31 13 - 14 09/23/04	DP32 14.5 - 15 09/23/04	DP32 17.5 - 18 09/23/04	DP33 11.5 - 12 09/24/04	DP33 14 - 15 09/24/04	DP34 13 - 14 09/24/04	DP34 13.5 - 14 09/24/04	DP34 19 - 20 09/24/04	DP35 12.6 - 13.2 09/27/04
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	NA	0.0060 J	0.0080 J	0.010 U	NA	NA	1.6 U	0.010 U	0.017
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	NA	0.025 U	0.025 U	0.025 U	NA	NA	3.9 U	0.025 U	0.025 U
Benzene	0.06	mg/kg	NA	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.79 U	0.0030 J	0.0050 U
Carbon disulfide	- -	mg/kg	NA	0.0020 J	0.0050 U	0.0050 U	NA	NA	0.79 U	0.0050 U	0.0010 J
Chloroform	0.37	mg/kg	NA	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.79 U	0.0050 U	0.0050 U
Ethylbenzene	1	mg/kg	NA	0.0050 U	0.0050 U	0.0050 U	NA	NA	**3.6**	0.0050 U	0.0020 J
Methylene chloride	0.05	mg/kg	NA	0.012 UJ	0.012 UJ	0.010 UJ	NA	NA	0.70 U	0.0070 UJ	0.0080 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	NA	0.15	0.12	0.0050 U	NA	NA	0.79 U	0.0050 U	0.046
Toluene	0.7	mg/kg	NA	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.79 U	0.0050 U	0.0050 U
Trichloroethene (TCE)	0.47	mg/kg	NA	0.014	0.024	0.0050 U	NA	NA	0.79 U	0.0050 U	0.022
Vinyl chloride	0.02	mg/kg	NA	0.010 U	0.010 U	0.010 U	NA	NA	1.6 U	0.010 U	0.010 U
Xylenes (total)	0.26	mg/kg	NA	0.015 U	0.015 U	0.015 U	NA	NA	**4.2**	0.015 U	0.015 U
Total BTEX	- -	mg/kg	NA	ND	ND	ND	NA	NA	7.8	0.0030 J	0.0020 J
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	14 D	NA	0.16 J	0.24 J
Acenaphthene	20	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	15 D	NA	0.17 J	0.24 J
Acenaphthylene	100	mg/kg	0.34 U	0.19 J	0.36 U	NA	0.39 U	2.8	NA	0.42 U	0.21 J
Anthracene	100	mg/kg	0.34 U	0.38 J	0.36 U	NA	0.39 U	13 D	NA	0.42 U	0.44
Benzo(a)anthracene	1	mg/kg	0.34 U	0.34 J	0.36 U	NA	0.39 U	**6.3 D**	NA	0.42 U	0.42
Benzo(a)pyrene	1	mg/kg	0.34 U	0.33 J	0.36 U	NA	0.39 U	**4.0**	NA	0.42 U	0.24 J
Benzo(b)fluoranthene	1	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	**3.2 J**	NA	0.42 U	0.40 U
Benzo(g,h,i)perylene	100	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	1.4	NA	0.42 U	0.40 U
Benzo(k)fluoranthene	0.8	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	**3.9 J**	NA	0.42 U	0.40 U
Chrysene	1	mg/kg	0.34 U	0.34 J	0.36 U	NA	0.39 U	**6.0 D**	NA	0.42 U	0.38 J
Dibenzo(a,h)anthracene	0.33	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	**0.66**	NA	0.42 U	0.40 U
Dibenzofuran	7	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	0.66	NA	0.42 U	0.40 U
Fluoranthene	100	mg/kg	0.34 U	0.49	0.36 U	NA	0.39 U	13 D	NA	0.42 U	0.64
Fluorene	30	mg/kg	0.34 U	0.16 J	0.36 U	NA	0.39 U	9.2 D	NA	0.42 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	**1.2**	NA	0.42 U	0.40 U
Naphthalene	12	mg/kg	0.34 U	0.40 U	0.36 U	NA	0.39 U	**14 D**	NA	0.17 J	0.40 U
Phenanthrene	100	mg/kg	0.34 U	1.1	0.36 U	NA	0.39 U	43 D	NA	0.46	1.6
Pyrene	100	mg/kg	0.34 U	0.80	0.36 U	NA	0.39 U	18 D	NA	0.20 J	1.1
Total PAHs	- -	mg/kg	ND	4.1 J	ND	NA	ND	170 J	NA	1.2 J	5.5 J

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP36 11.5 - 12 09/27/04	DP36 12.4 - 12.8 09/27/04	DP36 17 - 18 09/27/04	DP36 26 - 27 09/27/04	DP37 9 - 10 09/27/04	DP38 10.2 - 11.5 09/28/04	DP39 13.9 - 14.9 09/28/04	DP40 10 - 12 10/01/04	DP40 15 - 16 10/01/04
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.025 U	NA	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ
Benzene	0.06	mg/kg	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon disulfide	- -	mg/kg	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	0.37	mg/kg	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Ethylbenzene	1	mg/kg	0.0050 U	NA	0.086	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	0.05	mg/kg	0.0060 UJ	NA	0.010 UJ	0.0070 UJ	0.012 UJ	0.0060 UJ	0.0060 UJ	0.032 UJ	0.025 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.014	NA	0.0020 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.11	0.0050 U
Toluene	0.7	mg/kg	0.0050 U	NA	0.0020 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene (TCE)	0.47	mg/kg	0.0010 J	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl chloride	0.02	mg/kg	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Xylenes (total)	0.26	mg/kg	0.015 U	NA	0.037	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Total BTEX	- -	mg/kg	ND	NA	0.13 J	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	NA	0.36 U	0.47	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Acenaphthene	20	mg/kg	NA	0.36 U	0.14 J	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Acenaphthylene	100	mg/kg	NA	0.36 U	0.35 J	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Anthracene	100	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Benzo(a)anthracene	1	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Benzo(a)pyrene	1	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Benzo(b)fluoranthene	1	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Benzo(g,h,i)perylene	100	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Benzo(k)fluoranthene	0.8	mg/kg	NA	0.36 U	0.39 U	0.41 UJ	0.37 UJ	0.43 UJ	0.43 UJ	0.41 U	0.42 U
Chrysene	1	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Dibenzo(a,h)anthracene	0.33	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Dibenzofuran	7	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Fluoranthene	100	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Fluorene	30	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Naphthalene	12	mg/kg	NA	0.36 U	0.24 J	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Phenanthrene	100	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Pyrene	100	mg/kg	NA	0.36 U	0.39 U	0.41 U	0.37 U	0.43 U	0.43 U	0.41 U	0.42 U
Total PAHs	- -	mg/kg	NA	ND	1.2 J	ND	ND	ND	ND	ND	ND

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP41 11.5 - 12 10/01/04	DP41 13 - 14 10/01/04	DP41 23 - 24 10/01/04	DP43 10 - 11.5 05/10/05	DP43 14.5 - 15.5 05/10/05	DP43 30 - 32 05/10/05	DP44 14 - 15 05/10/05	DP44 15 - 16 05/10/05	DP44 21.5 - 22.5 05/10/05
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	1.4 U	1.3 U	0.010 U	0.011 U	0.012 U	0.011 U	NA	0.011 U	0.012 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	3.5 U	3.1 U	0.025 U	0.027 U	0.031 U	0.028 U	NA	0.028 U	0.031 U
Benzene	0.06	mg/kg	0.71 U	0.63 U	0.0050 U	0.0050 U	0.0060 U	0.0060 U	NA	0.0060 U	0.0060 U
Carbon disulfide	- -	mg/kg	0.71 UJ	0.63 U	0.0010 J	0.0050 UJ	0.0060 U	0.0060 UJ	NA	0.0060 U	0.0060 UJ
Chloroform	0.37	mg/kg	0.71 U	0.63 U	0.0050 U	0.0050 U	0.0060 U	0.0060 U	NA	0.0060 U	0.0060 U
Ethylbenzene	1	mg/kg	0.71 U	0.24 J	0.0050 U	0.0050 U	0.0060 U	0.0060 U	NA	0.0060 U	0.0060 U
Methylene chloride	0.05	mg/kg	0.71 UJ	0.63 U	0.017 U	0.0050 UJ	0.0060 UJ	0.0060 UJ	NA	0.0060 UJ	0.0060 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	**4.2**	**92 D**	0.0050 U	0.0050 U	0.0060 U	0.0060 U	NA	0.051	0.0060 U
Toluene	0.7	mg/kg	0.71 U	0.63 U	0.0050 U	0.0050	0.0060 U	0.014	NA	0.0060 U	0.028
Trichloroethene (TCE)	0.47	mg/kg	**0.59 J**	**1.6**	0.0050 U	0.0050 U	0.0060 U	0.0060 U	NA	0.0020 J	0.0060 U
Vinyl chloride	0.02	mg/kg	1.4 U	1.3 U	0.010 U	0.011 U	0.012 U	0.011 U	NA	0.011 U	0.012 U
Xylenes (total)	0.26	mg/kg	2.1 U	**0.53 J**	0.015 U	0.016 U	0.019 U	0.017 U	NA	0.017 U	0.019 U
Total BTEX	- -	mg/kg	ND	0.77 J	ND	0.0050	ND	0.014	NA	ND	0.028
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	3.6 U	8.5	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Acenaphthene	20	mg/kg	3.7	**23**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Acenaphthylene	100	mg/kg	3.6 U	6.4	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Anthracene	100	mg/kg	2.0 J	23	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Benzo(a)anthracene	1	mg/kg	**1.9 J**	**12**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Benzo(a)pyrene	1	mg/kg	**2.1 J**	**9.1**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Benzo(b)fluoranthene	1	mg/kg	**2.1 J**	**3.5 J**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Benzo(g,h,i)perylene	100	mg/kg	3.1 J	4.6	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Benzo(k)fluoranthene	0.8	mg/kg	**3.0 J**	**5.6**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Chrysene	1	mg/kg	**1.9 J**	**11**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Dibenzo(a,h)anthracene	0.33	mg/kg	3.6 U	3.7 U	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Dibenzofuran	7	mg/kg	3.6 U	1.5 J	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Fluoranthene	100	mg/kg	3.9	28	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Fluorene	30	mg/kg	1.6 J	13	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	3.6 U	**3.0 J**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Naphthalene	12	mg/kg	3.6 U	**16**	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Phenanthrene	100	mg/kg	5.9	80 D	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Pyrene	100	mg/kg	6.7	40	0.40 U	0.36 U	0.40 U	0.38 U	0.38 U	NA	0.42 U
Total PAHs	- -	mg/kg	38 J	290 J	ND	ND	ND	ND	ND	NA	ND

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP45 12 - 13 05/10/05	DP45 13 - 13.5 05/10/05	DP45 15.5 - 16 05/10/05	DP45 18 - 20 05/10/05	DP46 12 - 13 05/11/05	DP46 25 - 26 05/11/05	DP47 9 - 10 05/11/05	DP47 18.5 - 19.5 05/11/05	DP48 15 - 16 05/11/05
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	0.0050 J	NA	0.011 U	0.013 U	0.011 U	0.012 U	0.011 U	0.012 U	0.057 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.026 U	NA	0.029 U	0.032 U	0.028 U	0.031 U	0.028 U	0.031 U	0.14 U
Benzene	0.06	mg/kg	0.0050 U	NA	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	**0.065**
Carbon disulfide	- -	mg/kg	0.0050 U	NA	0.0060 UJ	0.0060 U	0.0060 UJ	0.0060 UJ	0.0060 U	0.0060 U	0.029 U
Chloroform	0.37	mg/kg	0.0050 U	NA	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.029 U
Ethylbenzene	1	mg/kg	0.069	NA	0.068	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.24
Methylene chloride	0.05	mg/kg	0.0050 UJ	NA	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.029 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.021	NA	0.0060 U	0.0060 U	0.054	0.0060 U	0.0060 U	0.0060 U	0.029 U
Toluene	0.7	mg/kg	0.0020 J	NA	0.026	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.053 U
Trichloroethene (TCE)	0.47	mg/kg	0.0040 J	NA	0.0060 U	0.0060 U	0.0020 J	0.0060 U	0.0060 U	0.0060 U	0.029 U
Vinyl chloride	0.02	mg/kg	0.010 U	NA	0.011 U	0.0020 J	0.011 U	0.012 U	0.011 U	0.012 U	0.057 U
Xylenes (total)	0.26	mg/kg	0.064 J	NA	0.059 J	0.019 U	0.016 U	0.018 U	0.017 U	0.018 U	0.24 J
Total BTEX	- -	mg/kg	0.14 J	NA	0.15 J	ND	ND	ND	ND	ND	0.55 J
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.46
Acenaphthene	20	mg/kg	NA	0.37 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Acenaphthylene	100	mg/kg	NA	0.19 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Anthracene	100	mg/kg	NA	0.48	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Benzo(a)anthracene	1	mg/kg	NA	0.30 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Benzo(a)pyrene	1	mg/kg	NA	0.23 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Benzo(b)fluoranthene	1	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Benzo(g,h,i)perylene	100	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Benzo(k)fluoranthene	0.8	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Chrysene	1	mg/kg	NA	0.25 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Dibenzo(a,h)anthracene	0.33	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Dibenzofuran	7	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Fluoranthene	100	mg/kg	NA	0.64	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Fluorene	30	mg/kg	NA	0.34 J	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	NA	0.40 U	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Naphthalene	12	mg/kg	NA	0.16 J	0.37	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	2.1
Phenanthrene	100	mg/kg	NA	1.8	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Pyrene	100	mg/kg	NA	0.80	0.37 U	0.42 U	0.37 U	0.40 U	0.36 U	0.42 U	0.41 U
Total PAHs	- -	mg/kg	NA	5.6 J	0.37	ND	ND	ND	ND	ND	2.6

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP48 21 - 22 05/11/05	DP49 13 - 14 05/12/05	DP49 22 - 23 05/12/05	DP50 13 - 14.5 05/12/05	DP50 21 - 22 05/12/05	DP51 12 - 12.3 05/12/05	DP51 12.5 - 13.5 05/12/05	DP51 20 - 21 05/12/05
Detected Volatile Organics										
1,2-Dichloroethene (total)	- -	mg/kg	0.012 U	0.012 U	0.013 U	0.011 U [0.012 U]	0.012 U	0.0040 J	NA	0.011 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.029 U	0.029 U	0.032 UJ	0.027 U [0.031 U]	0.029 U	0.024 U	NA	0.028 U
Benzene	0.06	mg/kg	0.0060 U	0.0060 U	0.0060 U	0.0050 U [0.0060 U]	0.0060 U	0.0050 U	NA	0.0060 U
Carbon disulfide	- -	mg/kg	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.0050 UJ [0.0060 U]	0.0060 UJ	0.0010 J	NA	0.0060 UJ
Chloroform	0.37	mg/kg	0.0060 U	0.0060 U	0.0060 U	0.0050 U [0.0060 U]	0.0060 U	0.0050 U	NA	0.0060 U
Ethylbenzene	1	mg/kg	0.0060 U	0.0060 U	0.0060 U	0.0050 U [0.0060 U]	0.0060 U	0.0070	NA	0.0060 U
Methylene chloride	0.05	mg/kg	0.0060 UJ	0.0060 UJ	0.0060 UJ	0.0050 UJ [0.0060 UJ]	0.0060 UJ	0.0050 UJ	NA	0.0060 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.0060 U	0.0060 U	0.0060 U	0.0050 U [0.0060 U]	0.0060 U	0.024 J	NA	0.0060 U
Toluene	0.7	mg/kg	0.012 U	0.0060 U	0.0080 U	0.0050 U [0.0070 U]	0.0060 U	0.018 U	NA	0.0060 U
Trichloroethene (TCE)	0.47	mg/kg	0.0060 U	0.0060 U	0.0060 U	0.0050 U [0.0060 U]	0.0060 U	0.0040 J	NA	0.0060 U
Vinyl chloride	0.02	mg/kg	0.012 U	0.012 U	0.013 U	0.011 U [0.012 U]	0.012 U	0.010 U	NA	0.011 U
Xylenes (total)	0.26	mg/kg	0.018 U	0.017 U	0.019 U	0.016 U [0.019 U]	0.0050 J	0.017 J	NA	0.016 U
Total BTEX	- -	mg/kg	ND	ND	ND	ND [ND]	0.0050 J	0.024 J	NA	ND
Detected Semivolatile Organics										
2-Methylnaphthalene	- -	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Acenaphthene	20	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Acenaphthylene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Anthracene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Benzo(a)anthracene	1	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Benzo(a)pyrene	1	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Benzo(b)fluoranthene	1	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Benzo(g,h,i)perylene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Benzo(k)fluoranthene	0.8	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Chrysene	1	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Dibenzofuran	7	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Fluoranthene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.19 J [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Fluorene	30	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Naphthalene	12	mg/kg	0.41 U	0.40 U	0.38 U	0.36 U [0.36 U]	0.41 U	NA	0.40 U	0.39 U
Phenanthrene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.24 J [0.36 U]	0.41 U	NA	0.32 J	0.39 U
Pyrene	100	mg/kg	0.41 U	0.40 U	0.38 U	0.29 J [0.14 J]	0.41 U	NA	0.40 U	0.39 U
Total PAHs	- -	mg/kg	ND	ND	ND	0.72 J [0.14 J]	ND	NA	0.32 J	ND

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP52 12 - 12.5 05/13/05	DP52 17 - 18 05/13/05	DP53 10.5 - 11.5 05/13/05	DP53 16 - 17 05/13/05	DP54 10 - 11 09/01/05	DP54 11 - 12 09/01/05	DP54 15 - 16 09/01/05	DP55 11.5 - 12 09/01/05	DP55 13.5 - 14.5 09/01/05
Detected Volatile Organics											
1,2-Dichloroethene (total)	- -	mg/kg	0.010 U	0.011 U	0.010 U	0.012 U	0.011 U	NA	0.012 U	1.4 U	NA
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.024 U	0.028 U	0.026 U	0.030 UJ	0.027 U	NA	0.029 U	3.4 U	NA
Benzene	0.06	mg/kg	0.0050 U	0.0060 U	0.0050 U	0.0060 UJ	0.0050 U	NA	0.0060 U	0.68 U	NA
Carbon disulfide	- -	mg/kg	0.0050 UJ	0.0060 UJ	0.0050 UJ	0.0060 U	0.0050 U	NA	0.0060 U	0.68 UJ	NA
Chloroform	0.37	mg/kg	0.0050 U	0.0060 U	0.0050 U	0.0060 U	0.0050 U	NA	0.0060 U	0.68 U	NA
Ethylbenzene	1	mg/kg	0.0050 U	0.0060 U	0.0050 U	0.0020 J	0.0050 U	NA	0.0060 U	0.68 U	NA
Methylene chloride	0.05	mg/kg	0.0050 UJ	0.0060 UJ	0.0050 UJ	0.0060 UJ	0.0080 UJ	NA	0.0060 UJ	0.68 U	NA
Tetrachloroethene (PCE)	1.3	mg/kg	0.0050 U	0.0060 U	0.0050 U	0.0060 U	0.0010 J	NA	0.0060 U	0.68 U	NA
Toluene	0.7	mg/kg	0.017 U	0.0060 U	0.0060 U	0.026 J	0.0050 U	NA	0.0060 U	0.68 U	NA
Trichloroethene (TCE)	0.47	mg/kg	0.0050 U	0.0060 U	0.0050 U	0.0060 UJ	0.0050 U	NA	0.0060 U	0.68 U	NA
Vinyl chloride	0.02	mg/kg	0.010 U	0.011 U	0.010 U	0.012 U	0.011 U	NA	0.012 U	1.4 U	NA
Xylenes (total)	0.26	mg/kg	0.014 U	0.017 U	0.016 U	0.0080 J	0.015 U	NA	0.018 U	2.0 U	NA
Total BTEX	- -	mg/kg	ND	ND	ND	0.036 J	ND	NA	ND	ND	NA
Detected Semivolatile Organics											
2-Methylnaphthalene	- -	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.39 U
Acenaphthene	20	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	2.8
Acenaphthylene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.49
Anthracene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	2.2
Benzo(a)anthracene	1	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	**1.5**
Benzo(a)pyrene	1	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	**1.2**
Benzo(b)fluoranthene	1	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.82
Benzo(g,h,i)perylene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.49
Benzo(k)fluoranthene	0.8	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.29 J
Chrysene	1	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	**1.4**
Dibenzo(a,h)anthracene	0.33	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.12 J
Dibenzofuran	7	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.14 J
Fluoranthene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	3.2
Fluorene	30	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	2.0
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.36 J
Naphthalene	12	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	0.11 J
Phenanthrene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	7.3 D
Pyrene	100	mg/kg	0.37 U	0.39 U	0.36 U	0.39 U	NA	0.37 U	0.40 U	NA	4.7
Total PAHs	- -	mg/kg	ND	ND	ND	ND	NA	ND	ND	NA	29 J

Table 1
Summary of Detected VOCs and SVOCs in Soil Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location ID: Sample Depth(Feet): Date Collected:	Unrestricted Use SCOs	Units	DP55 19 - 20 09/01/05	DP56 12.5 - 13.5 09/01/05	DP56 18.5 - 19.5 09/01/05
Detected Volatile Organics					
1,2-Dichloroethene (total)	- -	mg/kg	0.012 U	0.011 U	0.012 U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.030 U	0.027 U	0.030 U
Benzene	0.06	mg/kg	0.0060 U	0.0050 U	0.0060 U
Carbon disulfide	- -	mg/kg	0.0060 U	0.0050 U	0.0060 U
Chloroform	0.37	mg/kg	0.0060 U	0.0050 U	0.0060 U
Ethylbenzene	1	mg/kg	0.0020 J	0.0050 U	0.0010 J
Methylene chloride	0.05	mg/kg	0.0060 UJ	0.0050 UJ	0.0080 UJ
Tetrachloroethene (PCE)	1.3	mg/kg	0.0060 U	0.0050 U	0.0060 U
Toluene	0.7	mg/kg	0.0060 U	0.0050 U	0.0060 U
Trichloroethene (TCE)	0.47	mg/kg	0.0060 U	0.0050 U	0.0060 U
Vinyl chloride	0.02	mg/kg	0.012 U	0.011 U	0.012 U
Xylenes (total)	0.26	mg/kg	0.019	0.015 U	0.011 J
Total BTEX	- -	mg/kg	0.021 J	ND	0.012 J
Detected Semivolatile Organics					
2-Methylnaphthalene	- -	mg/kg	0.40 U	0.37 U	0.37 U
Acenaphthene	20	mg/kg	0.40 U	0.37 U	0.37 U
Acenaphthylene	100	mg/kg	0.40 U	0.37 U	0.37 U
Anthracene	100	mg/kg	0.40 U	0.37 U	0.37 U
Benzo(a)anthracene	1	mg/kg	0.40 U	0.37 U	0.37 U
Benzo(a)pyrene	1	mg/kg	0.40 U	0.37 U	0.37 U
Benzo(b)fluoranthene	1	mg/kg	0.40 U	0.37 U	0.37 U
Benzo(g,h,i)perylene	100	mg/kg	0.40 U	0.37 U	0.37 U
Benzo(k)fluoranthene	0.8	mg/kg	0.40 U	0.37 U	0.37 U
Chrysene	1	mg/kg	0.40 U	0.37 U	0.37 U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.40 U	0.37 U	0.37 U
Dibenzofuran	7	mg/kg	0.40 U	0.37 U	0.37 U
Fluoranthene	100	mg/kg	0.40 U	0.37 U	0.37 U
Fluorene	30	mg/kg	0.40 U	0.37 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.40 U	0.37 U	0.37 U
Naphthalene	12	mg/kg	0.40 U	0.37 U	0.37 U
Phenanthrene	100	mg/kg	0.40 U	0.37 U	0.37 U
Pyrene	100	mg/kg	0.40 U	0.37 U	0.37 U
Total PAHs	- -	mg/kg	ND	ND	ND

Notes:

1. J - Indicates the result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.
2. Analytical results in brackets "[ ]" represent blind field duplicates.
3. U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
4. D - Compound quantitated using a secondary dilution.
5. NA - Not analyzed.
6. ND - Non-detected.
7. Bold value indicates a detection.
8. Shaded values indicates compound detected at a concentration greater than the 6 NYCRR Part 375-6 Unrestricted Use Soil Clean Up Objectives.

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

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NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		MGP Property											
Location ID:	Standards and		PZ01	PZ01	PZ01	PZ01	PZ01	PZ01	PZ01	PZ02	PZ02	PZ02	PZ02	PZ02
Date Collected:	Guidance Values	Units	11/17/05	09/05/07	01/02/08	02/18/10	08/04/10	06/15/11	11/13/12	11/17/05	09/05/07	01/02/08	02/18/10	08/04/10
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	**16**	1.7 J	**11**	**220 JD**
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	5.0 U	5.0 U	3.1 J	**75**
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	**39 [35]**	**170 D**	**11**	**22**	5.0 U
Bromodichloromethane	50	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U [5.0 U]	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	NA	5.0 U	5.0 U	4.5 J	4.8 J	1.2 J	**7.6 [9.0]**	NA	5.0 U	5.0 U	5.0 U	**9.6**
Cyclohexane	- -	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	5.7	2.2 J	1.6 J	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	**19 [18]**	**91**	**13**	**13**	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	**11**	2.7 J	2.7 J	5.0 U
Methyl cyclohexane	- -	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ [5.0 UJ]	NA	35	13	5.4	13
Tetrachloroethene (PCE)	5	ug/L	NA	**300 JD**	**190 D**	**420 D**	**320 D**	**120**	**59 J [55 J]**	NA	5.0 U	1.4 J	**12**	**930 D**
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	**16 [15]**	**100 D**	**5.1**	**6.0**	5.0 U
Trichloroethene (TCE)	5	ug/L	NA	**16**	3.4 J	**12**	**7.5**	3.1 J	2.2 J [2.2 J]	NA	5.0 U	4.6 J	**8.8**	**1,100 D**
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	5.0 U	5.0 UJ	5.0 U	5.0 UJ	4.3 J	5.0 U [5.0 U]	NA	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl chloride	2	ug/L	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	5.0 U	5.0 U	5.0 U	**18**
Xylenes (m&p)	5	ug/L	NA	10 U	10 U	10 U	10 U	10 U	10 U [10 U]	NA	**66**	**9.1 J**	**8.2 J**	10 U
Xylenes (o)	5	ug/L	NA	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	NA	**63**	**15**	**31**	5.0 U
Xylenes (total)	5	ug/L	15 U	NA	NA	NA	NA	NA	NA	**34 [32]**	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND [ND]	110 [100]	490	53 J	80 J	ND
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	NA	10 UJ	10 U	10 U	10 U	NA	NA	NA	25 J	8.6 J	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	10 U	10 U	10 U	10 U	NA	NA	NA	**78**	10 U	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	10 U	10 U	10 U	10 U	NA	NA	NA	10 U	10 U	NA	NA
2-Methylnaphthalene	- -	ug/L	10 U	10 U	2.2 J	10 U	10 U	NA	NA	3.0 J [1.0 J]	64	7.0 J	NA	NA
3&4-Methylphenol	1	ug/L	NA	10 U	10 U	10 U	10 U	NA	NA	NA	**14**	10 U	NA	NA
3-Nitroaniline	5	ug/L	NA	10 U	10 U	4.8 J	10 U	NA	NA	NA	10 U	10 U	NA	NA
4-Nitroaniline	5	ug/L	NA	10 UJ	10 U	3.0 J	10 U	NA	NA	NA	10 UJ	10 U	NA	NA
Acenaphthene	20	ug/L	10 U	10 U	10 U	10 U	10 U	NA	NA	**50 [42]**	**66**	**52**	NA	NA
Acenaphthylene	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	3.0 J [2.0 J]	NA	NA	NA	NA
Anthracene	50	ug/L	10 U	10 UJ	10 U	10 U	10 U	NA	NA	7.0 J [6.0 J]	16 J	24	NA	NA
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U [10 U]	**3.9 J**	**17**	NA	NA
Benzo(a)pyrene	0	ug/L	10 U	10 U	**3.7 J**	10 U	10 U	NA	NA	10 U [10 U]	**2.5 J**	**12**	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	**2.6 J**	10 U	10 U	NA	NA	10 U [10 U]	**2.4 J**	**11 J**	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	10 U [10 U]	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U [10 U]	10 U	**3.4 J**	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	10 U	10 U	10 U	10 U	NA	NA	NA	10 U	**13**	NA	NA
Carbazole	- -	ug/L	NA	10 UJ	10 U	10 U	10 U	NA	NA	NA	10 J	10 U	NA	NA
Chrysene	0.002	ug/L	10 U	10 U	**1.4 J**	10 U	10 U	NA	NA	10 U [10 U]	**3.4 J**	**14**	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	10 U	10 UJ	10 U	10 U	10 U	NA	NA	3.0 J [3.0 J]	12 J	29	NA	NA
Fluorene	50	ug/L	10 U	10 UJ	10 U	10 U	10 U	NA	NA	21 [18]	39 J	28	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	10 U	**2.7 J**	10 U	10 U	NA	NA	10 U [10 U]	10 U	**4.0 J**	NA	NA
Naphthalene	10	ug/L	10 U	10 U	10 U	10 U	10 U	NA	NA	**58 J [29 J]**	**650 D**	**18**	NA	NA
Pentachlorophenol	1	ug/L	NA	10 U	10 U	10 U	10 UJ	NA	NA	NA	10 U	10 U	NA	NA
Phenanthrene	50	ug/L	10 U	10 UJ	10 U	10 U	10 U	NA	NA	25 [21]	46 J	**60**	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	10 UJ	10 U	1.9 J	10 U	10 U	NA	NA	4.0 J [3.0 J]	13	44	NA	NA
Total PAHs	- -	ug/L	ND	ND	15 J	ND	ND	NA	NA	170 J [130 J]	920 J	320 J	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		MGP Property			Franklin Street									
Location ID:	Standards and		PZ02	PZ02	PZ02	PZ03	PZ03	PZ03	PZ03	PZ03	PZ03	PZ03	PZ04	PZ04	PZ04
Date Collected:	Guidance Values	Units	06/15/11	03/21/12	11/13/12	06/24/04	11/10/05	02/17/10	08/04/10	06/14/11	03/20/12	11/12/12	06/24/04	11/10/05	09/05/07
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	0.92 J [1.4 J]	**8.1**	2.6 J	NA	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	10 U	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U [0.55 J]	1.1 J	0.47 J	NA	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	25 U	NA	NA	NA	NA	NA	NA	25 U	NA	NA
Benzene	1	ug/L	**5.0 U [4.4 J]**	**58**	**81**	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroethane	5	ug/L	5.0 U [5.0 UJ]	5.0 U	5.0 U	R	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	R	NA	5.0 U
Chloroform	7	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	5.0 U	0.90 J [0.92 J]	0.74 J	5.0 U	0.58 J	3.0 J	NA	5.0 U
Cyclohexane	- -	ug/L	5.0 U [5.0 U]	5.0 U	2.2 J	NA	NA	5.0 U	5.0 UJ [5.0 UJ]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Ethylbenzene	5	ug/L	5.0 U [1.2 J]	**34**	**22**	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U [5.0 U]	2.4 J	2.6 J	NA	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U [5.0 U]	5.4	6.8 J	NA	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**6.0 [7.6]**	3.1 J	2.8 J	5.0 U	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U
Toluene	5	ug/L	5.0 U [0.59 J]	**17**	**24**	2.0 J	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	2.8 J [3.8 J]	**6.9**	1.5 J	5.0 U	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Vinyl chloride	2	ug/L	5.0 U [5.0 U]	2.0 J	1.4 J	5.0 U	NA	5.0 U	5.0 UJ [5.0 UJ]	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Xylenes (m&p)	5	ug/L	10 U [10 U]	**19**	**17**	NA	NA	10 U	10 U [10 U]	10 U	10 U	10 U	NA	NA	10 U
Xylenes (o)	5	ug/L	5.0 U [3.7 J]	**30**	**24**	NA	NA	5.0 U	5.0 UJ [5.0 UJ]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	15 U	15 U	NA	NA	NA	NA	NA	15 U	15 U	NA
Total BTEX	- -	ug/L	ND [9.9 J]	160	170	2.0 J	ND	ND	ND [ND]	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	9.0 UJ	NA	NA	NA	NA	NA	NA	9.0 UJ	NA	10 UJ
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	9.0 U	NA	10 U
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	9.0 U	NA	10 U
2-Methylnaphthalene	- -	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U
3-Nitroaniline	5	ug/L	NA	NA	NA	47 U	NA	NA	NA	NA	NA	NA	47 U	NA	10 U
4-Nitroaniline	5	ug/L	NA	NA	NA	47 U	NA	NA	NA	NA	NA	NA	47 U	NA	10 UJ
Acenaphthene	20	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Acenaphthylene	- -	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	NA
Anthracene	50	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 UJ
Benzo(a)anthracene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Benzo(a)pyrene	0	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	9.0 U	NA	10 U
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 UJ
Chrysene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Dibenzofuran	- -	ug/L	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	9.0 U	NA	NA
Fluoranthene	50	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 UJ
Fluorene	50	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 UJ
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Naphthalene	10	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Pentachlorophenol	1	ug/L	NA	NA	NA	47 U	NA	NA	NA	NA	NA	NA	47 U	NA	10 U
Phenanthrene	50	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 UJ
Phenol	1	ug/L	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	9.0 U	NA	NA
Pyrene	50	ug/L	NA	NA	NA	9.0 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U	10 U
Total PAHs	- -	ug/L	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Franklin Street									
Location ID:	**Standards and**		**PZ04**	**PZ05**	**PZ05**	**PZ06**	**PZ06**	**PZ06**	**PZ07**	**PZ07**	**PZ08**	**PZ08**
Date Collected:	**Guidance Values**	**Units**	**01/03/08**	**06/25/04**	**11/09/05**	**06/25/04**	**11/09/05**	**09/05/07**	**06/25/04**	**11/08/05**	**06/25/04**	**11/08/05**
Detected Volatile Organics												
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U	NA	5.0 U	NA
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
1,2-Dichloroethene (total)	5	ug/L	NA	10 U	NA	10 U [10 U]	NA	NA	10 U	NA	10 U	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	25 U	NA	25 U [25 U]	NA	NA	25 U	NA	25 U	NA
Benzene	1	ug/L	5.0 U	**9.0**	**2.0 J**	5.0 UJ [5.0 UJ]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	1.0 J	NA	5.0 U	NA
Chloroethane	5	ug/L	5.0 U	R	NA	5.0 U [5.0 U]	NA	5.0 U	R	NA	R	NA
Chloroform	7	ug/L	1.2 J	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	**10**	NA	**8.0**	NA
Cyclohexane	- -	ug/L	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Ethylbenzene	5	ug/L	5.0 U	**36**	5.0	**32 [23]**	5.0 U	**12**	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	NA	NA	NA	NA	**11**	NA	NA	NA	NA
Methyl cyclohexane	- -	ug/L	5.0 U	NA	NA	NA	NA	12	NA	NA	NA	NA
Tetrachloroethene (PCE)	5	ug/L	5.0 U	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U	NA	5.0 U	NA
Toluene	5	ug/L	5.0 U	**7.0**	1.0 J	2.0 J [2.0 J]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U	NA	5.0 U	NA
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 UJ	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Vinyl chloride	2	ug/L	5.0 U	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U	NA	5.0 U	NA
Xylenes (m&p)	5	ug/L	10 U	NA	NA	NA	NA	**6.9 J**	NA	NA	NA	NA
Xylenes (o)	5	ug/L	5.0 U	NA	NA	NA	NA	**5.5**	NA	NA	NA	NA
Xylenes (total)	5	ug/L	NA	**70**	**18**	**40 [28]**	15 U	NA	15 U	15 U	15 U	15 U
Total BTEX	- -	ug/L	ND	120	26 J	74 J [53 J]	ND	24 J	ND	ND	ND	ND
Detected Semivolatile Organics												
1,1'-Biphenyl	- -	ug/L	10 U	13 J	NA	10 U [10 U]	NA	6.9 J	9.0 UJ	NA	9.0 UJ	NA
2,4-Dimethylphenol	50	ug/L	10 U	9.0 U	NA	10 U [10 U]	NA	10 U	9.0 U	NA	9.0 U	NA
2,4-Dinitrotoluene	5	ug/L	10 U	9.0 U	NA	10 U [10 U]	NA	10 U	9.0 U	NA	9.0 U	NA
2-Methylnaphthalene	- -	ug/L	10 U	53	9.0	5.0 J [6.0 J]	0.50 J	26	9.0 U	10 U	9.0 U	10 U
3&4-Methylphenol	1	ug/L	10 U	NA	NA	NA	NA	10 U	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	10 U	47 U	NA	48 U [48 U]	NA	10 U	47 U	NA	47 U	NA
4-Nitroaniline	5	ug/L	10 U	47 U	NA	48 U [48 U]	NA	10 UJ	47 U	NA	47 U	NA
Acenaphthene	20	ug/L	10 U	**46**	7.0 J	17 [16]	1.0 J	**23**	9.0 U	10 U	9.0 U	10 U
Acenaphthylene	- -	ug/L	NA	10	2.0 J	10 U [10 U]	9.0 U	NA	9.0 U	10 U	9.0 U	10 U
Anthracene	50	ug/L	10 U	9.0 U	9.0 U	10 U [10 U]	0.80 J	4.3 J	9.0 U	10 U	9.0 U	10 U
Benzo(a)anthracene	0.002	ug/L	10 U	9.0 U	**0.70 J**	10 U [10 U]	**0.50 J**	10 U	9.0 U	10 U	9.0 U	10 U
Benzo(a)pyrene	0	ug/L	10 U	9.0 U	**0.60 J**	10 U [10 U]	9.0 U	10 U	9.0 U	10 U	9.0 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	10 U	9.0 U	**0.60 J**	10 U [10 U]	9.0 U	10 U	9.0 U	10 U	9.0 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	NA	9.0 U	0.60 J	10 U [10 U]	9.0 U	NA	9.0 U	10 U	9.0 U	10 U
Benzo(k)fluoranthene	0.002	ug/L	10 U	9.0 U	9.0 U	10 U [10 U]	9.0 U	10 U	9.0 U	10 U	9.0 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	9.0 U	NA	10 U [10 U]	NA	10 U	9.0 U	NA	9.0 U	NA
Carbazole	- -	ug/L	10 U	NA	NA	NA	NA	10 UJ	NA	NA	NA	NA
Chrysene	0.002	ug/L	10 U	9.0 U	**0.80 J**	10 U [10 U]	**0.60 J**	10 U	9.0 U	10 U	9.0 U	10 U
Dibenzofuran	- -	ug/L	NA	2.0 J	NA	10 U [10 U]	NA	NA	9.0 U	NA	9.0 U	NA
Fluoranthene	50	ug/L	10 U	5.0 J	1.0 J	2.0 J [2.0 J]	1.0 J	2.4 J	9.0 U	10 U	9.0 U	10 U
Fluorene	50	ug/L	10 U	26	3.0 J	10 U [10 U]	0.70 J	10 J	9.0 U	10 U	9.0 U	10 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	9.0 U	9.0 U	10 U [10 U]	9.0 U	10 U	9.0 U	10 U	9.0 U	10 U
Naphthalene	10	ug/L	10 U	**68**	**22**	10 U [10 U]	1.0 J	**120 D**	9.0 U	10 U	9.0 U	10 U
Pentachlorophenol	1	ug/L	10 U	47 U	NA	48 U [48 U]	NA	10 U	47 U	NA	47 U	NA
Phenanthrene	50	ug/L	10 U	47	4.0 J	10 U [10 U]	3.0 J	12 J	9.0 U	10 U	9.0 U	10 U
Phenol	1	ug/L	NA	9.0 U	NA	10 U [10 U]	NA	NA	9.0 U	NA	9.0 U	NA
Pyrene	50	ug/L	10 U	7.0 J	0.90 J	3.0 J [2.0 J]	2.0 J	20 UD	9.0 U	10 U	9.0 U	10 U
Total PAHs	- -	ug/L	ND	260 J	52 J	27 J [26 J]	11 J	200 J	ND	ND	ND	ND

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

DRAFT

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Franklin Street			Morse Street								
Location ID:	Standards and		PZ09	PZ09	PZ09	PZ10	PZ10	PZ10	PZ10	PZ10	PZ10	PZ10	PZ10	PZ10
Date Collected:	Guidance Values	Units	06/25/04	11/09/05	09/05/07	06/26/04	11/08/05	09/06/07	01/03/08	02/17/10	08/03/10	06/14/11	03/20/12	11/12/12
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	4.1 J	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	25 U	NA	NA	25 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	2.0 J	NA	5.0 U	2.0 J	NA	4.6 J	3.1 J	5.0 U	1.3 J	2.6 J	3.4 J	3.6 J
Cyclohexane	- -	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**8.0**	NA	**25**	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	NA	**5.5**	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	NA	NA	10 U	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	NA	NA	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	15 U	15 U	NA	15 U	15 U	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	9.0 U	NA	10 UJ	9.0 U	NA	10 U	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	9.0 U	NA	10 U	9.0 U	NA	10 U	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	9.0 U	NA	10 U	9.0 U	NA	10 U	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	47 U	NA	10 U	47 U	NA	10 U	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	47 U	NA	10 U	47 U	NA	10 U	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	9.0 U	9.0 U	NA	9.0 U	10 U	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	9.0 U	9.0 U	10 UJ	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	9.0 U	9.0 U	NA	9.0 U	10 U	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	9.0 U	NA	10 U	9.0 U	NA	10 U	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	10 UJ	NA	NA	10 U	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	9.0 U	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	9.0 U	9.0 U	10 UJ	9.0 U	10	10 U	NA	NA	NA	NA	NA	NA
Fluorene	50	ug/L	9.0 U	9.0 U	10 UJ	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	47 U	NA	10 U	47 U	NA	10 U	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	9.0 U	9.0 U	10 UJ	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Phenol	1	ug/L	9.0 U	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	9.0 U	9.0 U	10 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	ND	ND	ND	ND	10	ND	NA	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

DRAFT

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Morse Street											
Location ID:	Standards and		PZ11	PZ11	PZ11	PZ11	PZ11	PZ11	PZ11	PZ11	PZ11	PZ12	PZ12	PZ12
Date Collected:	Guidance Values	Units	06/26/04	11/08/05	09/06/07	01/03/08	02/17/10	08/03/10	06/14/11	03/20/12	11/12/12	09/29/04	11/08/05	09/06/07
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.73 J	NA	NA	**7.0**
1,2-Dichloroethene (total)	5	ug/L	**6.0 J**	NA	NA	NA	NA	NA	NA	NA	NA	3.0 J	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.53 J	NA	NA	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	25 U	NA	NA	NA	NA	NA	NA	NA	NA	25 U	NA	NA
Benzene	1	ug/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroethane	5	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	R	NA	5.0 U
Chloroform	7	ug/L	3.0 J	NA	5.0 U	1.2 J	2.4 J	2.4 J	3.4 J	2.0 J	2.2 J	4.0 J	NA	5.0 U
Cyclohexane	- -	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Methyl cyclohexane	- -	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**30**	NA	**23 J**	**20**	**16**	**6.6**	**15 J**	**11**	**12 J**	4.0 J	NA	**16**
Toluene	5	ug/L	5.0 U	5.0 U	2.8 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	**22**	NA	4.9 J	2.9 J	5.0 U	1.8 J	2.6 J	2.0 J	1.8 J	1.0 J	NA	4.7 J
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Vinyl chloride	2	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Xylenes (m&p)	5	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U
Xylenes (o)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
Xylenes (total)	5	ug/L	15 U	15 U	NA	NA	NA	NA	NA	NA	NA	15 U	15 U	NA
Total BTEX	- -	ug/L	ND	ND	2.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U
2,4-Dimethylphenol	50	ug/L	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U
2,4-Dinitrotoluene	5	ug/L	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U
2-Methylnaphthalene	- -	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
3&4-Methylphenol	1	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	10 U
3-Nitroaniline	5	ug/L	47 U	NA	10 U	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U
4-Nitroaniline	5	ug/L	47 U	NA	10 U	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U
Acenaphthene	20	ug/L	9.0 U	10	10 U	10 U	NA	NA	NA	NA	NA	10 U	10	10 U
Acenaphthylene	- -	ug/L	9.0 U	10	NA	NA	NA	NA	NA	NA	NA	10 U	10	NA
Anthracene	50	ug/L	9.0 U	10	10 U	10 U	NA	NA	NA	NA	NA	10 U	10	10 U
Benzo(a)anthracene	0.002	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Benzo(a)pyrene	0	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	9.0 U	10 U	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA
Benzo(k)fluoranthene	0.002	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U
Carbazole	- -	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	10 U
Chrysene	0.002	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Dibenzofuran	- -	ug/L	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	NA
Fluoranthene	50	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Fluorene	50	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Naphthalene	10	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Pentachlorophenol	1	ug/L	47 U	NA	10 U	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U
Phenanthrene	50	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Phenol	1	ug/L	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	NA
Pyrene	50	ug/L	9.0 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U
Total PAHs	- -	ug/L	ND	30	ND	ND	NA	NA	NA	NA	NA	ND	30	ND

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Morse Street						North of Battle Street						
Location ID:	Standards and		PZ12	PZ12	PZ12	PZ12	PZ12	PZ12	PZ13	PZ13	PZ13	PZ13	PZ13	PZ13	PZ13
Date Collected:	Guidance Values	Units	01/03/08	02/17/10	08/03/10	06/14/11	03/20/12	11/12/12	09/29/04	11/08/05	09/06/07	01/03/08	02/18/10	08/04/10	06/14/11
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	2.1 J	5.0 U	5.0 U	0.97 J	1.0 J	0.65 J	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	25 U	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	R	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	5.0 U	5.0	1.6 J	1.6 J	0.81 J	3.0 J	NA	5.0 U	5.0 U	5.0 U	**7.8**	2.2 J
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**6.3**	**6.7**	1.4 J	2.1 J	**6.6**	**6.6 J**	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	1.6 J	5.0 U	5.0 U	0.73 J	2.7 J	1.6 J	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	15 U	15 U	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
3&4-Methylphenol	1	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA
3-Nitroaniline	5	ug/L	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U	10 U	NA	NA	NA
4-Nitroaniline	5	ug/L	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U	10 U	NA	NA	NA
Acenaphthene	20	ug/L	10 U	NA	NA	NA	NA	NA	4.0 J	10	10 U	10 U	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	10 U	10	NA	NA	NA	NA	NA
Anthracene	50	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10	10 U	10 U	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(a)pyrene	0	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	NA	NA	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
Carbazole	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA
Chrysene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Fluorene	50	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Naphthalene	10	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Pentachlorophenol	1	ug/L	10 U	NA	NA	NA	NA	NA	48 U	NA	10 U	10 U	NA	NA	NA
Phenanthrene	50	ug/L	10 U	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	10 U	NA	NA	NA	NA	NA	1.0 J	10 U	10 U	10 U	NA	NA	NA
Total PAHs	- -	ug/L	ND	NA	NA	NA	NA	NA	5.0 J	30	ND	ND	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		North of Battle Street		North of Franklin Street										
Location ID:	Standards and		PZ13	PZ13	PZ14	PZ14	PZ15	PZ15	PZ15	PZ15	PZ15	PZ15	PZ15	PZ15	PZ15
Date Collected:	Guidance Values	Units	03/20/12	11/13/12	09/29/04	11/08/05	09/30/04	11/08/05	09/06/07	01/03/08	02/17/10	08/03/10	06/14/11	03/20/12	11/12/12
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	10 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	25 U	NA	25 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	1.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	R	NA	R	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	0.52 J	5.0	NA	5.0 U	NA	5.0 U	1.5 J	5.0 U	1.2 J	5.0 U	5.0 U	1.8 J
Cyclohexane	- -	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 UJ	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	5.0 U	5.0 UJ	5.0 U	NA	2.0 J	NA	5.0 U	2.2 J	2.6 J	5.0 U	1.7 J	5.0 U	2.6 J
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	NA	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	15 U	15 U	15 U	15 U	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	1.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	10 U	NA	10 U	NA	10 U	10 U	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	10 U	NA	10 U	NA	10 U	10 U	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	10 U	NA	10 U	NA	10 U	10 U	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	48 U	NA	50 U	NA	10 U	10 U	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	48 U	NA	50 U	NA	10 U	10 U	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	10 U	10	10 U	10	10 U	10 U	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	10 U	10	10 U	10	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	10 U	10	10 U	10	10 U	10 U	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	10 U	NA	10 U	NA	10 U	10 U	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	10 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Fluorene	50	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	48 U	NA	50 U	NA	10 U	10 U	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Phenol	1	ug/L	NA	NA	10 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	NA	NA	ND	30	ND	30	ND	ND	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		West of MGP		North of Battle Street		West of MGP Property				North of Franklin Street			North of Battle Street	
Location ID:	Standards and		PZ16	PZ16	PZ17	PZ17	PZ18	PZ18	PZ19	PZ19	PZ20	PZ21	PZ21	PZ22	PZ22
Date Collected:	Guidance Values	Units	09/30/04	11/11/05	09/02/05	11/10/05	09/30/04	11/11/05	09/02/05	11/10/05	09/30/04	10/01/04	11/10/05	10/01/04	11/08/05
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	NA
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (total)	5	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	**82**	NA	10 U	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone (Methyl ethyl ketone)	50	ug/L	25 U	NA	25 U	NA	25 U	NA	25 U	NA	25 U	25 U	NA	25 U	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	**69**	**93**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	NA
Chloroethane	5	ug/L	R	NA	5.0 U	NA	R	NA	5.0 U	NA	R	R	NA	R	NA
Chloroform	7	ug/L	**10**	NA	0.90 J	NA	3.0 J	NA	1.0 J	NA	4.0 J	5.0 U	NA	7.0	NA
Cyclohexane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	4.0 J	**7.0**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene (PCE)	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	**110**	NA	5.0 U	NA
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	**38**	NA	5.0 U	NA
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	NA	5.0 U	NA
Xylenes (m&p)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (o)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	5	ug/L	15 U	15 U	15 U	15 U	15 U	**6.0 J**	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Total BTEX	- -	ug/L	ND	ND	ND	ND	73 J	110 J	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	9.0 U	NA
2,4-Dimethylphenol	50	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	9.0 U	NA
2,4-Dinitrotoluene	5	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	9.0 U	NA
2-Methylnaphthalene	- -	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	48 U	NA	50 U	NA	48 U	NA	48 U	NA	48 U	48 U	NA	47 U	NA
4-Nitroaniline	5	ug/L	48 U	NA	50 U	NA	48 U	NA	48 U	NA	48 U	48 U	NA	47 U	NA
Acenaphthene	20	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Acenaphthylene	- -	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10	9.0 U	10
Anthracene	50	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Benzo(a)pyrene	0	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	9.0 U	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Dibenzofuran	- -	ug/L	10 U	NA	10 U	NA	10 U	NA	17	NA	10 U	10 U	NA	9.0 U	NA
Fluoranthene	50	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Fluorene	50	ug/L	10 U	10 U	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Naphthalene	10	ug/L	10 U	10	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Pentachlorophenol	1	ug/L	48 U	NA	50 U	NA	48 U	NA	48 U	NA	48 U	48 U	NA	47 U	NA
Phenanthrene	50	ug/L	10 U	10 U	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Phenol	1	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	9.0 U	NA
Pyrene	50	ug/L	10 U	10 U	10 U	10	10 U	10	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U
Total PAHs	- -	ug/L	ND	60	ND	90	ND	90	ND	ND	ND	ND	10	ND	10

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		North of Franklin Street										
Location ID:	Standards and		PZ24	PZ24	PZ24	PZ24	PZ24	PZ24	PZ24	PZ24	PZ24	PZ25	PZ25
Date Collected:	Guidance Values	Units	10/01/04	11/09/05	09/06/07	01/03/08	02/17/10	08/04/10	06/14/11	03/20/12	11/12/12	10/01/04	11/09/05
Detected Volatile Organics													
1,1-Dichloroethene	5	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U [5.0 U]	NA
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	5.0 U	4.1 J	**5.3**	**5.4**	**35 [37]**	**7.2 [5.0 U]**	4.5 J	NA	NA
1,2-Dichloroethene (total)	5	ug/L	**75**	NA	NA	NA	NA	NA	NA	NA	NA	**47 [47]**	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	5.0 U	1.1 J	5.0 U	2.2 J	**6.9 [7.3]**	3.5 J [4.2 J]	2.4 J	NA	NA
2-Butanone (Methyl ethyl ketone)	50	ug/L	25 U	NA	NA	NA	NA	NA	NA	NA	NA	25 U [25 U]	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.56 J [5.0 U]	1.0 J [5.0 U]	5.0 U	**25 [25]**	**21**
Bromodichloromethane	50	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U [5.0 U]	NA
Chloroethane	5	ug/L	R	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 UJ]	5.0 U [5.0 U]	5.0 U	5.0 U [5.0 U]	NA
Chloroform	7	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	1.3 J	0.81 J [0.92 J]	5.0 U [5.0 U]	0.51 J	1.0 J [1.0 J]	NA
Cyclohexane	- -	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	NA	NA
Ethylbenzene	5	ug/L	5.0 U	0.50 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	**180 [180]**	**210 D**
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	NA	NA
Methyl cyclohexane	- -	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	NA	NA
Tetrachloroethene (PCE)	5	ug/L	**41**	NA	5.0 U	**8.8**	**30**	**31**	**19 [19]**	**47 [51]**	**36 J**	**17 [16]**	NA
Toluene	5	ug/L	5.0 U	15 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	**12 [12]**	**9.0**
Trichloroethene (TCE)	5	ug/L	**19**	NA	5.0 U	2.9 J	**8.9**	**11**	**17 [17]**	**14 [17]**	**9.3**	**17 [16]**	NA
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	NA	NA
Vinyl chloride	2	ug/L	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U [5.0 U]	NA
Xylenes (m&p)	5	ug/L	NA	NA	10 U	10 U	10 U	10 U	10 U [10 U]	10 U [10 U]	10 U	NA	NA
Xylenes (o)	5	ug/L	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	NA	NA
Xylenes (total)	5	ug/L	15 U	**100 D**	NA	NA	NA	NA	NA	NA	NA	**110 [110]**	**84**
Total BTEX	- -	ug/L	ND	100 J	ND	ND	ND	ND	0.56 J [ND]	1.0 J [ND]	ND	330 [330]	320
Detected Semivolatile Organics													
1,1'-Biphenyl	- -	ug/L	10 U	NA	10 U	10 U	11 U	10 U	NA	NA	NA	4.0 J [4.0 J]	NA
2,4-Dimethylphenol	50	ug/L	10 U	NA	10 U	R	11 U	10 U	NA	NA	NA	10 U [10 U]	NA
2,4-Dinitrotoluene	5	ug/L	10 U	NA	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	NA
2-Methylnaphthalene	- -	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	40 [36]	52
3&4-Methylphenol	1	ug/L	NA	NA	10 U	R	11 U	10 U	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	48 U	NA	10 U	10 U	11 U	10 U	NA	NA	NA	48 U [48 U]	NA
4-Nitroaniline	5	ug/L	48 U	NA	10 U	10 U	11 U	10 U	NA	NA	NA	48 U [48 U]	NA
Acenaphthene	20	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	11 [10]	11
Acenaphthylene	- -	ug/L	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	23 [21]	30
Anthracene	50	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Benzo(a)pyrene	0	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Benzo(g,h,i)perylene	- -	ug/L	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	4.0 J [10 U]	10 U
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	NA	10 U	10 U	11 U	10 U	NA	NA	NA	**12 [10 U]**	NA
Carbazole	- -	ug/L	NA	NA	10 U	10 U	11 U	10 U	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Dibenzofuran	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U [10 U]	NA
Fluoranthene	50	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Fluorene	50	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Naphthalene	10	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	**56 [52]**	**45**
Pentachlorophenol	1	ug/L	48 U	NA	10 U	R	11 U	10 UJ	NA	NA	NA	48 U [48 U]	NA
Phenanthrene	50	ug/L	10 U	10 U	10 U	1.6 J	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Phenol	1	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U [10 U]	NA
Pyrene	50	ug/L	10 U	10 U	10 U	10 U	11 U	10 U	NA	NA	NA	10 U [10 U]	10 U
Total PAHs	- -	ug/L	ND	ND	ND	1.6 J	ND	ND	NA	NA	NA	130 J [120]	140

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS Standards and Guidance Values	Units	North of Franklin		South of Ossian		Morse Street		Pappas Property		South of Ossian		North of Battle Street		
Location ID:			PZ26	PZ26	PZ27	PZ27	PZ28	PZ28	PZ29	PZ29	PZ30	PZ30	PZ31	PZ31	PZ31
Date Collected:			10/01/04	11/09/05	10/02/04	11/11/05	10/02/04	11/08/05	10/02/04	11/16/05	05/17/05	11/11/05	05/17/05	11/10/05	09/05/07
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**52**
1,2-Dichloroethene (total)	5	ug/L	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	5.0 U	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9.5**
2-Butanone (Methyl ethyl ketone)	50	ug/L	25 U	NA	25 U	NA	25 U	NA	25 U	NA	25 U	NA	25 U	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U
Chloroethane	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	R	NA	R	NA	5.0 U
Chloroform	7	ug/L	2.0 J	NA	7.0	NA	**9.0**	NA	2.0 J	NA	**8.0**	NA	5.0 U	NA	5.0 U
Cyclohexane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.50 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
Methyl cyclohexane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
Tetrachloroethene (PCE)	5	ug/L	5.0 U	NA	5.0 U	NA	1.0 J	NA	**87**	NA	5.0 U	NA	**120**	NA	**350 D**
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	**9.0**	NA	**82**
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
Vinyl chloride	2	ug/L	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U
Xylenes (m&p)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U
Xylenes (o)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
Xylenes (total)	5	ug/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U	4.0 J	15 U	15 U	15 U	15 U	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	7.5 J	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	10 U	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	10 UJ
2,4-Dimethylphenol	50	ug/L	10 U	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	10 U
2,4-Dinitrotoluene	5	ug/L	10 U	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	10 U
2-Methylnaphthalene	- -	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U
3-Nitroaniline	5	ug/L	50 U	NA	47 U	NA	47 U	NA	48 U	NA	47 U	NA	48 U	NA	10 U
4-Nitroaniline	5	ug/L	50 U	NA	47 U	NA	47 U	NA	48 U	NA	47 U	NA	48 U	NA	10 U
Acenaphthene	20	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Acenaphthylene	- -	ug/L	10 U	10 U	9.0 U	10	9.0 U	10	10 U	10 U	9.0 U	10 U	10 U	10 U	NA
Anthracene	50	ug/L	10 U	10 U	9.0 U	10	9.0 U	10	10 U	10 U	9.0 U	10 U	10 U	10 U	10 UJ
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	10 U
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 UJ
Chrysene	0.002	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Dibenzofuran	- -	ug/L	10 U	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	NA
Fluoranthene	50	ug/L	10 U	10	9.0 U	10	9.0 U	10	10 U	10	9.0 U	10	10 U	10	10 UJ
Fluorene	50	ug/L	10 U	10 U	9.0 U	10	9.0 U	10	10 U	10 U	9.0 U	10 U	10 U	10 U	10 UJ
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Naphthalene	10	ug/L	10 U	10 U	9.0 U	10 U	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Pentachlorophenol	1	ug/L	50 U	NA	47 U	NA	47 U	NA	48 U	NA	47 UJ	NA	48 UJ	NA	10 U
Phenanthrene	50	ug/L	10 U	10 U	9.0 U	10	9.0 U	10	10 U	10 U	9.0 U	10 U	10 U	10 U	10 UJ
Phenol	1	ug/L	1.0 J	NA	9.0 U	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U	NA	NA
Pyrene	50	ug/L	10 U	10 U	9.0 U	10	9.0 U	10	10 U	10 U	9.0 U	10 U	10 U	10 U	10 U
Total PAHs	- -	ug/L	ND	10	ND	60	ND	60	ND	10	ND	10	ND	10	ND

Table 2

Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

DRAFT

Location:	NYSDEC TOGS		North of Battle Street											
Location ID:	Standards and		PZ31	PZ31	PZ31	PZ31	PZ31	PZ31	PZ32	PZ32	PZ32	PZ32	PZ32	PZ32
Date Collected:	Guidance Values	Units	01/02/08	02/18/10	08/04/10	06/14/11	03/20/12	11/13/12	05/18/05	11/10/05	09/05/07	01/03/08	02/17/10	08/04/10
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	**13**	**6.1**	2.7 J	**20**	4.1 J [4.3 J]	**7.0**	NA	NA	**23**	**38**	5.0 U	**11**
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	**360 D**	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	2.5 J	1.9 J	0.98 J	**26**	1.9 J [1.9 J]	2.5 J	NA	NA	**12**	**6.5**	**5.6**	**31**
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	25 U	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U [5.0 U]	5.0 U	R	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	**9.4**	6.9	3.2 J	4.9 J [4.8 J]	5.5	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U [5.0 U]	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	2.0 J	5.0 U [5.0 U]	3.6 J	5.0 U	5.0 U	1.2 J
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**130 D**	**190 D**	**180**	**100**	**130 D [130 D]**	**220 D**	**240 D**	NA	**11**	**10**	5.0 U	**66**
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	**42**	**25**	**17**	**58**	**21 [20]**	**31**	**70**	NA	**5.7**	**6.8**	5.0 U	**46**
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	NA	**6.3**	**41**	5.0 U	5.0 UJ
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U [10 U]	10 U	NA	NA	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U [5.0 U]	5.0 U	NA	NA	**5.1**	5.0 U	5.0 U	1.3 J
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	2.0 J	15 U [15 U]	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND [ND]	ND	4.0 J	ND [ND]	8.7 J	ND	ND	2.5 J
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	10 U	NA	NA	NA	NA	NA	2.0 J	NA	10 U	10 U	NA	NA
2,4-Dimethylphenol	50	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	NA	10 U	10 U	NA	NA
2,4-Dinitrotoluene	5	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	NA	10 U	10 U	NA	NA
2-Methylnaphthalene	- -	ug/L	10 U	NA	NA	NA	NA	NA	10	0.60 J [0.80 J]	6.9 J	10 U	NA	NA
3&4-Methylphenol	1	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
3-Nitroaniline	5	ug/L	10 U	NA	NA	NA	NA	NA	47 U	NA	10 U	10 U	NA	NA
4-Nitroaniline	5	ug/L	10 U	NA	NA	NA	NA	NA	47 U	NA	10 UJ	10 U	NA	NA
Acenaphthene	20	ug/L	10 U	NA	NA	NA	NA	NA	15	2.0 J [2.0 J]	9.9 J	2.1 J	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	9.0 U	2.0 J [2.0 J]	NA	NA	NA	NA
Anthracene	50	ug/L	10 U	NA	NA	NA	NA	NA	3.0 J	0.80 J [0.80 J]	10 UJ	10 U	NA	NA
Benzo(a)anthracene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Benzo(a)pyrene	0	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	NA	10 U	10 U	NA	NA
Carbazole	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA
Chrysene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	10 U	NA	NA	NA	NA	NA	2.0 J	1.0 J [1.0 J]	1.6 J	10 U	NA	NA
Fluorene	50	ug/L	10 U	NA	NA	NA	NA	NA	7.0 J	0.80 J [0.90 J]	10 UJ	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Naphthalene	10	ug/L	10 U	NA	NA	NA	NA	NA	9.0 U	10 U [10 U]	10 U	10 U	NA	NA
Pentachlorophenol	1	ug/L	10 U	NA	NA	NA	NA	NA	47 UJ	NA	10 U	10 U	NA	NA
Phenanthrene	50	ug/L	10 U	NA	NA	NA	NA	NA	7.0 J	0.60 J [1.0 J]	1.7 J	10 U	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	9.0 U	NA	NA	NA	NA	NA
Pyrene	50	ug/L	10 U	NA	NA	NA	NA	NA	3.0 J	2.0 J [2.0 J]	2.0 J	10 U	NA	NA
Total PAHs	- -	ug/L	ND	NA	NA	NA	NA	NA	47 J	9.8 J [11 J]	22 J	2.1 J	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		North of Battle Street			Pappas Property		North of Battle		West of MGP		North of Battle Street			
Location ID:	**Standards and**		**PZ32**	**PZ32**	**PZ32**	**PZ33**	**PZ33**	**PZ34**	**PZ34**	**PZ35**	**PZ35**	**PZ36**	**PZ36**	**PZ36**	**PZ36**
Date Collected:	**Guidance Values**	**Units**	**06/14/11**	**03/20/12**	**11/13/12**	**05/17/05**	**11/11/05**	**05/17/05**	**11/10/05**	**05/17/05**	**11/11/05**	**05/18/05**	**11/10/05**	**09/05/07**	**01/02/08**
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	5.0 U	NA	5.0 U	NA	2.0 J [3.0 J]	NA	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	0.56 J	5.0 U	3.0 J [2.6 J]	NA	NA	NA	NA	NA	NA	NA	NA	**26**	**53**
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	5.0 U	NA	10 U	NA	10 U	NA	**550 D [530 D]**	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	**6.4**	**9.6 [8.5]**	NA	NA	NA	NA	NA	NA	NA	NA	**75**	**31**
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	17 J	NA	25 U	NA	25 U	NA	25 U [25 U]	NA	NA	NA
Benzene	1	ug/L	5.0 U	**1.4 J**	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**5.0 [6.0]**	**32**	**36**	**13**
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 UJ	5.0 U	5.0 U [5.0 U]	R	NA	R	NA	R	NA	R [R]	NA	5.0 U	5.0 U
Chloroform	7	ug/L	**8.3**	5.0 U	5.0 U [5.0 U]	5.0 U	NA	1.0 J	NA	3.0 J	NA	5.0 U [5.0 U]	NA	5.0 U	5.0 U
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	3.0 J	1.1 J [1.5 J]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	4.0 J [4.0 J]	**170**	**76**	**21**
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	0.56 J	5.0 U [0.47 J]	NA	NA	NA	NA	NA	NA	NA	NA	**19**	**9.3**
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U [5.0 UJ]	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**30**	**8.4**	**13 J [13 J]**	**83**	NA	5.0 U	NA	5.0 U	NA	**140 [150]**	NA	5.0 U	**15**
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [1.0 J]	**20**	**13**	4.3 J
Trichloroethene (TCE)	5	ug/L	3.3 J	3.2 J	**8.0 [7.9]**	**11**	NA	5.0 U	NA	5.0 U	NA	**120 [130]**	NA	4.7 J	**35**
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	5.0 UJ
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	NA	5.0 U	NA	5.0 U	NA	**120 [140]**	NA	**530 D**	**55**
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA	NA	**25**	**8.8 J**
Xylenes (o)	5	ug/L	5.0 U	3.0 J	5.0 U [5.0 U]	NA	NA	NA	NA	NA	NA	NA	NA	**68**	**33**
Xylenes (total)	5	ug/L	NA	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	**16 [17]**	**150**	NA	NA
Total BTEX	- -	ug/L	ND	7.4 J	1.1 J [1.5 J]	ND	ND	ND	ND	ND	ND	25 J [28 J]	370	220	80 J
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	12 [12]	NA	10 UJ	16
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U [9.0 U]	NA	10 U	10 U
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U [9.0 U]	NA	10 U	10 U
2-Methylnaphthalene	- -	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	96 [100]	370 D	10 U	10 U
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U
3-Nitroaniline	5	ug/L	NA	NA	NA	47 U	NA	48 U	NA	47 U	NA	48 U [47 U]	NA	10 U	10 U
4-Nitroaniline	5	ug/L	NA	NA	NA	47 U	NA	48 U	NA	47 U	NA	48 U [47 U]	NA	10 UJ	10 U
Acenaphthene	20	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	**54 [53]**	**160 D**	**70**	**58**
Acenaphthylene	- -	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	25 [24]	62	NA	NA
Anthracene	50	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 [10]	12	9.1 J	5.8 J
Benzo(a)anthracene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	**1.0 J**	10 U	10 U
Benzo(a)pyrene	0	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	**0.60 J**	10 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	**0.50 J**	10 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	9.0 U	10	10 U	10	9.0 U	10	10 U [9.0 U]	10 U	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U [9.0 U]	NA	10 U	10 U
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 J	1.1 J
Chrysene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	**0.60 J**	10 U	10 U
Dibenzofuran	- -	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	2.0 J [2.0 J]	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	NA	9.0 U	10	10 U	10	9.0 U	10	7.0 J [6.0 J]	8.0 J	6.4 J	4.3 J
Fluorene	50	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	17 [16]	36	14 J	13
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	10 U [9.0 U]	10 U	10 U	10 U
Naphthalene	10	ug/L	NA	NA	NA	9.0 U	10	10 U	10	9.0 U	10	4.0 J [5.0 J]	**550 D**	3.8 J	**24**
Pentachlorophenol	1	ug/L	NA	NA	NA	47 UJ	NA	48 UJ	NA	47 UJ	NA	48 UJ [47 UJ]	NA	10 U	10 U
Phenanthrene	50	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	44 [44]	**73**	35 J	27
Phenol	1	ug/L	NA	NA	NA	9.0 U	NA	10 U	NA	9.0 U	NA	10 U [9.0 U]	NA	NA	NA
Pyrene	50	ug/L	NA	NA	NA	9.0 U	10 U	10 U	10 U	9.0 U	10 U	9.0 J [8.0 J]	9.0 J	7.2 J	5.6 J
Total PAHs	- -	ug/L	NA	NA	NA	ND	30	ND	30	ND	30	270 J [270 J]	1,300 J	150 J	140 J

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		North of Battle Street					West of MGP Property						
Location ID:	Standards and		PZ36	PZ36	PZ36	PZ36	PZ36	PZ37	PZ37	PZ37	PZ37	PZ37	PZ37	PZ37
Date Collected:	Guidance Values	Units	02/17/10	08/03/10	06/14/11	03/20/12	11/13/12	05/18/05	11/11/05	09/05/07	01/02/08	02/17/10	08/03/10	06/15/11
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	5.0 U [5.0 U]	5.0 U [5.0 U]	1.5 J	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	**26 [25]**	**8.8 [21]**	**54**	**13**	**6.6**	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	**40 [40]**	**63 [81]**	**50**	**140**	**33**	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	28	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	**9.4 [9.1]**	**21 [140 D]**	**14**	**17**	**29**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U	0.88 J	R	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U [5.0 U]	5.0 U [5.0 U]	1.5 J	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	- -	ug/L	5.0 U [5.0 U]	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	**23 [21]**	**60 [67]**	5.0 U	**67**	**70**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	**8.4 [8.5]**	**11 [16]**	2.9 J	**13**	**17**	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U [5.0 U]	5.0 U [5.0 UJ]	5.0 U	5.0 U	1.2 J	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	4.0 J [3.6 J]	1.5 J [1.0 J]	**140**	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Toluene	5	ug/L	5.0 U [5.0 U]	**5.3 [7.5]**	5.0 U	**6.7**	**7.8**	5.0 U	0.70 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	**8.8 [9.0]**	**10 [17]**	**170 D**	**8.4**	2.7 J	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U [5.0 U]	5.0 U [5.0 UJ]	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	**5.5 [4.9 J]**	**14 [30]**	**19**	**9.6**	**8.1**	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	3.9 J [3.8 J]	**11 [14]**	10 U	**12**	**10**	NA	NA	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	**25 [23]**	**34 J [46]**	**7.4**	**46**	**57**	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	15 U	15 U	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	61 J [57 J]	130 J [270]	21	150	170	ND	0.70 J	ND	ND	ND	ND	ND
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	13 [14]	9.2 J [14]	NA	NA	NA	10 U	NA	10 UJ	10 U	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	11 U [1.9 J]	10 U [10 U]	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
3&4-Methylphenol	1	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA
3-Nitroaniline	5	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	48 U	NA	10 U	10 U	NA	NA	NA
4-Nitroaniline	5	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	48 U	NA	10 UJ	10 U	NA	NA	NA
Acenaphthene	20	ug/L	**43 [49]**	**68 [72]**	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
Anthracene	50	ug/L	3.5 J [4.8 J]	3.5 J [4.3 J]	NA	NA	NA	10 U	10 U	10 UJ	10 U	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	**11 U [1.3 J]**	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(a)pyrene	0	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	**11 U [1.4 J]**	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	NA
Carbazole	- -	ug/L	11 U [2.0 J]	10 U [1.3 J]	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	NA
Chrysene	0.002	ug/L	**11 U [1.5 J]**	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	2.3 J [4.0 J]	2.7 J [3.5 J]	NA	NA	NA	10 U	10 U	10 UJ	10 U	NA	NA	NA
Fluorene	50	ug/L	11 [13]	12 [14]	NA	NA	NA	10 U	10 U	10 UJ	10 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	11 U [11 U]	10 U [10 U]	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Naphthalene	10	ug/L	**25 [29]**	**8.4 J [11]**	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA
Pentachlorophenol	1	ug/L	**11 U [2.1 J]**	10 UJ [10 UJ]	NA	NA	NA	48 UJ	NA	10 U	10 U	NA	NA	NA
Phenanthrene	50	ug/L	25 [28]	8.3 J [19]	NA	NA	NA	10 U	10 U	10 UJ	10 U	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	3.2 J [4.3 J]	3.4 J [4.4 J]	NA	NA	NA	10 U	10	10 U	10 U	NA	NA	NA
Total PAHs	- -	ug/L	110 J [140 J]	110 J [130 J]	NA	NA	NA	ND	10	ND	ND	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		West of MGP		North of Franklin Street									MGP Property	
Location ID:	Standards and		PZ37	PZ37	PZ38	PZ38	PZ38	PZ38	PZ38	PZ38	PZ38	PZ38	PZ38	MW-01D	MW-01S
Date Collected:	Guidance Values	Units	03/20/12	11/13/12	05/18/05	11/09/05	09/06/07	01/03/08	02/17/10	08/04/10	06/14/11	03/20/12	11/12/12	11/15/05	11/15/05
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
1,2-Dichloroethene (total)	5	ug/L	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	25 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Chloroethane	5	ug/L	5.0 U	5.0 U	R	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Chloroform	7	ug/L	5.0 U	5.0 U	2.0 J	NA	5.0 U	1.6 J	5.0 U	1.0 J	2.0 J	2.4 J	1.7 J	NA	NA
Cyclohexane	- -	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Tetrachloroethene (PCE)	5	ug/L	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.40 J	NA	NA
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA
Xylenes (m&p)	5	ug/L	10 U	10 U	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Xylenes (o)	5	ug/L	5.0 U	5.0 U	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	NA
Xylenes (total)	5	ug/L	NA	NA	15 U	15 U	NA	NA	NA	NA	NA	NA	NA	15 U	15 U
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	47 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	47 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Acenaphthylene	- -	ug/L	NA	NA	9.0 U	9.0 U	NA	NA	NA	NA	NA	NA	NA	9.0 U	9.0 U
Anthracene	50	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Benzo(a)anthracene	0.002	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Benzo(a)pyrene	0	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	9.0 U	9.0 U	NA	NA	NA	NA	NA	NA	NA	9.0 U	9.0 U
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	9.0 U	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Dibenzofuran	- -	ug/L	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Fluorene	50	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Naphthalene	10	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Pentachlorophenol	1	ug/L	NA	NA	47 UJ	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Phenol	1	ug/L	NA	NA	9.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	NA	NA	9.0 U	9.0 U
Total PAHs	- -	ug/L	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		MGP Property											
Location ID:	Standards and		MW-02D	MW-02S	MW-03D	MW-03D	MW-03D	MW-03D	MW-03D	MW-03D	MW-03S	MW-03S	MW-03S	MW-03S
Date Collected:	Guidance Values	Units	11/16/05	11/16/05	11/14/05	09/05/07	01/02/08	02/18/10	08/04/10	06/15/11	11/14/05	09/05/07	01/02/08	02/18/10
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	**8.2**	1.8 J	1.0 J
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	0.50 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**5.0**	**7.2**	**2.1 J**	5.0 U
Bromodichloromethane	50	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	NA	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
Cyclohexane	- -	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	11	2.8 J	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**60**	**70**	**7.6**	3.4 J
Isopropylbenzene (Cumene)	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	**10**	1.9 J	5.0 U
Methyl cyclohexane	- -	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	22	5.5	5.0 U
Tetrachloroethene (PCE)	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**13**	**14**	3.1 J	5.0 U
Trichloroethene (TCE)	5	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	NA	NA	NA	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 UJ	5.0 U
Vinyl chloride	2	ug/L	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	NA	**18**	4.8 J	1.1 J
Xylenes (o)	5	ug/L	NA	NA	NA	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	**89 J**	**28**	**7.8**
Xylenes (total)	5	ug/L	15 U	15 U	15 U	NA	NA	NA	NA	NA	**97**	NA	NA	NA
Total BTEX	- -	ug/L	ND	0.50 J	ND	ND	ND	ND	ND	ND	180	200 J	46 J	12 J
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	10 UJ	10 U	NA	NA	NA	NA	25 J	4.6 J	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
2-Methylnaphthalene	- -	ug/L	9.0 U	0.90 J	9.0 U	10 U	10 U	NA	NA	NA	100	7.9 J	4.5 J	NA
3&4-Methylphenol	1	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
3-Nitroaniline	5	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
4-Nitroaniline	5	ug/L	NA	NA	NA	10 UJ	10 U	NA	NA	NA	NA	10 UJ	10 U	NA
Acenaphthene	20	ug/L	9.0 U	1.0 J	9.0 U	10 U	10 U	NA	NA	NA	**63**	**60**	**33**	NA
Acenaphthylene	- -	ug/L	9.0 U	2.0 J	9.0 U	NA	NA	NA	NA	NA	12	NA	NA	NA
Anthracene	50	ug/L	9.0 U	9.0 U	9.0 U	10 UJ	10 U	NA	NA	NA	10	14 J	5.6 J	NA
Benzo(a)anthracene	0.002	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	**1.0 J**	**1.4 J**	10 U	NA
Benzo(a)pyrene	0	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	**0.70 J**	10 U	10 U	NA
Benzo(b)fluoranthene	0.002	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	**0.50 J**	**1.1 J**	10 U	NA
Benzo(g,h,i)perylene	- -	ug/L	9.0 U	9.0 U	9.0 U	NA	NA	NA	NA	NA	9.0 U	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	9.0 U	10 U	10 U	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
Carbazole	- -	ug/L	NA	NA	NA	10 UJ	10 U	NA	NA	NA	NA	5.7 J	1.9 J	NA
Chrysene	0.002	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	**0.90 J**	10 U	10 U	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	9.0 U	9.0 U	9.0 U	10 UJ	10 U	NA	NA	NA	6.0 J	8.8 J	4.4 J	NA
Fluorene	50	ug/L	9.0 U	9.0 U	9.0 U	10 UJ	10 U	NA	NA	NA	25	30 J	9.6 J	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	9.0 U	10 U	10 U	NA
Naphthalene	10	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	**31**	**79**	**32**	NA
Pentachlorophenol	1	ug/L	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA
Phenanthrene	50	ug/L	9.0 U	9.0 U	9.0 U	10 UJ	10 U	NA	NA	NA	47	47 J	21	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	9.0 U	9.0 U	9.0 U	10 U	10 U	NA	NA	NA	7.0 J	10 J	5.8 J	NA
Total PAHs	- -	ug/L	ND	3.9 J	ND	ND	ND	NA	NA	NA	300 J	260 J	120 J	NA

Table 2 *DRAFT*

Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		MGP Property								Pappas Property			
Location ID:	Standards and		MW-03S	MW-03S	MW-04S	MW-05S	MW-06D	MW-06S	MW-07D	MW-07S	MW-01	MW-01	MW-01	MW-01
Date Collected:	Guidance Values	Units	08/04/10	06/15/11	11/14/05	11/16/05	11/16/05	11/14/05	11/15/05	11/15/05	09/04/07	01/03/08	06/15/11	03/21/12
Detected Volatile Organics														
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	2.3 J	**120**	NA	NA	NA	NA	NA	NA	5.0 U	1.4 J	**17**	**230 JD**
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	1.7 J	**16**	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	4.9 J	**76**
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	**1.5 J**	**2.0 J**	**59**	**47**	5.0 U	**430 D [480 D]**	0.60 J	**37**	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 UJ	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	4.1 J	4.4 J	1.0 J	5.0 U
Cyclohexane	- -	ug/L	5.0 UJ	5.0 U	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	**6.4**	**5.8**	**110 D**	**110 DJ**	5.0 U	**56 [56]**	0.60 J	**1,400 D**	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	0.65 J	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	5.0 U	2.5 J	NA	NA	NA	NA	NA	NA	2.6 J	4.1 J	**230 D**	**1,600 JD**
Toluene	5	ug/L	1.2 J	1.1 J	**19**	**27**	0.40 J	**14 [13]**	5.0 U	**140 D**	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	0.71 J	**240 D**	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	**65**	**1,400 D**
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	1.6 J	5.0 U
Vinyl chloride	2	ug/L	5.0 UJ	**6.0**	NA	NA	NA	NA	NA	NA	5.0 U	5.0 U	0.60 J	**2.2 J**
Xylenes (m&p)	5	ug/L	1.1 J	1.0 J	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	**9.9 J**	**13**	NA	NA	NA	NA	NA	NA	5.0 UJ	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	**100**	**120**	15 U	**86 [86]**	15 U	**1,100 D**	NA	NA	NA	NA
Total BTEX	- -	ug/L	20 J	23 J	290	300 J	0.40 J	590 [640]	1.2 J	2,700	ND	ND	ND	ND
Detected Semivolatile Organics														
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	6.0 DJ	36	9.0 U	25 [29]	9.0 U	1,600 D	10 U	10 U	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
Acenaphthene	20	ug/L	NA	NA	**190 D**	**120**	9.0 U	12 [13]	9.0 U	**780 DJ**	10 U	10 U	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	9.0	14	9.0 U	2.0 J [2.0 J]	9.0 U	53	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	16	8.0 J	9.0 U	1.0 J [1.0 J]	9.0 U	25	10 UJ	10 U	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	**2.0 J**	**3.0 J**	9.0 U	10 U [9.0 U]	9.0 U	**4.0 J**	10 U	10 U	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	**2.0 J**	**2.0 J**	9.0 U	10 U [9.0 U]	9.0 U	**3.0 J**	10 U	10 U	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	**2.0 J**	**2.0 J**	9.0 U	10 U [9.0 U]	9.0 U	**2.0 J**	10 U	10 U	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	0.70 J	1.0 J	9.0 U	10 U [9.0 U]	9.0 U	1.0 J	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	**2.0 J**	**2.0 J**	9.0 U	10 U [9.0 U]	9.0 U	**0.60 J**	10 U	10 U	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA
Chrysene	0.002	ug/L	NA	NA	**2.0 J**	**2.0 J**	9.0 U	10 U [9.0 U]	9.0 U	**3.0 J**	10 U	10 U	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	10	6.0 J	1.0 J	10 U [9.0 U]	9.0 U	14	10 UJ	10 U	NA	NA
Fluorene	50	ug/L	NA	NA	**61**	32	9.0 U	3.0 J [4.0 J]	9.0 U	**95**	10 UJ	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	**0.50 J**	**0.70 J**	9.0 U	10 U [9.0 U]	9.0 U	**0.80 J**	10 U	10 U	NA	NA
Naphthalene	10	ug/L	NA	NA	**340 D**	**840 D**	9.0 U	**98 [92]**	9.0 U	**18,000 D**	10 U	10 U	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA
Phenanthrene	50	ug/L	NA	NA	**84**	29	9.0 U	10 U [4.0 J]	9.0 U	**120**	10 UJ	10 U	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	13	8.0 J	9.0 U	10 [9.0 U]	9.0 U	19	10 U	10 U	NA	NA
Total PAHs	- -	ug/L	NA	NA	740 J	1,100 J	1.0 J	150 J [150 J]	ND	21,000 J	ND	ND	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

DRAFT

Location:	NYSDEC TOGS		South of Maple Street							Pappas Property					
Location ID:	Standards and		MW-02	MW-02	MW-02	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04
Date Collected:	Guidance Values	Units	09/04/07	01/03/08	02/17/10	08/03/10	06/13/11	03/19/12	11/12/12	09/04/07	01/03/08	06/15/11	03/21/12	09/04/07	01/03/08
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**5.8**	500 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	1.8 J	5.0 U	5.0 U	3.1 J	5.0 U	5.0 U	5.0 U	5.0 U	**300 D**	**1,100**	5.0 U	3.2 J
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	1.2 J	5.0 U	5.0 U	5.0 U	5.0 U	**210 D**	**540**	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	1.1 J	5.0 U	2.8 J	2.5 J	5.0 U	1.3 J	5.0 U	1.7 J	1.3 J	500 U	5.0 U	5.0 U
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 J	500 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	16	500 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**5.8**	**30**	**24**	**19**	**23 J**	**23 J**	**20 J**	**10**	**10**	**3,200 D**	**4,800 J**	**36**	**37**
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	2.7 J	**6.9**	4.9 J	4.3 J	**6.0**	4.7 J	2.5 J	5.0 U	1.8 J	**2,200 D**	**3,200**	**11**	**9.3**
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	2.0 J	500 U	5.0 U	5.0 UJ
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**88**	**220 J**	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	4.0 J	500 U	5.0 UJ	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0 J	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
2,4-Dimethylphenol	50	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
2,4-Dinitrotoluene	5	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
2-Methylnaphthalene	- -	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
3&4-Methylphenol	1	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
3-Nitroaniline	5	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
4-Nitroaniline	5	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 UJ	10 U
Acenaphthene	20	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Benzo(a)pyrene	0	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Carbazole	- -	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
Chrysene	0.002	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
Fluorene	50	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Naphthalene	10	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Pentachlorophenol	1	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Phenanthrene	50	ug/L	10 UJ	10 U	NA	NA	NA	NA	NA	10 UJ	10 U	NA	NA	10 UJ	10 U
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	10 U	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	10 U
Total PAHs	- -	ug/L	ND	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	ND	ND

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS Standards and Guidance Values	Units	Pappas Property		South of Maple		East of Pappas Property								
Location ID:			MW-04	MW-04	MW-05	MW-05	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06
Date Collected:			06/15/11	03/21/12	09/04/07	01/03/08	09/04/07	01/02/08	02/18/10	08/03/10	06/15/11	06/15/11	03/20/12	03/21/12	11/13/12
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	2.3 J	5.0 U	4.7 J	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	2.3 J	5.0 U	2.6 J	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	6.6	**11**	5.0 U	5.0 U	5.0 U	5.0 U [1.0 J]	5.0 U	2.4 J	0.83 J	0.72 J	5.0 U	5.0 U	1.3 J
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**6.4**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 UJ	**1,100 D**	3.2 J	**3,000 JD**	5.0 UJ
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	**30**	5.0 U	**59**	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	1.8 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ [5.0 UJ]	5.0 U	5.0 UJ	5.0 U	**8.6**	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U [10 U]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND [ND]	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	10 UJ	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Fluorene	50	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	10 UJ	10 U	10 UJ	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	10 U	10 U	10 U	10 U [10 U]	NA	NA	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	NA	NA	ND	ND	ND	ND [ND]	NA	NA	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

DRAFT

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Maple Street					South of Maple Street					Maple Street			
Location ID:	Standards and		MW-07	MW-07	MW-07	MW-07	MW-07	MW-08	MW-08	MW-08	MW-08	MW-08	MW-09	MW-09	MW-09	MW-09
Date Collected:	Guidance Values	Units	02/16/10	08/02/10	06/14/11	03/20/12	11/13/12	02/16/10	08/03/10	06/14/11	03/20/12	11/13/12	02/16/10	08/03/10	06/14/11	06/15/11
Detected Volatile Organics																
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J	2.6 J	0.85 J	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.79 J
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Chloroform	7	ug/L	2.1 J	1.3 J	0.70 J	2.5 J	0.93 J	5.0 U	5.0 U	2.6 J	5.0 U	5.0 U	0.73 J	0.86 J	1.4 J	6.7
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**9.5**	**6.4**	3.8 J	**9.9 J**	**8.9 J**	5.0 UJ	5.0 U	4.7 J	5.0 U	5.0 UJ	**8.4**	**11**	**7.6**	1.8 J
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.3 J	4.1 J	2.4 J	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		Maple Street												North of Maple	
Location ID:	Standards and		MW-09	MW-09	MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-11	MW-12	MW-12
Date Collected:	Guidance Values	Units	03/19/12	11/13/12	02/16/10	08/03/10	06/14/11	03/19/12	11/13/12	02/16/10	08/03/10	06/13/11	03/19/12	11/12/12	02/16/10	08/02/10
Detected Volatile Organics																
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	1.6 J	0.53 J	0.86 J	1.4 J	2.3 J	1.3 J	0.44 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	0.83 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	1.4 J	0.69 J	1.7 J	2.1 J	2.2 J	2.2 J	1.3 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	**12 J**	4.8 J	**17**	**11**	**17**	**21 J**	**12 J**	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	3.8 J	0.93 J	4.0 J	4.0 J	4.4 J	**5.4**	2.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	10 UJ	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	10 U	10 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Location:	NYSDEC TOGS		North of Maple Street												
Location ID:	Standards and		MW-12	MW-12	MW-12	MW-13	MW-13	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14	MW-14	MW-14
Date Collected:	Guidance Values	Units	06/13/11	03/19/12	11/12/12	02/16/10	08/03/10	06/13/11	03/19/12	11/12/12	02/16/10	08/02/10	06/13/11	03/19/12	11/12/12
Detected Volatile Organics															
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	0.83 J	5.0 U	0.42 J
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 UJ	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene (PCE)	5	ug/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	1.6 J [1.5 J]	0.90 J	1.7 J	5.0 U	1.5 J
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U [10 U]	10 U	10 U	10 U	10 U
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND [ND]	ND	ND	ND	ND
Detected Semivolatile Organics															
1,1'-Biphenyl	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PAHs	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2
Summary of Detected VOCs and SVOCs in Groundwater Samples

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

DRAFT

Location:	NYSDEC TOGS		West of Airport				
Location ID:	Standards and		MW-15	MW-15	MW-15	MW-15	MW-15
Date Collected:	Guidance Values	Units	02/16/10	08/02/10	06/13/11	03/19/12	11/12/12
Detected Volatile Organics							
1,1-Dichloroethene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (cis) (DCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5	ug/L	NA	NA	NA	NA	NA
1,2-Dichloroethene (trans)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	NA	NA	NA	NA	NA
Benzene	1	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	7	ug/L	6.4	4.4 J	3.4 J	4.9 J	4.6 J
Cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	0.92 J
Ethylbenzene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene (Cumene)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	- -	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	1.3 J
Tetrachloroethene (PCE)	5	ug/L	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U
Toluene	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	1.1 J
Trichloroethene (TCE)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (m&p)	5	ug/L	10 U	10 U	10 U	10 U	1.0 J
Xylenes (o)	5	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	5	ug/L	NA	NA	NA	NA	NA
Total BTEX	- -	ug/L	ND	ND	ND	ND	2.1 J
Detected Semivolatile Organics							
1,1'-Biphenyl	- -	ug/L	10 U	10 U	NA	NA	NA
2,4-Dimethylphenol	50	ug/L	10 U	10 U	NA	NA	NA
2,4-Dinitrotoluene	5	ug/L	10 U	10 U	NA	NA	NA
2-Methylnaphthalene	- -	ug/L	10 U	10 U	NA	NA	NA
3&4-Methylphenol	1	ug/L	10 U	10 U	NA	NA	NA
3-Nitroaniline	5	ug/L	10 U	10 U	NA	NA	NA
4-Nitroaniline	5	ug/L	10 U	10 U	NA	NA	NA
Acenaphthene	20	ug/L	10 U	10 U	NA	NA	NA
Acenaphthylene	- -	ug/L	NA	NA	NA	NA	NA
Anthracene	50	ug/L	10 U	10 U	NA	NA	NA
Benzo(a)anthracene	0.002	ug/L	10 U	10 U	NA	NA	NA
Benzo(a)pyrene	0	ug/L	10 U	10 U	NA	NA	NA
Benzo(b)fluoranthene	0.002	ug/L	10 U	10 U	NA	NA	NA
Benzo(g,h,i)perylene	- -	ug/L	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	10 U	10 U	NA	NA	NA
Bis(2-ethylhexyl)phthalate	5	ug/L	10 U	10 U	NA	NA	NA
Carbazole	- -	ug/L	10 U	10 U	NA	NA	NA
Chrysene	0.002	ug/L	10 U	10 U	NA	NA	NA
Dibenzofuran	- -	ug/L	NA	NA	NA	NA	NA
Fluoranthene	50	ug/L	10 U	10 U	NA	NA	NA
Fluorene	50	ug/L	10 U	10 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	10 UJ	10 U	NA	NA	NA
Naphthalene	10	ug/L	10 U	10 U	NA	NA	NA
Pentachlorophenol	1	ug/L	10 U	10 UJ	NA	NA	NA
Phenanthrene	50	ug/L	10 U	10 U	NA	NA	NA
Phenol	1	ug/L	NA	NA	NA	NA	NA
Pyrene	50	ug/L	10 U	10 U	NA	NA	NA
Total PAHs	- -	ug/L	ND	ND	NA	NA	NA

Notes:

1. J - Indicates the result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.
2. Analytical results in brackets "[ ]" represent blind field duplicates.
3. R - Indicates that due to Matrix Spike/Matrix Spike Duplicate sample recovery < 10%, the analytical result is rejected.
4. U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
5. D - Compound quantitated using a secondary dilution.
6. NA - Not analyzed.
7. E - Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
8. ND - Non-detected.
9. Bold value indicates a detection.
10. Shaded values indicates compound detected at a concentration greater than TOGS 1.1.1 Class GA Standard or Guidance Value.

Table 3
Summary of Chemical-Specific SCGs

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Regulation	Citation	Potential Standard (S) or Guidance (G)	Summary of Requirements	Applicability to the Remedial Design/Remedial Action
Federal				
National Primary Drinking Water Standards	40 CFR Part 141	S	Establishes maximum contaminant levels (MCLs) which are health-based standards for public water supply systems.	These standards are potentially applicable if an action involves future use of ground water as a public supply source.
RCRA-Regulated Levels for Toxic Characteristics Leaching Procedure (TCLP) Constituents	40 CFR Part 261	S	These regulations specify the TCLP constituent levels for identification of hazardous wastes that exhibit the characteristic of toxicity.	Excavated materials may be sampled and analyzed for TCLP constituents prior to disposal to determine if the materials are hazardous based on the characteristic of toxicity.
Universal Treatment Standards/Land Disposal Restrictions (UTS/LDRs)	40 CFR Part 268	S	Identifies hazardous wastes for which land disposal is restricted and provides a set of numerical constituent concentration criteria at which hazardous waste is restricted from land disposal (without treatment).	Applicable if waste is determined to be hazardous and for remedial alternatives involving off-site land disposal.
New York State				
NYSDEC Guidance on Remedial Program Soil Cleanup Objectives	6 NYCRR Part 375	G	Provides an outline for the development and execution of the soil remedial programs. Includes soil cleanup objective tables.	These guidance values are to be considered, as appropriate, in evaluating soil quality.
Guidance for Evaluating Soil Vapor Intrusion in the State of New York	NYSDOH	G	Describes the NYS' methodology for evaluating soil vapor intrusion at a site.	Potentially applicable for evaluating potential soil vapor intrusion concerns. Based on the evaluation, remedial action may be necessary.
Identification and Listing of Hazardous Wastes	6 NYCRR Part 371	S	Outlines criteria for determining if a solid waste is a hazardous waste and is subject to regulation under 6 NYCRR Parts 371-376.	Applicable for determining if materials generated during implementation of remedial activities are hazardous wastes. These regulations do not set cleanup standards, but are considered when developing remedial alternatives.
Soil Cleanup Guidance	CP-51	G	Provides the framework and policies for the selection of soil cleanup levels.	Guidance would be used to develop site-specific soil cleanup objectives (SCOs).
NYSDEC Ambient Water Quality Standards and Guidance Values	Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1	G	Provides a compilation of ambient water quality standards and guidance values for toxic and non-conventional pollutants for use in the NYSDEC programs.	These standards are to be considered in evaluating groundwater and surface water quality.
New York State Surface Water and Groundwater Quality Standards	6 NYCRR Parts 700-705	S	Establishes quality standards for surface water and groundwater.	Potentially applicable for assessing water quality at the site during remedial activities.

Table 4
Summary of Action-Specific SCGs

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Regulation	Citation	Potential Standard (S) or Guidance (G)	Summary of Requirements	Applicability to the Remedial Design/Remedial Action
Federal				
Occupational Safety and Health Act (OSHA) - General Industry Standards	29 CFR Part 1910	S	Specify the 8-hour time-weighted average concentration for worker exposure to various compounds. Training requirements for workers at hazardous waste operations are specified in 29 CFR 1910.120.	Proper respiratory equipment will be worn if it is not possible to maintain the work atmosphere below required concentrations. Appropriate training requirements will be met for remedial workers.
OSHA - Safety and Health Standards	29 CFR Part 1926	S	These regulations specify the type of safety equipment and procedures to be followed during site remediation.	Appropriate safety equipment will be on-site and appropriate procedures will be followed during remedial activities.
OSHA - Record-keeping, Reporting and Related Regulations	29 CFR Part 1904	S	Outlines record-keeping and reporting requirements for an employer under OSHA.	These regulations apply to the company(s) contracted to install, operate and maintain remedial actions at hazardous waste sites.
RCRA - Preparedness and Prevention	40 CFR Part 264.30 - 264.31	S	These regulations outline requirements for safety equipment and spill control when treating, handling and/or storing hazardous wastes.	Safety and communication equipment will be installed at the site as necessary. Local authorities will be familiarized with the site.
RCRA - Contingency Plan and Emergency Procedures	40 CFR Part 264.50 - 264.56	S	Provides requirements for outlining emergency procedures to be used following explosions, fires, etc. when storing hazardous wastes.	Emergency and contingency plans will be developed and implemented during remedial design. Copies of the plan will be kept on-site.
90 Day Accumulation Rule for Hazardous Waste	40 CFR Part 262.34	S	Allows generators of hazardous waste to store and treat hazardous waste at the generation site for up to 90 days in tanks, containers, and containment buildings without having to obtain a RCRA hazardous waste permit.	Potentially applicable to remedial alternatives that involve the storing or treating of hazardous materials on-site.
Land Disposal Facility Notice in Deed	40 CFR Parts 264 and 265 Sections 116-119(b)(1)	S	Establishes provisions for a deed notation for closed hazardous waste disposal units, to prevent land disturbance by future owners.	The regulations are potentially applicable because closed areas may be similar to closed RCRA units.
RCRA - General Standards	40 CFR Part 264.111	S	General performance standards requiring minimization of need for further maintenance and control; minimization or elimination of post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products. Also requires decontamination or disposal of contaminated equipment, structures, and soils.	Decontamination actions and facilities will be constructed for remedial activities and disassembled after completion.
Standards Applicable to Transporters of Applicable Hazardous Waste - RCRA Section 3003	40 CFR Parts 170-179, 262, and 263	S	Establishes the responsibility of off-site transporters of hazardous waste in the handling, transportation and management of the waste. Requires manifesting, recordkeeping and immediate action in the event of a discharge.	These requirements will be applicable to any company(s) contracted to transport hazardous material from the site.
United States Department of Transportation (USDOT) Rules for Transportation of Hazardous Materials	49 CFR Parts 107 and 171.1 - 172.558	S	Outlines procedures for the packaging, labeling, manifesting, and transporting of hazardous materials.	These requirements will be applicable to any company(s) contracted to transport hazardous material from the site.
Clean Air Act-National Ambient Air Quality Standards	40 CFR Part 60	S	Establishes ambient air quality standards for protection of public health.	Remedial operations will be performed in a manner that minimizes the production of benzene and particulate matter.
USEPA-Administered Permit Program: The Hazardous Waste Permit Program	RCRA Section 3005; 40 CFR Part 270.124	S	Covers the basic permitting, application, monitoring, and reporting requirements for off-site hazardous waste management facilities.	Any off-site facility accepting hazardous waste from the site must be properly permitted. Implementation of the site remedy will include consideration of these requirements.
Land Disposal Restrictions	40 CFR Part 368	S	Restricts land disposal of hazardous wastes that exceed specific criteria. Establishes Universal Treatment Standards (UTSs) to which hazardous waste must be treated prior to land disposal.	Excavated materials that display the characteristic of hazardous waste or that are decharacterized after generation must be treated to 90% constituent concentration reduction capped at 10 times the UTS.
RCRA Subtitle C	40 U.S.C. Section 6901 et seq.; 40 CFR Part 268	S	Restricts land disposal of hazardous wastes that exceed specific criteria. Establishes UTSs to which hazardous wastes must be treated prior to land disposal.	Potentially applicable to remedial activities that include the dredging and disposal waste material from the site.

Table 4
Summary of Action-Specific SCGs

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Regulation	Citation	Potential Standard (S) or Guidance (G)	Summary of Requirements	Applicability to the Remedial Design/Remedial Action
New York State				
NYSDEC's Monitoring Well Decommissioning Guidelines	CP-43	G	This guidance presents procedure for abandonment of monitoring wells at remediation sites.	This guidance is applicable for soil or groundwater alternatives that require the decommissioning of monitoring wells.
Guidelines for the Control of Toxic Ambient Air Contaminants	DAR-1 (Air Guide 1)	G	Provides guidance for the control of toxic ambient air contaminants in New York State and outlines the procedures for evaluating sources of air pollution.	This guidance may be applicable for soil or groundwater alternatives that results in certain air emissions.
New York Permits and Certificates	6 NYCRR Part 201	G	Provides instructions and regulations for obtaining a permit to operate air emission source.	Permits are not required for remedial actions taken at hazardous waste sites; however, documentation for relevant and appropriate permit conditions would be provided to NYSDEC prior to and during implementation of this alternative.
New York State Air Quality Classification System	6 NYCRR Part 256	G	Outlines the air quality classifications for different land uses and population densities.	Air quality classification system will be referenced during the treatment process design.
New York Air Quality Standards	6 NYCRR Part 257	G	Provides air quality standards for different chemicals (including those found at the site), particles, and processes.	Emissions from the treatment process will meet the air quality standards.
Discharges to Public Waters	New York State Environmental Conservation Law, Section 71-3503	S	Provides that a person who deposits gas tar, or the refuse of a gas house or gas factory, or offal, refuse, or any other noxious, offensive, or poisonous substances into any public waters, or into any sewer or stream running or entering into such public waters, is guilty of a misdemeanor.	During the remedial activities, MGP-impacted materials will not be deposited into public waters or sewers.
New York Hazardous Waste Management System - General	6 NYCRR Part 370	S	Provides definitions of terms and general instructions for the Part 370 series of hazardous waste management.	Hazardous waste is to be managed according to this regulation.
Identification and Listing of Hazardous Wastes	6 NYCRR Part 371	S	Outlines criteria for determining if a solid waste is a hazardous waste and is subject to regulation under 6 NYCRR Parts 371-376.	Applicable for determining if solid waste generated during implementation of remedial activities are hazardous wastes. These regulations do not set cleanup standards, but are considered when developing remedial alternatives.
Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities	6 NYCRR Part 372	S	Provides guidelines relating to the use of the manifest system and its recordkeeping requirements. It applies to generators, transporters and facilities in New York State.	This regulation will be applicable to any company(s) contracted to do treatment work at the site or to transport or manage hazardous material generated at the site.
New York Regulations for Transportation of Hazardous Waste	6 NYCRR Part 372.3 a-d	S	Outlines procedures for the packaging, labeling, manifesting and transporting of hazardous waste.	These requirements will be applicable to any company(s) contracted to transport hazardous material from the site.
Waste Transporter Permits	6 NYCRR Part 364	S	Governs the collection, transport and delivery of regulated waste within New York State.	Properly permitted haulers will be used if any waste materials are transported off-site.
New York Regulations for Hazardous Waste Management Facilities	6 NYCRR Part 373.1.1 - 373.1.8	S	Provides requirements and procedures for obtaining a permit to operate a hazardous waste treatment, storage and disposal facility. Also lists contents and conditions of permits.	Any off-site facility accepting waste from the site must be properly permitted.
Land Disposal of a Hazardous Waste	6 NYCRR Part 376	S	Restricts land disposal of hazardous wastes that exceed specific criteria.	New York defers to USEPA for UTS/LDR regulations.
NYSDEC Guidance on the Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment from Former Manufactured Gas Plants	TAGM 4061 (DER-4)	G	Outlines the criteria for conditionally excluding coal tar waste and impacted soils from former MGPs which exhibit the hazardous characteristic of toxicity for benzene (D018) from the hazardous waste requirements of 6 NYCRR Parts 370 - 374 and 376 when destined for thermal treatment.	This guidance will be used as appropriate in the management of MGP-impacted soil and coal tar waste generated during the remedial activities.
National Pollutant Discharge Elimination System (NPDES) Program Requirements, Administered Under New York State Pollution Discharge Elimination System (SPDES)	40 CFR Parts 122 Subpart B, 125, 301, 303, and 307 (Administered under 6 NYCRR 750-758)	S	Establishes permitting requirements for point source discharges; regulates discharge of water into navigable waters including the quantity and quality of discharge.	Removal activities may involve treatment/disposal of water. If so, water generated at the site will be managed in accordance with NYSDEC SPDES permit requirements.

Table 5
Summary of Location-Specific SCGs

NYSEG - Dansville Former MGP Site (OU-2) - Dansville, New York

Regulation	Citation	Potential Standard (S) or Guidance (G)	Summary of Requirements	Applicability to the Remedial Design/Remedial Action
Federal				
Historical and Archaeological Data Preservation Act	16 USC 469a-1	S	Provides for the preservation of historical and archaeological data that might otherwise be lost as the result of alteration of the terrain.	The National Register of Historic Places register would be consulted to determine the presence of historical sites in the immediate vicinity of the MGP site.
National Historic and Historical Preservation Act	16 USC 470; 36 CFR Part 65; 36 CFR Part 800	S	Requirements for the preservation of historic properties.	
Hazardous Waste Facility Located on a Floodplain	40 CFR Part 264.18(b)	S	Requirements for a treatment, storage and disposal (TSD) facility built within a 100-year floodplain.	Hazardous waste TSD activities (if any) will be designed to comply with applicable requirements cited in this regulation.
Endangered Species Act	16 USC 1531 et seq.; 50 CFR Part 200; 50 CFR Part 402	S	Requires federal agencies to confirm that the continued existence of any endangered or threatened species and their habitat will not be jeopardized by a site action.	During RI, no threatened or endangered species and/or critical habitats were identified within a half mile radius of the site.
New York State				
New York State Freshwater Wetlands Act	ECL Article 24 and 71; 6 NYCRR Parts 662-665	S	Activities in wetlands areas must be conducted to preserve and protect wetlands.	Does not appear to be applicable as the site is not located in a wetlands area.
New York State Parks, Recreation, and Historic Preservation Law	New York Executive Law Article 14	S	Requirements for the preservation of historic properties.	The National Register of Historic Places register would be consulted to determine the presence of historical sites in the immediate vicinity of the MGP site.
Endangered & Threatened Species of Fish and Wildlife	6 NYCRR Part 182	S	Identifies endangered and threatened species of fish and wildlife in New York.	During RI, no threatened or endangered species and/or critical habitats were identified within a half mile radius of the site.
Local				
Local Building Permits	N/A	S	Local authorities may require a building permit for any permanent or semi-permanent structure, such as an on-site water treatment system building or a retaining wall.	Substantive provisions are potentially applicable to remedial activities that require construction of permanent or semi-permanent structures.
Local PTOW Permits	NA	S	Local wastewater treatment plant would require a permit (and associated sampling) to discharge treated (or untreated waters) to the local sanitary sewer.	A Temporary Wastewater Discharge Permit (and associated sampling) has historically been required for the discharge site groundwater (extracted and treated on-site) during remedial construction.
Local Street Work Permits	N/A	S	Local authorities will require a permits for conducting work within and closing local roadways.	Street work permits will be required to conduct remedial activities within public roadways.

Table 6
Remedial Technology Screening Evaluation for Soil

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
No Action	No Action	No Further Action	Alternative would not include any remedial action. The 'No Action' alternative serves as a baseline for comparison of the overall effectiveness of other remedial alternatives. Consideration of a 'No Action' alternative is required by the NYSDEC DER-10.	Implementable.	Would not achieve the RAOs for soil in an acceptable time frame.
Institutional Controls	Institutional Controls	Deed Restrictions, Environmental Land Use Restrictions, Enforcement and Permit Controls, Informational Devices	Institutional controls would include legal and/or administrative controls that mitigate the potential for exposure to impacted soils and/or jeopardize the integrity of a remedy. Examples of potential institutional controls include establishing land use restrictions, health and safety requirements for subsurface activities.	Implementable. However, administratively challenging for properties not owned by NYSEG.	When properly implemented and followed, this technology could reduce potential human exposures, and may be effective when combined with other technology processes. Would help to reduce human exposure to impacted soil. May not achieve RAOs for environmental protection.
In-Situ Containment/ Control	Capping	Soil Cap	Placing and compacting soil/gravel material over impacted soil to provide a physical barrier to human and biota exposure to impacted soil at the site.	Implementable. Equipment and materials necessary to construct the cap are readily available. However, existing vegetated and asphalt/concrete surfaces are already present throughout OU-2.	Although construction of a cap is readily implementable, the presence of a surface cap would not achieve a majority of the site-specific RAOs. Shallow soil on OU-2 is not impacted. Therefore, capping does not reduce potential exposures.
		Asphalt/Concrete Cap	Application of a layer of asphalt or concrete over impacted soils.		
		Multi-Media Cap	Application of a combination of clay/soils and synthetic membrane(s) over impacted soil.		
In-Situ Treatment	Immobilization	Solidification/ Stabilization	Addition of material to the impacted soil that limits the solubility and mobility of NAPL and COCs in soil and groundwater. Involves treating soil to produce a stable material with low leachability that physically and chemically locks NAPL and COCs in the solidified matrix.	Potentially implementable. Solidification/ stabilization materials are readily available. The presence of existing residential buildings would limit implementability.	Overall effectiveness of this process would need to be evaluated during a bench-scale treatability study. Assuming an effective stabilization mix could be developed, this technology would effectively address each of the RAOs for soil. However, based on the limited residual quantity of MGP-related impacts that remain in OU-2, solidification/ stabilization is not considered cost effective or warranted.
	Extraction/In-Situ Stripping	Dynamic Underground Stripping and Hydrous Pyrolysis/Oxidation (DUS/HPO)	Steam is injected into the subsurface to mobilize contaminants and NAPLs. The mobilized contaminants are captured and constituents are recondensed, collected, and treated. In addition, HPO can degrade contaminants in subsurface heated zones. In most cases, this technology requires long-term operation and maintenance of on-site injection, collection and/or treatment systems.	Technically implementable. This option would require a pilot scale study to determine effectiveness. Process may result in uncontrolled NAPL migration. Not a preferred technology process due to risks and potential technical implementability issues associated with operation in a residential setting and presence of underground utilities.	Could potentially promote NAPL mobilization. Alone, this technology would not effectively address the RAO of preventing direct exposure to impacted soil. Could volatilization MGP-related and CVOC-related impacts, causing potential soil vapor exposures to residents.
	Chemical Treatment	Chemical Oxidation	Oxidizing agents are added to oxidize and reduce the mass of organic constituents in-situ chemical oxidation involves the introduction of chemicals such as ozone, hydrogen peroxide, magnesium peroxide, sodium persulfate or potassium permanganate. A pilot study would be required to evaluate/determine oxidant application requirements. May not effectively oxidize NAPL.	Implementable. Equipment and materials necessary to inject/apply oxidizing agents are readily available. May require special provisions for storage of process chemicals. Not a preferred technology process based on the residential setting and underground utilities.	Would require multiple treatments of chemicals to reduce COCs. Would not be effective at treating NAPL and NAPL-containing soil. Could volatilization MGP-related and CVOC-related impacts, causing potential soil vapor exposures to residents.
		Surfactant/Cosolvent Flushing	A surfactant or cosolvent solution is delivered and extracted by a network of injection and extraction wells to flush the NAPL source area. Reduction of the NAPL mass occurs by increasing the dissolution of the NAPL or selected constituents or by increasing the NAPL mobility with reduction of the interfacial tension between the NAPL and groundwater and/or reduction of the NAPL viscosity. A bench scale and treatability study would be required to determine surfactant/cosolvent solution.	Implementable. Equipment and materials necessary to inject/apply surfactant/cosolvent agents are readily available. May require special provisions for storage of process chemicals. Not a preferred technology process based on the residential setting.	Overall effectiveness of this process would need to be evaluated during a bench and field-scale pilot test to determine the site-specific design. Would not be effective at treating NAPL and NAPL-containing soil. Additionally would likely not be efficient based on the limited quantity of small NAPL globules.

See Note on Page 3.

Table 6
Remedial Technology Screening Evaluation for Soil

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
In-Situ Treatment (Cont.)	Biological Treatment	Biodegradation	Natural biological and physical processes that, under favorable conditions, act without human intervention to reduce the mass, volume, concentration, toxicity, and/or mobility of COCs. This process relies on long-term monitoring to demonstrate the reduction of impacts.	Implementable.	Less effective for PAHs; not effective for NAPLs; would not achieve RAOs in an acceptable time frame.
		Enhanced Biodegradation	Addition of amendments (e.g., oxygen, nutrients) and controls to the subsurface to enhance indigenous microbial populations to improve the rate of natural degradation.	Implementable.	May not achieve RAOs for soil. Not effective for NAPLs.
		Biosparging	Air/oxygen injection wells are installed within the impacted regions to enhance biodegradation of constituents by increasing oxygen availability. Low-flow injection technology may be incorporated. This technology requires long-term operation and monitoring.	Implementable. However, application would be difficult given thin saturated zone and limited thickness of impacts above the confining layer. Would require implementation of soil vapor extraction as well.	May not achieve RAOs for soil. Not effective for NAPLs.
	Thermal Treatment	In-Situ Thermal Desorption	Heat is injected into the subsurface via vacuum wells and heat transfer is completed via thermal conduction. COCs are destroyed via oxidation, pyrolysis, boiling, and volatilization. Vapor/water is recovered and treated.	Potentially implementable. Numerous concerns related to conducting thermal treatment in close proximity to residential buildings, roadways, and subsurface utilities.	May not achieve RAOs for soil. Not effective for NAPLs and SVOCs.
		Electrical Resistance Heating	Electrical current is applied to the subsurface via network of probes installed through standard drilling techniques. Electrical resistance is used to transfer heat via thermal conduction. COCs are destroyed via oxidation, boiling, and volatilization Vapor/water is recovered and treated.		
Removal	Excavation	Excavation	Physical removal of impacted soil. Typical excavation equipment would include excavators, backhoes, loaders, and/or dozers. Extraction wells and pumps or other methods may be used to obtain hydraulic control to facilitate use of typical excavation equipment to physically remove soil.	Implementable. Equipment capable of excavating the soil is readily available. Presence of private residences may limit implementability.	Would achieve RAOs. Proven process for effectively removing impacted soil.
	NAPL Removal	Active Removal	Process by which automated pumps are utilized to remove DNAPL from recovery wells.	Technically implementable.	Although NAPL has not accumulated in OU-2 monitoring wells or piezometers to date, if recoverable quantities of NAPL are present and mobile, would be an effective means to remove NAPL from the subsurface. Active removal may generate large volumes of water that would require treatment and disposal. Collection trenches not warranted based on residual nature of remaining impacts.
		Passive Removal	NAPL is passively collected in vertical wells and periodically removed (i.e., via bottom-loading bailers, manually operated pumps, etc.).	Technically implementable.	
		Hot Water/Steam Injection	Process involves the injection of hot water and/or steam to heat groundwater and decrease the viscosity of DNAPL to facilitate mobilization and removal. Used in conjunction with one (or more) of the above recovery technologies.	Technically feasible. Not a preferred technology process based on the residential setting.	This process may facilitate uncontrolled migration of NAPL. Would not meet the RAOs as a stand-alone technology.
Ex-Situ On-Site Treatment and/or Disposal	Immobilization	Solidification/ Stabilization	Addition of material to excavated soil that limits the solubility or mobility of the constituents present. Involves treating soil to produce a stable material with low leachability, that physically and chemically locks the constituents within the solidified matrix.	Technically implementable. Limitations of space and public proximity concerns limits the implementability of this technology. Pilot study would be needed to verify implementability.	May achieve RAOs. Proven process for effectively reducing mobility and toxicity of NAPL and organic and inorganic constituents.
	Extraction	Low-Temperature Thermal Desorption	Process by which soils containing organics with boiling point temperatures less than 800° Fahrenheit are excavated, conditioned, and heated; the organic compounds are desorbed from the soils into an induced airflow. The resulting gas is treated either by condensation and filtration or by thermal destruction. Treated soils are returned to the subsurface. Treatment is conducted in a thermal treatment unit that is mobilized or constructed on-site	Not considered implementable due to close proximity of public areas.	Proven process for effectively removing organic constituents from excavated soil. The efficiency of the system and rate of removal of organic constituents would require evaluation during bench-scale and/or pilot-scale testing.

See Note on Page 3.

Table 6
Remedial Technology Screening Evaluation for Soil

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
Ex-Situ On-Site Treatment and/or Disposal (Cont.)	Thermal Destruction	Incineration	Use of a mobile incineration unit installed on-site for high temperature thermal destruction of the organic compounds present in the media. Soils are excavated and conditioned prior to incineration. Treated soils are returned to the subsurface.	Not considered implementable due to close proximity of public areas.	Proven process for effectively addressing organic constituents. The efficiency of the system and rate of removal of organic constituents would need to be verified during bench-scale and/or pilot-scale testing.
	Chemical Treatment	Chemical Oxidation	Addition of oxidizing agents to degrade organic constituents to less-toxic by-products.	Implementable. Equipment and materials necessary to apply oxidizing agents are available. Large amounts of oxidizing agents may be required. May require special provisions for storage of process chemicals.	Not known to be effective for NAPL.
	On-Site Disposal	RCRA Landfill	Construction of a landfill that would meet RCRA requirements.	Not considered implementable due to close proximity of public areas.	This technology process would be effective at meeting the RAOs for soil. Excavated material would be contained in an appropriately constructed soil management cell. Long-term effectiveness requires ongoing maintenance and monitoring.
		Solid Waste Landfill	Construction of a landfill that would meet NYSDEC solid waste requirements.		
Off-Site Treatment and/or Disposal	Recycle/ Reuse	Asphalt Concrete Batch Plant	Soil is used as a raw material in asphalt concrete paving mixtures. The impacted soil is transported to an off-site asphalt concrete facility and can replace part of the aggregate and asphalt concrete fraction. The hot-mix process melts asphalt concrete prior to mixing with aggregate. During the cold-mix process, aggregate is mixed at ambient temperature with an asphalt concrete/water emulsion. Organics and inorganics are bound in the asphalt concrete. Some organics may volatilize in the hot-mix.	Permitted facilities and demand are limited.	Effective for treating organics and inorganics through volatilization and/or encapsulation. Thermal pretreatment may be required to prevent leaching. Limited number of projects to support comparison of effectiveness.
		Brick/Concrete Manufacture	Soil is used as a raw material in manufacture of bricks or concrete. Heating in ovens during manufacture volatilizes organics and some inorganics. Other inorganics are bound in the product.	The site does not have the adequate space necessary to conduct the amount of screening of the material required to be performed prior to being utilized in brick/concrete manufacture.	Effective for treating organics and inorganics through volatilization and/or vitrification. A bench-scale/pilot study may be necessary to determine effectiveness.
		Co-Burn in Utility Boiler	Soil is blended with feed coal to fire a utility boiler used to generate steam. Organics are destroyed.	Permitted facilities available for burning MGP soils are limited.	Effective for treating organic constituents. Soil would be blended with coal prior to burning. Overall effectiveness of this process would need to be evaluated during a trial burn.
	Extraction	Low-Temperature Thermal Desorption	Process by which soils containing organics with boiling poin temperatures less than 800^{0} Fahrenheit are heated and the organic compounds are desorbed from the soils into an induced airflow. The resulting gas is treated either by condensation and filtration or by thermal destruction. Would be used on materials that are determined to be characteristically hazardous based on TCLP analysis	Implementable. Treatment facilities are available.	Effective means for treatment of materials that are characteristically hazardous due to the presence of organic compounds (i.e., benzene).
	Thermal Destruction	Incineration	Soils are incinerated off-site for high temperature thermal destruction of the organic compounds present in the media. Soils are excavated and conditioned prior to incineration.	Not implementable. Not a cost effective means for treating impacted soil. Limited number of treatment facilities. LTTD is a more appropriate technology process for thermally treating MGP-impacted media.	Proven process for effectively addressing organic constituents. The efficiency and effectiveness of the system and rate of removal of organic constituents would need to be verified during bench-scale and/or pilot-scale testing.
	Off-Site Disposal	Solid Waste Landfill	Disposal of non-hazardous soil and C&D debris in an existing permitted non-hazardous landfill.	Implementable.	Proven process that, in conjunction with excavation, can effectively achieve the RAOs.
		RCRA Landfill	Disposal of impacted soil in an existing RCRA permitted landfill facility.	Hazardous materials would not meet New York State LDRs.	Proven process that, in conjunction with excavation, can effectively achieve the RAOs.

Note:

1. Shading indicates that technology process has not been retained for development of a remedial alternative.

Table 7
Remedial Technology Screening Evaluation for Groundwater

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
No Action	No Action	No Further Action	Alternative would not include any remedial action. A 'No Action' alternative serves as a baseline for comparison of the overall effectiveness of other remedial alternatives. Consideration of a 'No Action' alternative is required by the NYSDEC DER-10.	Implementable.	Natural attenuation of dissolved phase impacts is already occurring. Could potentially achieve some RAOs for groundwater.
Institutional Controls	Institutional Controls	Deed Restrictions, Groundwater Use Restriction, Enforcement and Permit Controls, Informational Devices	Institutional controls would include legal and/or administrative controls that mitigate the potential for exposure to impacted materials and/or jeopardize the integrity of a remedy. Examples of potential institutional controls include establishing land use restrictions, health and safety requirements for subsurface activities, and restrictions on groundwater use and/or extraction.	Implementable. However, administratively challenging for properties not owned by NYSEG.	May be effective for reducing the potential for human exposure. This option would not meet the RAO for restoring groundwater, to the extent practicable, the quality of groundwater. This option may be effective when combined with other process options.
In-Situ Containment/ Control	Containment	Sheet Pile	Steel sheet piles are driven into the subsurface to contain impacted soils, groundwater, and NAPLs. The sheet pile wall is typically keyed into a confining unit and could be permeable or impermeable to groundwater flow.	Presence of existing buildings and subsurface utilities would prevent installation of a continuous barrier, limiting the implementability of this alternative. Hydraulic effects on site groundwater would have to be evaluated. Equipment and materials required to install slurry walls are readily available.	Effectiveness could be limited based on the presence of subsurface utilities (which may prevent construction of a complete barrier). Additionally, containment would address potential exposures to future construction/utility workers. Not considered an effective means to achieve groundwater RAOs considering the source of dissolved phase impacts (i.e., OU-1 soil) has been addressed.
		Slurry Walls/Jet Grout Wall	Involves excavating a trench and adding a slurry (e.g., soil/cement-bentonite mixture) to control migration of groundwater and NAPL from an area. Slurry walls are typically keyed into a low permeability unit (e.g., an underlying silt/clay layer).		
In-Situ Treatment	Biological Treatment	Groundwater Monitoring	Natural biological, chemical, and physical processes that under favorable conditions, act without human intervention to reduce the mass, volume, concentration, toxicity, and mobility of chemical constituents. Long-term monitoring is required to demonstrate the reduction of COCs.	Easily implemented. Would require monitoring to demonstrate reduction of COCs.	May be effective given the source of MGP-related impacts has been addressed at OU-1.
		Enhanced Biodegradation	Addition of amendments (e.g., nutrients, oxygen) to the subsurface to enhance indigenous microbial populations to improve the rate of natural biodegradation of constituents.	Implementable. Can be applied via passive wells or active injection systems. Active injection is not a preferred technology process based on the residential setting.	As anaerobic conditions are present throughout OU-2, aerobic conditions would only be induced on a local level (i.e., in the immediate vicinity of the wells). Potentially be effective at restoring groundwater to pre-release/pre-disposal conditions as MGP source materials have been addressed at OU-1.
		Biosparging	Air/oxygen injection wells are installed within the dissolved plume to enhance biodegradation of constituents by increasing oxygen availability. Low-flow injection technology may be incorporated. This technology requires long-term operation, monitoring, and maintenance of air/oxygen delivery system.	Implementable. Equipment for installing wells and injecting air/oxygen is readily available. However, challenging to effectively distribute oxygen in the relatively thin saturated zone (i.e., 5 feet or less). Could lead to horizontal migration of gas and create vapor intrusion issues within utility corridors or nearby residences.	Could be effective at addressing dissolved-phase impacts.
	Chemical Treatment	Chemical Oxidation	Oxidizing agents are added to oxidize and reduce the mass of organic constituents. In-situ chemical oxidation involves the introduction of chemicals such as ozone, hydrogen peroxide, magnesium peroxide, sodium persulfate, or potassium permanganate. Large amounts of oxidizing agents are needed to oxidize NAPL.	Implementable. Equipment and materials necessary to inject/apply oxidizing agents are readily available. However, challenging to effectively distribute oxygen in the relatively thin saturated zone (i.e., 5 feet or less). May require special provisions for storage of process chemicals. Not a preferred technology process based on the residential setting.	Given removal of source materials, this technology could meet the RAOs for groundwater. However, may not be a cost effective means to achieve the RAOs. Could volatilization MGP-related and CVOC-related impacts, causing potential soil vapor exposures to residents.
		Permeable Reactive Barrier (PRB)	PRBs are installed in or downgradient from the flow path of a contaminant plume. The contaminants in the plume react with the media inside the barrier to either break the compound down into harmless products or immobilize contaminants by precipitation or sorption.	Presence of residential buildings and subsurface utilities would prevent installation of a continuous barrier, limiting the implementability of this alternative. Would require periodic replacement of treatment media.	

See Note on Page 3.

Table 7
Remedial Technology Screening Evaluation for Groundwater

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
In-Situ Treatment (Cont.)	Extraction	Dynamic Underground Stripping and Hydrous Pyrolysis/Oxidation (DUS/HPO)	Steam is injected into the subsurface to mobilize contaminants and NAPLs. The mobilized contaminants are captured and constituents are recondensed, collected and treated. In addition, HPO can degrade contaminants in subsurface heated zones. In most cases, this technology requires long-term operation and maintenance of on-site injection, collection, and/or treatment systems.	Technically implementable. This option would require a pilot scale study to determine effectiveness. Process may result in uncontrolled NAPL migration. Not a preferred technology process due to risks and potential technical implementability issues associated with operation in a residential setting.	This option would require a pilot scale study to determine effectiveness. Process may result in NAPL and/or dissolved plume migration. Not certain in the ability of this alternative to meet the RAOs. Could volatilization MGP-related and CVOC-related impacts, causing potential soil vapor exposures to residents.
Removal	Hydraulic Control	Vertical Extraction Wells	Vertical wells are installed and utilized to recover groundwater for treatment/disposal and containment/ migration control. Typically requires extensive design/testing to determine required hydraulic gradients and feasibility of achieving those gradients.	Equipment and tools necessary to install and operate vertical extraction wells are readily available. Would require operation for an extended period of time.	Would not meet RAOs as a stand alone technology. Would likely be used in conjunction with an ex-situ treatment system (i.e., pump and treat). Pumping would be required over a prolonged period of time.
		Horizontal Extraction Wells	Horizontal wells are utilized to replace conventional well clusters in soil and containment/migration control.	Requires specialized horizontal drilling equipment.	
Ex-Situ/On-Site Treatment	Chemical Treatment	Ultra-violet (UV) Oxidation	Oxidation by subjecting groundwater to UV light and ozone. If complete mineralization is achieved, the final products of oxidation are carbon dioxide, water, and salts.	Potentially implementable. Not typically used in MGP-impacted groundwater treatment train. Not effective on NAPL.	Proven process for effectively treating organic compounds. Use of this process may effectively achieve the RAOs. A bench-scale treatability study may be required to evaluate the efficiency of this process and to make project-specific adjustments to the process.
		Chemical Oxidation	Addition of oxidizing agents to degrade organic constituents to less-toxic byproducts.	Potentially implementable. Not effective on NAPL.	A bench-scale treatability study may be required to evaluate the efficiency of this process and to make project-specific adjustments to the process. Large amounts of oxidizing agents are needed to oxidize NAPL.
	Physical Treatment	Carbon Adsorption	Process by which organic constituents are adsorbed to the carbon as groundwater is passed through carbon units.	Potentially implementable. May be used as part of a temporary water treatment system in support of excavation dewatering activities. However, permanent on-site treatment technologies are not required because groundwater removal technologies have not been retained.	Effective at removing organic constituents. Use of this treatment process may effectively achieve the RAOs when combined with groundwater extraction.
		Filtration	Extraction of groundwater and treatment using filtration. Process in which the groundwater is passed through a granular media in order to removed suspended solids by interception, straining, flocculation, and sedimentation activity within the filter.		Effective pre-treatment process to reduce suspended solids. Use of this process along with other processes (i.e., that address organic constituents) could effectively achieve the RAOs.
		Air Stripping	A process in which VOCs are removed through volatilization by increasing the contact between the groundwater and air.		This technology process would be effective at removing VOCs from water. Process would potentially be used as part of a temporary treatment train to treat groundwater removed from excavation areas. Has potential to be used as part of a treatment system to meet the RAOs.
		Precipitation/ Coagulation/ Flocculation	Process which precipitates dissolved constituents into insoluble solids and improves settling characteristics through the addition of amendments to water to facilitate subsequent removal from the liquid phase by sedimentation/filtration.		Process which transforms dissolved constituents into insoluble solids by adding coagulating agents to facilitate subsequent removal from the liquid phase by sedimentation/ filtration. Has potential to be used as part of a treatment system to meet the RAOs.
		Oil/Water Separation	Process by which insoluble oils are separated from water via physical separation technologies, including gravity separation, baffled vessels, etc.		Effective at separating insoluble oil from groundwater. This process could be used as part of the groundwater treatment train if needed to address separate-phase liquids. Has potential to be used as part of a treatment system to meet the RAOs.

See Note on Page 3.

Table 7
Remedial Technology Screening Evaluation for Groundwater

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

General Response Action	Remedial Technology Type	Technology Process Option	Description	Implementability	Effectiveness
Off-Site Treatment and/or Disposal	Groundwater Discharge	Discharge to a local Publicly-Owned Treatment Works (POTW)	Treated or untreated water is discharged to a sanitary sewer and treated at a local POTW facility.	Implementable. Equipment and materials necessary to extract, pretreat (if necessary), and discharge the water to the sewer system are readily available. Discharges to the sewer will require a POTW-issued discharge permit. Based on OU-1 experience, strict discharge/sampling criteria is associated with the local POTW permit.	Proven process for effectively disposing of groundwater. Typically requires the least amount of pretreatment because the discharged water will be subjected to additional treatment at the POTW. May be used in support of excavation dewatering activities. However, permanent off-site treatment/disposal technologies are not required because groundwater removal technologies have not been retained.
		Discharge to Surface Water via Storm Sewer	Treated or untreated water is discharged to surface water, provided that the water quality and quantity meet the allowable discharge requirements for surface waters (NYSDEC SPDES compliance).	Discharges to surface water must meet substantive requirements of a SPDES permit. Cleanup objectives and sampling requirements may be restrictive. Surface water discharge locations not present near site.	This technology process would effectively dispose of groundwater. Impacted groundwater would require treatment to achieve water quality discharge limits. Helps in the management of treated water, but does not directly lend to achieving the RAOs for groundwater. May be used in support of excavation dewatering activities. However, permanent off-site treatment/disposal technologies are not required because groundwater removal technologies have not been retained.
		Discharge to a privately-owned treatment/ disposal facility.	Treated or untreated water is collected and transported to a privately-owned treatment facility.	Equipment and materials to pretreat the water at the site are readily available on a commercial basis. Facilities capable of transporting and disposing of the groundwater are available. Treatment may be required prior to discharge. Surface water bodies not present in close proximity to the site.	Proven process for effectively disposing of groundwater. Typically requires the least amount of pretreatment because the discharged water will be subjected to additional treatment at the disposal facility. May be used in support of excavation dewatering activities. However, permanent off-site treatment/disposal technologies are not required because groundwater removal technologies have not been retained.

Note:
1. Shading indicates that technology process has not been retained for development of a remedial alternative.

Table 8
Cost Estimate for Alternative 2 - Groundwater Monitoring

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Cost
Capital Costs					
1	New Monitoring Wells	10	EACH	$4,000	$40,000
2	PDI Groundwater Sampling	1	EVENT	$7,500	$7,500
3	Laboratory Analysis of Groundwater Samples (BTEX and PAHs)	16	EACH	$250	$4,000
4	Site Management Plan	1	LS	$30,000	$30,000
5	Institutional Controls	1	LS	$50,000	$50,000
	Subtotal Capital Cost				$131,500
6	Administration & Engineering (15%)				$19,725
	Contingency (20%)				$26,300
	Total Capital Cost				$177,525
Operation and Maintenance Costs					
7	Annual Verification of Institutional Controls	1	LS	$5,000	$5,000
8	Annual Groundwater Sampling	1	EVENT	$5,000	$5,000
9	Laboratory Analysis of Groundwater Samples (BTEX and PAHs)	12	EACH	$250	$3,000
10	Waste Disposal	2	DRUM	$700	$1,400
11	Annual Summary Report	1	LS	$15,000	$15,000
	Subtotal O&M Cost				$29,400
	Contingency (20%)				$5,880
	Total Annual O&M Cost				$35,280
12	30-Year Total Present Worth Cost of O&M				$542,340
	Total Estimated Cost:				**$719,865**
	Rounded To:				**$700,000**

General Notes:

1. Cost estimate is based on Arcadis of New York's (Arcadis') past experience and vendor estimates using 2015 dollars.

2. This estimate has been prepared for the purposes of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. Arcadis is not licensed to provide financial or legal consulting services; as such; this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

Assumptions:

1. New monitoring wells cost estimate includes labor, equipment, and material necessary to install overburden monitoring wells. Cost estimate includes oversight by a geologist, drill rig and crew, and assumes 2-inch diameter PVC well construction.

2. PDI groundwater sampling cost estimate includes labor, equipment, and materials necessary to conduct groundwater sampling as part of the pre-design investigation. Cost estimate assumes groundwater samples will be collected from up to 14 new/existing groundwater monitoring wells using low-flow sampling procedures. Cost estimate assumes two workers will require 3 days to complete the sampling activities. Estimate includes costs for labor, field vehicle, and equipment rental.

3. Laboratory analysis of groundwater samples (BTEX and PAHs) cost estimate includes the analysis of groundwater samples for BTEX and PAHs. Estimate assumes laboratory analysis of groundwater samples from up to 14 groundwater monitoring wells and up to 2 QA/QC samples per sampling event.

4. Site management plan cost estimate includes labor necessary to prepare a site management plan to document: the institutional controls that have been established and will be maintained for the NYSEG-owned portion of OU-2; protocols and requirements for conducting the periodic monitoring; protocols for addressing significant changes in COC concentrations in groundwater based on the results of the periodic monitoring activities; known locations of soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs; protocols, including health and safety requirements, for conducting invasive (i.e., subsurface) activities and managing potentially impacted material encountered during these activities; protocols and requirements for a soil vapor intrusion evaluation if new structures are built in OU-2.

5. Institutional controls cost estimate includes legal expenses to institute environmental easements and/or deed restrictions on the NYSEG-owned portion of OU-2. Institutional controls would: limit intrusive (i.e., subsurface) activities that could result in potential exposures to remaining subsurface soil and groundwater containing MGP-related impacts at concentrations greater than applicable standards and guidance values; require compliance with the SMP; and prohibit the use of non-treated groundwater.

6. Administration and engineering costs (e.g., preparation of work plans, initial summary reports, etc.) are based on an assumed 15% of the total capital costs.

7. Annual verification of institutional controls cost estimate includes administrative costs for confirming institutional controls to minimize the potential for human exposure to project area soil and groundwater are effective and bring maintained. Annual costs associated with institutional controls include verifying the status of institutional controls and preparing/submitting notification to the NYSDEC to demonstrate that the institutional controls are being maintained and remain effective.

8. Annual groundwater sampling cost estimate includes labor, equipment, and materials necessary to conduct annual groundwater sampling activities. Cost estimate assumes groundwater samples will be collected from up to 10 groundwater monitoring wells using low-flow sampling procedures. Cost estimate assumes two workers will require 2 days to complete the sampling activities. Estimate includes costs for labor, field vehicle, and equipment rental.

9. Laboratory analysis of groundwater samples cost estimate includes the analysis of groundwater samples for BTEX and PAHs. Estimate assumes laboratory analysis of groundwater samples from up to 10 groundwater monitoring wells and up to 2 QA/QC samples per sampling event.

10. Waste disposal cost estimate includes off-site disposal of drummed PPE, disposable sampling equipment, and purge water generated/collected during annual groundwater monitoring activities.

11. Annual summary report cost estimate includes labor necessary to prepare an annual report summarizing annual groundwater monitoring activities and results. Annual report to be submitted to NYSDEC.

12. Present worth is estimated based on a 5% beginning-of-year discount rate. It is assumed that "year zero" is 2016.

Table 9
Cost Estimate for Alternative 3 - Enhanced Natural Attenuation and NAPL Monitoring

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Cost
Capital Costs					
1	New Monitoring Wells	10	EACH	$4,000	$40,000
2	New NAPL Monitoring Wells	6	EACH	$6,000	$36,000
3	PDI Groundwater Sampling	1	EVENT	$7,500	$7,500
4	Laboratory Analysis of Groundwater Samples (BTEX and PAHs)	16	EACH	$250	$4,000
5	Laboratory Analysis of Groundwater Samples (NA parameters)	8	EACH	$750	$6,000
6	New ORM Application Wells	14	EACH	$6,000	$84,000
7	Site Management Plan	1	LS	$30,000	$30,000
8	Institutional Controls	1	LS	$50,000	$50,000
				Subtotal Capital Cost	$257,500
9				Administration & Engineering (15%)	$38,625
				Contingency (20%)	$51,500
				Total Capital Cost	$347,625
Operation and Maintenance Costs					
10	Annual Verification of Institutional Controls	1	LS	$5,000	$5,000
11	Annual Groundwater Sampling/NAPL Monitoring	1	EVENT	$5,000	$5,000
12	Laboratory Analysis of Groundwater Samples (BTEX and PAHs)	12	EACH	$250	$3,000
13	Semi-Annual ORM Application	28	EACH	$350	$9,800
14	Waste Disposal	5	DRUM	$700	$3,500
15	Annual Summary Report	1	LS	$15,000	$15,000
				Subtotal O&M Cost	$41,300
				Contingency (20%)	$8,260
				Total Annual O&M Cost	$49,560
16				30-Year Total Present Worth Cost of O&M	$761,859
				Total Estimated Cost:	**$1,109,484**
				Rounded To:	**$1,100,000**

General Notes:

1. Cost estimate is based on Arcadis of New York's (Arcadis') past experience and vendor estimates using 2015 dollars.

2. This estimate has been prepared for the purposes of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. Arcadis is not licensed to provide financial or legal consulting services; as such; this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

Assumptions:

1. New monitoring wells cost estimate includes labor, equipment, and material necessary to install overburden monitoring wells. Cost estimate includes oversight by a geologist, drill rig and crew, and assumes 2-inch diameter PVC well construction.

2. New NAPL monitoring wells cost estimate includes labor, equipment, and material necessary to install overburden monitoring wells. Cost estimate includes oversight by a geologist, drill rig and crew, and assumes 4-inch diameter PVC well construction.

3. PDI groundwater sampling cost estimate includes labor, equipment, and materials necessary to conduct groundwater sampling as part of the pre-design investigation. Cost estimate assumes groundwater samples will be collected from up to 14 new/existing groundwater monitoring wells using low-flow sampling procedures. Cost estimate assumes two workers will require 3 days to complete the sampling activities. Estimate includes costs for labor, field vehicle, and equipment rental.

4. Laboratory analysis of groundwater samples (BTEX and PAHs) cost estimate includes the analysis of groundwater samples for BTEX and PAHs. Estimate assumes laboratory analysis of groundwater samples from up to 14 groundwater monitoring wells and up to 2 QA/QC samples per sampling event.

5. Laboratory analysis of groundwater samples (NA parameters) cost estimate includes the analysis of groundwater samples for natural attenuation parameters (e.g., oxygen, nitrate, manganese oxides, ferric iron, sulfate, carbon dioxide, carbon dioxide, nitrogen gas, nitrite, dissolved iron, dissolved manganese, sulfide, methane, and other microbial parameters). Estimate assumes laboratory analysis of groundwater samples from up to 8 groundwater monitoring wells.

6. New ORM application wells cost estimate includes labor, equipment, and material necessary to install overburden monitoring wells. Cost estimate includes oversight by a geologist, drill rig and crew, and assumes 4-inch diameter PVC well construction.

7. Site management plan cost estimate includes labor necessary to prepare a site management plan to document: the institutional controls that have been established and will be maintained for the NYSEG-owned portion of OU-2; protocols and requirements for conducting the periodic monitoring; protocols for addressing significant changes in COC concentrations in groundwater based on the results of the periodic monitoring activities; known locations of soil containing COCs at concentrations greater than 6 NYCRR Part 375-6 unrestricted use SCOs; protocols, including health and safety requirements, for conducting invasive (i.e., subsurface) activities and managing potentially impacted material encountered during these activities; protocols and requirements for a soil vapor intrusion evaluation if new structures are built in OU-2.

8. Institutional controls cost estimate includes legal expenses to institute environmental easements and/or deed restrictions on the NYSEG-owned portion of OU-2. Institutional controls would: limit intrusive (i.e., subsurface) activities that could result in potential exposures to remaining subsurface soil and groundwater containing MGP-related impacts at concentrations greater than applicable standards and guidance values; require compliance with the SMP; and prohibit the use of non-treated groundwater.

9. Administration and engineering costs (e.g., preparation of work plans, initial summary reports, etc.) are based on an assumed 15% of the total capital costs.

10. Annual verification of institutional controls cost estimate includes administrative costs for confirming institutional controls to minimize the potential for human exposure to project area soil and groundwater are effective and bring maintained. Annual costs associated with institutional controls include verifying the status of institutional controls and preparing/submitting notification to the NYSDEC to demonstrate that the institutional controls are being maintained and remain effective.

11. Annual groundwater sampling/NAPL monitoring cost estimate includes labor, equipment, and materials necessary to conduct annual groundwater sampling activities. Cost estimate assumes groundwater samples will be collected from up to 10 groundwater monitoring wells using low-flow sampling procedures. Cost estimate assumes two workers will require 2 days to complete the groundwater sampling and NAPL monitoring activities. Estimate includes costs for labor, field vehicle, and equipment rental.

12. Laboratory analysis of groundwater samples cost estimate includes the analysis of groundwater samples for BTEX and PAHs. Estimate assumes laboratory analysis of groundwater samples from up to 10 groundwater monitoring wells and up to 2 QA/QC samples per sampling event.

13. Semi-annual ORM application cost estimate includes labor and materials necessary to replace ORM every 6 months. Estimate includes costs for purchasing and shipping new ORM and assumes ORM change-out will be completed in one day.

14. Waste disposal cost estimate includes off-site disposal of drummed PPE, disposable sampling equipment, spent ORM, and purge water generated/collected during annual groundwater monitoring activities.

15. Annual summary report cost estimate includes labor necessary to prepare an annual report summarizing annual monitoring activities and results. Annual report to be submitted to NYSDEC.

16. Present worth is estimated based on a 5% beginning-of-year discount rate. It is assumed that "year zero" is 2016.

Table 10
Cost Estimate for Alternative 4 - Soil Removal to Unrestricted Use SCOs

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Cost
Capital Costs					
1	Pre-Design Investigation	1	LS	$100,000	$100,000
2	Purchase of Property	17	LS	$62,000	$1,054,000
3	Mobilization/Demobilization	3	LS	$240,000	$720,000
4	Building Demolition and Disposal	14	LS	$20,000	$280,000
5	Utility Markout, Protection, Bypass and Relocation	1	LS	$300,000	$300,000
6	Decontamination Pad	3	LS	$6,000	$18,000
7	Material Staging Area	3	LS	$75,000	$225,000
8	Install, Remove, and Decontaminate Sheet Pile	218,250	SF	$50	$10,912,500
9	Soil Excavation and Handling	102,000	CY	$30	$3,060,000
10	Soil Amendment	2,300	TON	$125	$287,500
11	Temporary Water Treatment System	28	MONTH	$50,000	$1,400,000
12	Temporary Enclosure and Air Handling System	28	MONTH	$160,000	$4,480,000
13	Community Air Monitoring and Vapor/Odor Control	133	WEEK	$5,000	$665,000
14	Backfill	98,000	CY	$25	$2,450,000
15	Pavement Restoration	17,000	SF	$5	$85,000
16	Topsoil/Seeding	3,100	CY	$45	$139,500
17	Liquid Waste Characterization	82	EACH	$750	$61,500
18	Liquid Waste Disposal (POTW)	4,100,000	GAL	$0.10	$410,000
19	Solid Waste Characterization	351	EACH	$1,000	$351,000
20	Solid Waste Transportation and Disposal - C&D Debris	630	TON	$100	$62,963
21	Solid Waste Transportation and Disposal - Non-Hazardous Debris	146,300	TON	$55	$8,046,500
22	Solid Waste Transportation and Disposal - LTTD	28,300	TON	$95	$2,688,500
				Subtotal Capital Cost	$37,796,963
23				Administration & Engineering (10%)	$2,484,500
				Construction Management (10%)	$2,484,500
				Contingency (20%)	$7,559,393
				Total Capital Cost	**$50,325,356**
				Rounded To:	**$50,300,000**

General Notes:

1. Cost estimate is based on Arcadis of New York's (Arcadis') past experience and vendor estimates using 2015 dollars.

2. This estimate has been prepared for the purposes of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. Arcadis is not licensed to provide financial or legal consulting services; as such; this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

Assumptions

1. Pre-design investigation cost estimate includes all labor and equipment necessary to conduct pre-design investigation (PDI) activities in support of the remedial design of this alternative. PDI activities may include, but are not limited to, completion of soil borings and test pits to define final excavation limits, the collection and chemical/geotechnical analysis of soil samples, evaluation of potential excavation support systems, and collection and laboratory analysis of groundwater samples. Cost includes preparation of PDI Work Plan and PDI Summary Report.

2. Purchase of property cost estimate includes purchase of 17 parcels to facilitate building demolition and soil removal activities. Average property cost estimate based on Livingston County Assessment Data (reviewed July 2015). Estimate does not include additional relocation fees or potential costs recuperated from sale of properties following completion of remedial construction.

3. Mobilization/demobilization cost estimate includes mobilization and demobilization of labor, equipment, and materials necessary to conduct the remedial construction activities associated with this alternative. Estimate based on assumed 3% of the subtotal capital cost, not including: PDI; property purchase; waste characterization; and transportation and disposal costs. As remedial construction activities are anticipated to be constructed over multiple construction seasons, the estimate assumes that mobilization/ demobilization of labor, equipment, and materials will be required for each construction season.

4. Building demolition and disposal cost estimate includes labor, equipment, and material necessary to remove the existing buildings to facilitate soil excavation activities.

Table 10
Cost Estimate for Alternative 4 - Soil Removal to Unrestricted Use SCOs

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

5. Utility markout, protection, bypass and relocation cost estimate includes labor, equipment, and materials necessary to temporarily bypass or relocate subsurface utilities within anticipated excavation limits. Utilities anticipated to be affected by remedial construction activities include, but are not limited to, overhead electric, telecommunication, storm water, potable water, and sanitary sewer lines on Battle and Franklin Streets.

6. Decontamination pad cost estimate includes labor, equipment, and materials necessary to construct and remove a 50-foot by 20-foot decontamination pad and appurtenances. The decontamination pad would consist of a 12-inch gravel fill layer bermed and sloped to a sump and covered with a 40-mil HDPE liner and a 6-inch layer of gravel. Cost estimate assumes decontamination pad will be replaced at the beginning of each construction season.

7. Material staging area cost estimate includes labor, equipment, and materials to construct a 150-foot by 150-foot material staging area. The material staging area is assumed to consist of a 12-inch berm, a 40-mil high-density polyethylene (HDPE) liner, collection sump, and 12-inch gravel layer for staging excavated material and to facilitate material handling/stabilization. Cost estimate assumes that: a) the staging area will be located on existing surfaces; b) the staging area will be replaced at the beginning of each construction season; and c) maintenance activities will include inspections and repair to the staging area, as

8. Install, remove, and decontaminate temporary sheet pile cost estimate includes labor, equipment, and materials necessary to install, remove, and decontaminate temporary steel sheet pile. Cost estimate assumes sheet pile used as support to excavate areas to an average depth of 15 feet bgs. Sheet pile will be installed to depths up to 50 feet bgs and cost does not include internal bracing or other support. Sheet pile to be removed following site restoration activities. Final excavation support system to be determined as part of the remedial design.

9. Soil excavation and handling cost estimate includes labor, equipment, and materials necessary to excavate soil to an average depth of 15 foot bgs to address impacted soil. Cost estimate assumes that excavation activities will be completed using conventional construction equipment. Cost estimate based on in-place soil volume.

10. Soil amendment cost includes purchase and importation of amended (e.g. Portland cement or cement kiln dust) material excavated from below the water table. Cost estimate assumes amendment will be applied at a ratio of 4% of the weight of the material to be stabilized.

11. Temporary water treatment system cost estimate includes installation of sumps within excavation areas and rental of a portable water treatment system capable of operating at 100 gallons-per-minute to dewater excavation areas. Cost estimate assumes water treatment system includes pumps, influent piping and hoses, influent tanks, bag filters, organoclay filters, activated carbon filters, effluent tanks, discharge piping and hoses, and flow meter.

12. Temporary enclosure and air handling system cost estimate includes the rental of an approximately 100-foot by 200-foot temporary excavation enclosure during excavation and backfilling activities (assumed $140,000 per month). Cost estimate assumes enclosure is equipped with overhead doors for truck/equipment access and lighting. Final structure configuration and specifications to be determined during the remedial design. Cost estimate includes rental of 3 blowers and 3 - 20,000 lb activated carbon units (assumed $20,000 per month). Cost estimate assumes that the temporary enclosure and air handling units will be moved 17 times during construction activities.

13. Community air monitoring and odor/vapor control cost estimate includes equipment and materials necessary to monitor odor/vapor emissions during intrusive site activities and apply odor/vapor-suppressing foam to open excavations.

14. Backfill cost estimate includes labor, equipment, and materials necessary to import, place, grade and compact general fill in excavation areas to within 6 inches if the previously existing surrounding grades. Cost estimate is based on in-place soil volume. Cost estimate assumes 95% compaction based on standard proctor testing and includes survey verification and compaction

15. Pavement restoration cost estimate includes labor, equipment, and materials necessary to install 6 inches of pavement to restore Battle and Franklin Streets following the completion of remedial construction activities.

16. Topsoil/seeding cost estimate includes labor, equipment, and materials necessary to furnish and place six inches of imported topsoil and grass seed in distributed areas not restored with asphalt pavement. Cost estimate based on in-place volume.

17. Liquid waste characterization cost estimate includes the analysis (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals) of water collected and treated during remedial construction. Cost estimate assumes one sample collected and analyzed per every 50,000 gallons water requiring treatment and discharge to the POTW.

Table 10
Cost Estimate for Alternative 4 - Soil Removal to Unrestricted Use SCOs

NYSEG - Dansville Former Manufactured Gas Plant Site (OU-2) - Dansville, New York

18. Liquid waste disposal cost estimate includes all fees associated with disposing of water collected during remedial construction activities. Volume estimate includes decontamination water and groundwater removed from excavation areas only. Volume estimate based on two saturated pore volumes of the excavation areas. Cost estimate assumes water treatment by temporary on-site system would be discharged to the local POTW via a sanitary sewer. Disposal fees and sewer connection details would be evaluated as part of the remedial design. Cost based on disposal fees associated with the 2014 remedial construction activities

19. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Costs assumes that waste characterization samples would be collected at a frequency of one sample per every 500 tons of material destined for off-site treatment/disposal.

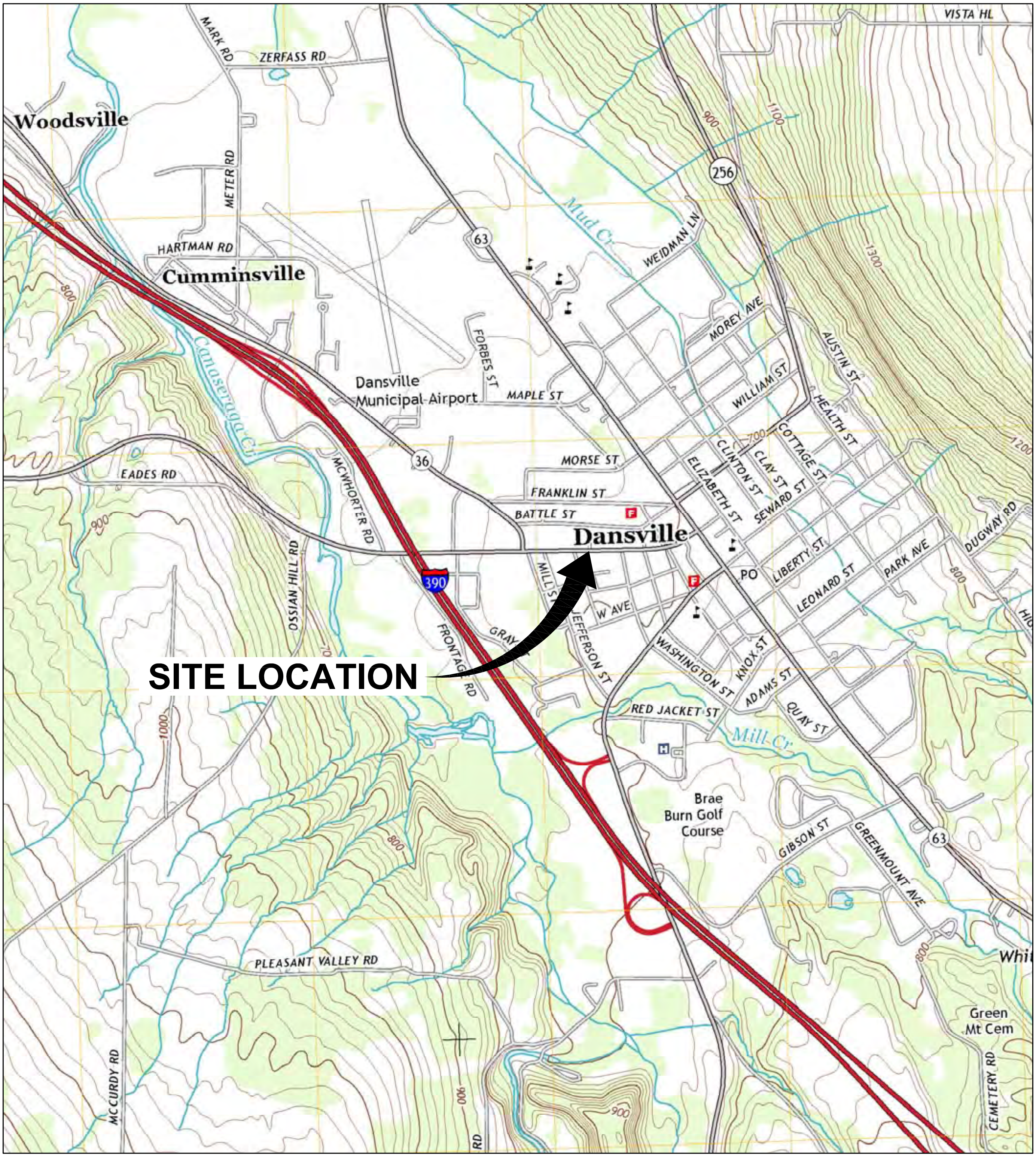
20. Solid waste transportation and disposal - C&D debris cost estimate includes labor, equipment, and materials necessary to transport and dispose of asphalt, pavement, concrete, and/or other debris as construction and demolition (C&D) debris. Cost estimate assumes excavated material will be transported off-site for disposal as C&D debris at an assumed density of 2 tons per in-situ cubic yard. Cost estimate includes disposal fee; transportation fuel surcharge; and environmental, transportation, and

21. Solid waste transportation and disposal - non-hazardous waste cost estimate includes labor, equipment, and materials necessary to transport and dispose of excavated surface soil at a non-hazardous waste landfill (i.e. Seneca Meadows Landfill). Estimated quantity assumes 85% of total removal and reflects an assumed soil density of 1.7 tons per in-situ cubic yard. Cost estimate includes disposal fee, transportation fuel surcharge, and spotting fees.

22. Solid waste transportation and disposal - LTTD cost estimate includes labor, equipment, and materials necessary to transport and treat excavated soil at a thermal treatment facility (i.e. ESMI Fort Edward). Estimated quantity assumes 15% of total removal and reflects an assumed soil density of 1.7 tons per in-situ cubic yard. Cost estimate includes disposal fee, transportation fuel surcharge, and spotting fees. Cost estimate assumes thermally thermally treated soil does not require subsequent treatment or

23. Administration and engineering and construction management costs are based on an assumed 10% of the total capital costs, not including costs for: pre-design investigation; property purchase; mob/demob; building demo; and off-site transportation and treatment/disposal of excavated material.

Figures



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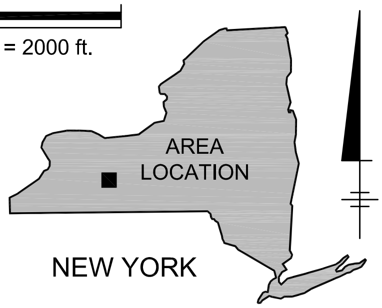
Approximate Scale: 1 in. = 2000 ft.



NYSEG
DANSVILLE FORMER MGP SITE
DANSVILLE, NEW YORK

FEASIBILTY STUDY REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

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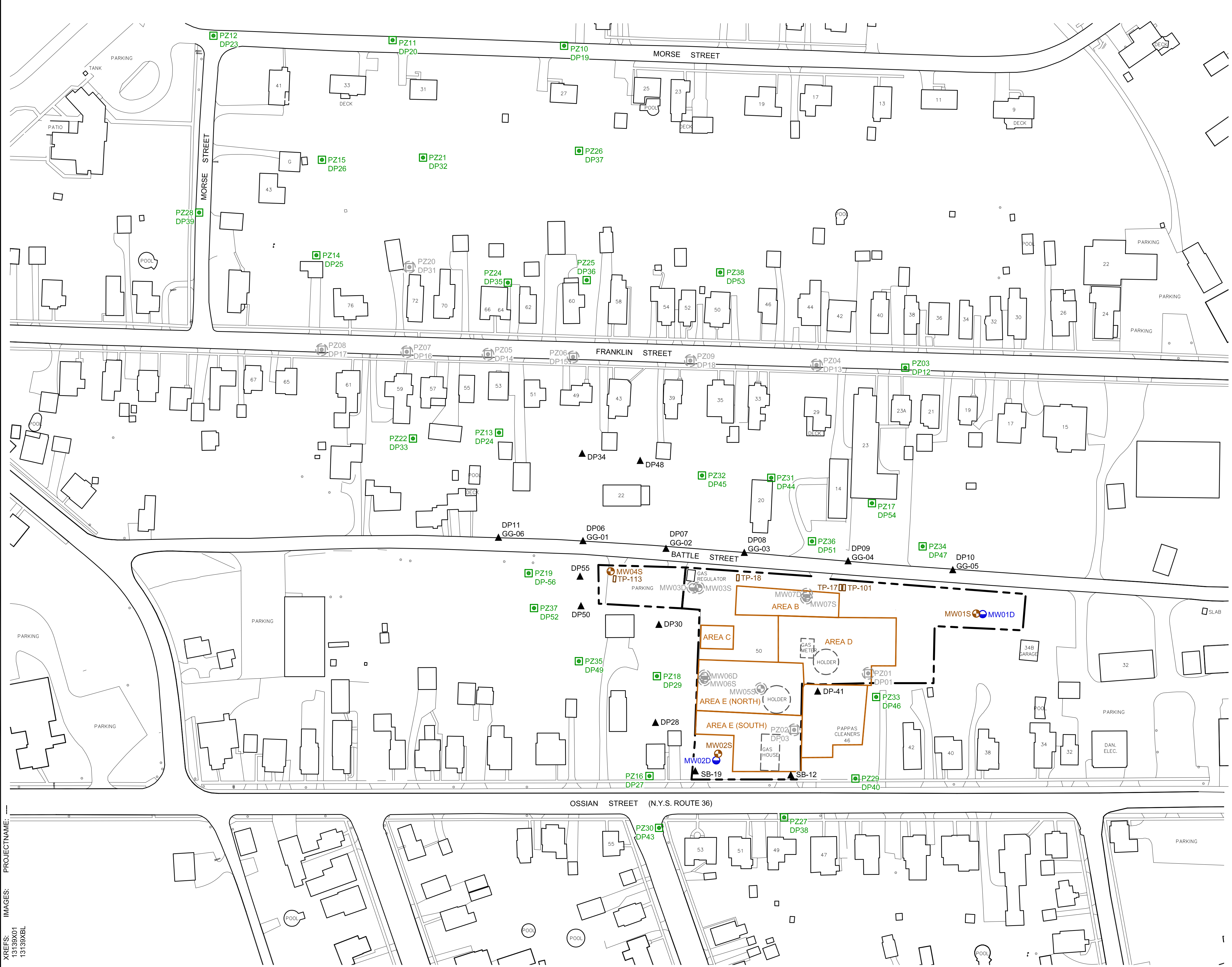


LEGEND:

- ▲ SOIL BORING LOCATION
- TEST PIT LOCATION
- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- ABANDONED OR DESTROYED WELL OR PIEZOMETER LOCATION
- NYSEG PROPERTY BOUNDARY
- FORMER MGP STRUCTURE
- LIMITS OF PREVIOUSLY COMPLETED EXCAVATIONS

NOTES:

1. BASE MAP PREPARED FROM DWG FILE PROVIDED BY NYSEG, DATED 10/2/2006, TITLED EXPANDED DANSVILLE MGP SITE, AT A SCALE OF 1"=100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ONLY SELECT MONITORING WELL, SOIL BORING, PIEZOMETER, AND TEST PIT LOCATIONS ARE SHOWN ON THE NYSEG PROPERTY AS A MAJORITY OF THE LOCATIONS WERE REMEDIATED IN 2014. SEE PREVIOUS SITE REPORTS FOR ADDITIONAL INVESTIGATION LOCATIONS.
4. ADDITIONAL WELLS OR PIEZOMETERS SHOWN MAY BE ABANDONED OR DESTROYED.

0 150' 300'

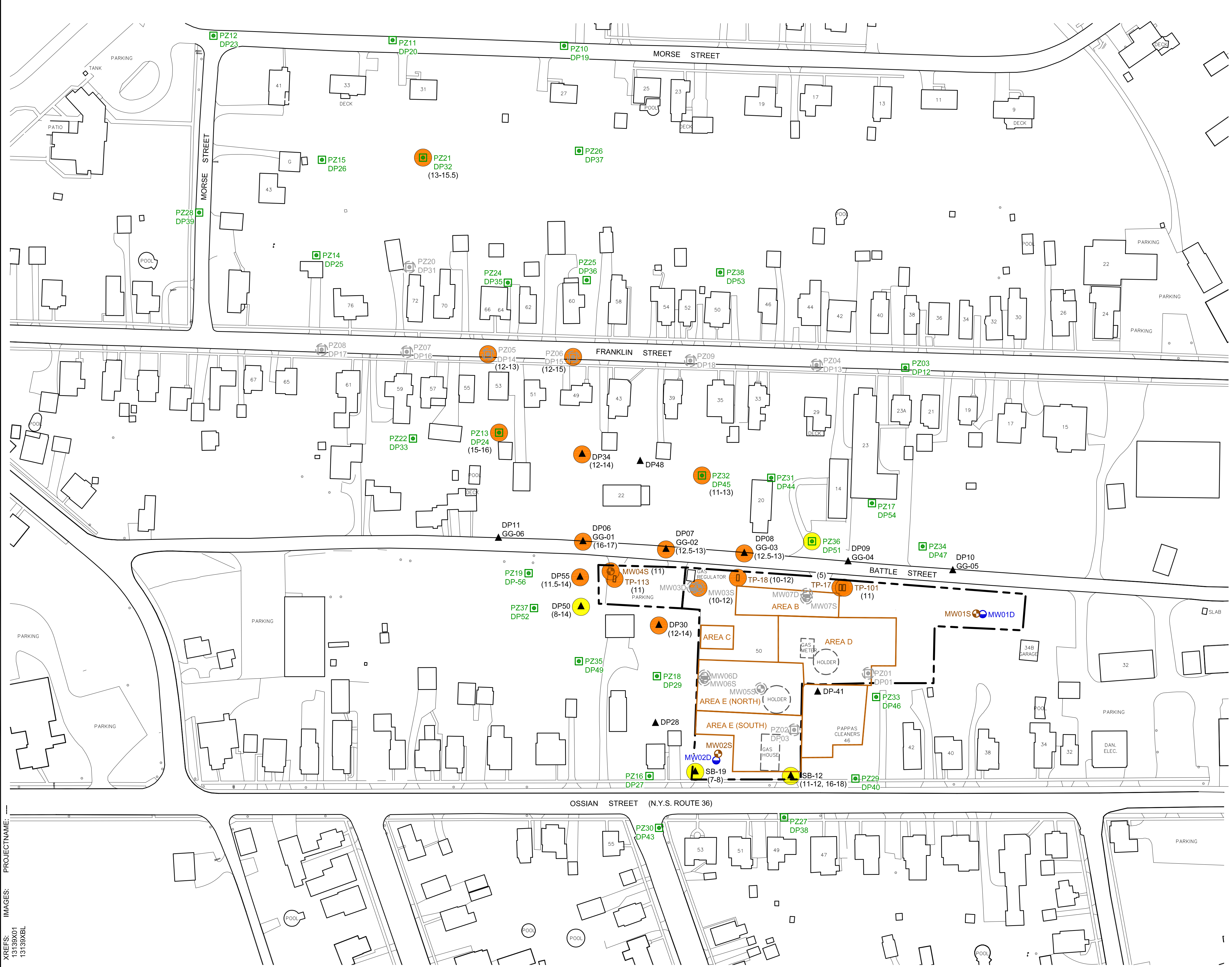
GRAPHIC SCALE

NYSEG
DANSVILLE FORMER MGP SITE (OU-2)
DANSVILLE, NEW YORK
FEASIBILITY STUDY REPORT

SITE PLAN

ARCADIS

FIGURE
2



LEGEND:

- ▲ SOIL BORING LOCATION
- TEST PIT LOCATION
- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- ABANDONED OR DESTROYED WELL OR PIEZOMETER LOCATION
- NYSEG PROPERTY BOUNDARY
- FORMER MGP STRUCTURE
- LIMITS OF PREVIOUSLY COMPLETED EXCAVATIONS
- SHEENS
- NAPL GLOBULES
- (10-12) DEPTH OF IMPACT (FEET BELOW GRADE)

NOTES:

1. BASE MAP PREPARED FROM DWG FILE PROVIDED BY NYSEG, DATED 10/2/2006, TITLED EXPANDED DANSVILLE MGP SITE, AT A SCALE OF 1"=100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ONLY SELECT MONITORING WELL, SOIL BORING, PIEZOMETER, AND TEST PIT LOCATIONS ARE SHOWN ON THE NYSEG PROPERTY AS A MAJORITY OF THE LOCATIONS WERE REMEDIATED IN 2014. SEE PREVIOUS SITE REPORTS FOR ADDITIONAL INVESTIGATION LOCATIONS.
4. ADDITIONAL WELLS OR PIEZOMETERS SHOWN MAY BE ABANDONED OR DESTROYED.

0 150' 300'

GRAPHIC SCALE

NYSEG
DANSVILLE FORMER MGP SITE (OU-2)
DANSVILLE, NEW YORK
FEASIBILITY STUDY REPORT

EXTENT OF VISUAL IMPACTS

ARCADIS

FIGURE 3

CITY:SYRACUSE, NY DIV/GROUP:ENV/IM-DV DB:R. ALLEN LD:(Opt) PIC:(Opt) PM:B. AHRENS TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* G:\ENVCAD\SYRACUSE\ACT\B0013139\0000\00002\DWG\FS-RPT\13139C01.dwg LAYOUT: 3 SAVED: 12/2/2015 10:58 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/2/2015 10:58 AM BY: ALLEN, ROYCE
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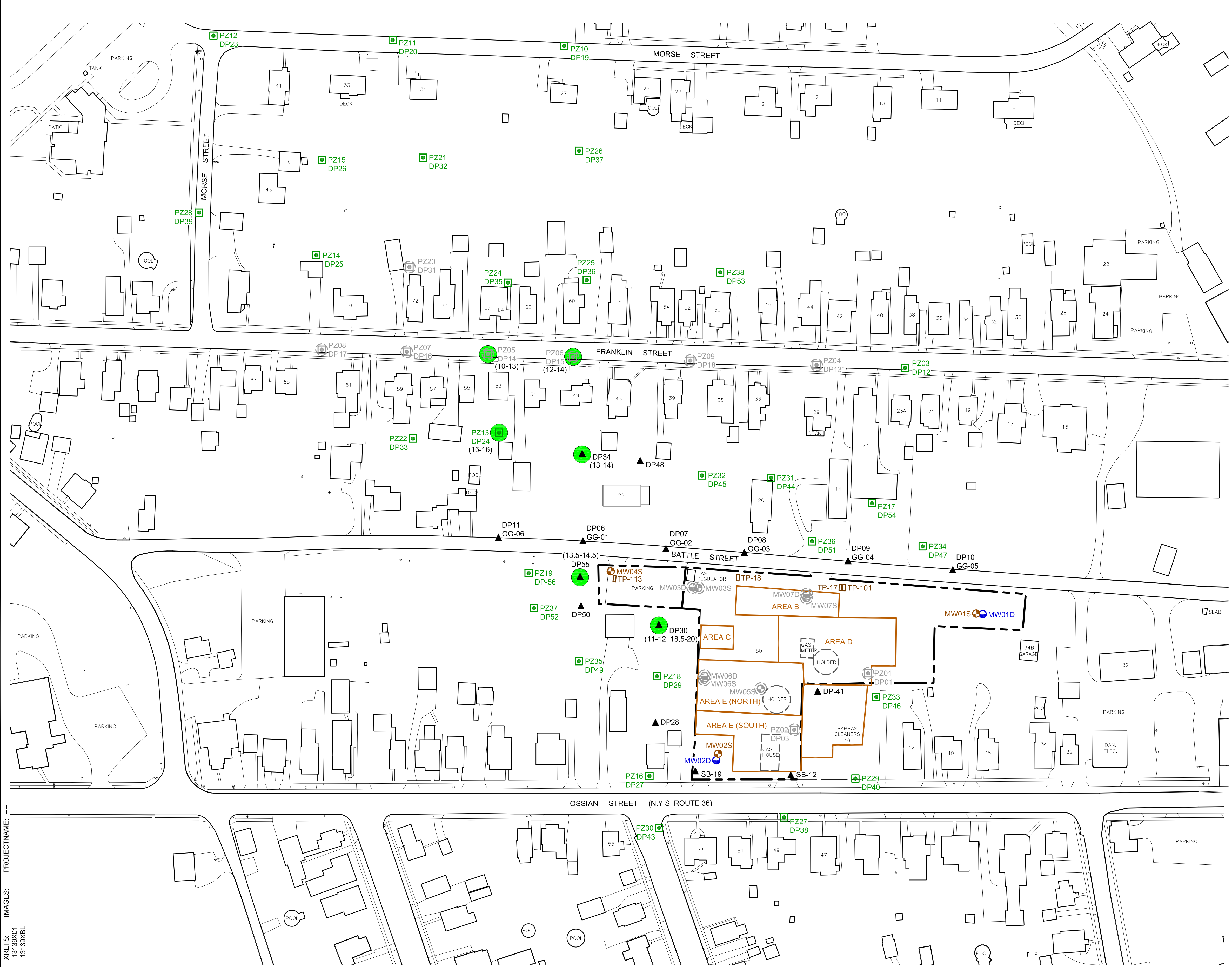


LEGEND:

- ▲ SOIL BORING LOCATION
- TEST PIT LOCATION
- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- ABANDONED OR DESTROYED WELL OR PIEZOMETER LOCATION
- NYSEG PROPERTY BOUNDARY
- FORMER MGP STRUCTURE
- LIMITS OF PREVIOUSLY COMPLETED EXCAVATIONS
- LOCATION CONTAINING ONE OR MORE BTEX/PAH COMPOUND GREATER THAN 6NYCRR PART 375-6 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES
- (10-12) DEPTH OF EXCEEDANCE (FEET BELOW GRADE)

NOTES:

1. BASE MAP PREPARED FROM DWG FILE PROVIDED BY NYSEG, DATED 10/2/2006, TITLED EXPANDED DANSVILLE MGP SITE, AT A SCALE OF 1"=100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ONLY SELECT MONITORING WELL, SOIL BORING, PIEZOMETER, AND TEST PIT LOCATIONS ARE SHOWN ON THE NYSEG PROPERTY AS A MAJORITY OF THE LOCATIONS WERE REMEDIATED IN 2014. SEE PREVIOUS SITE REPORTS FOR ADDITIONAL INVESTIGATION LOCATIONS.
4. ADDITIONAL WELLS OR PIEZOMETERS SHOWN MAY BE ABANDONED OR DESTROYED.

0 150' 300'

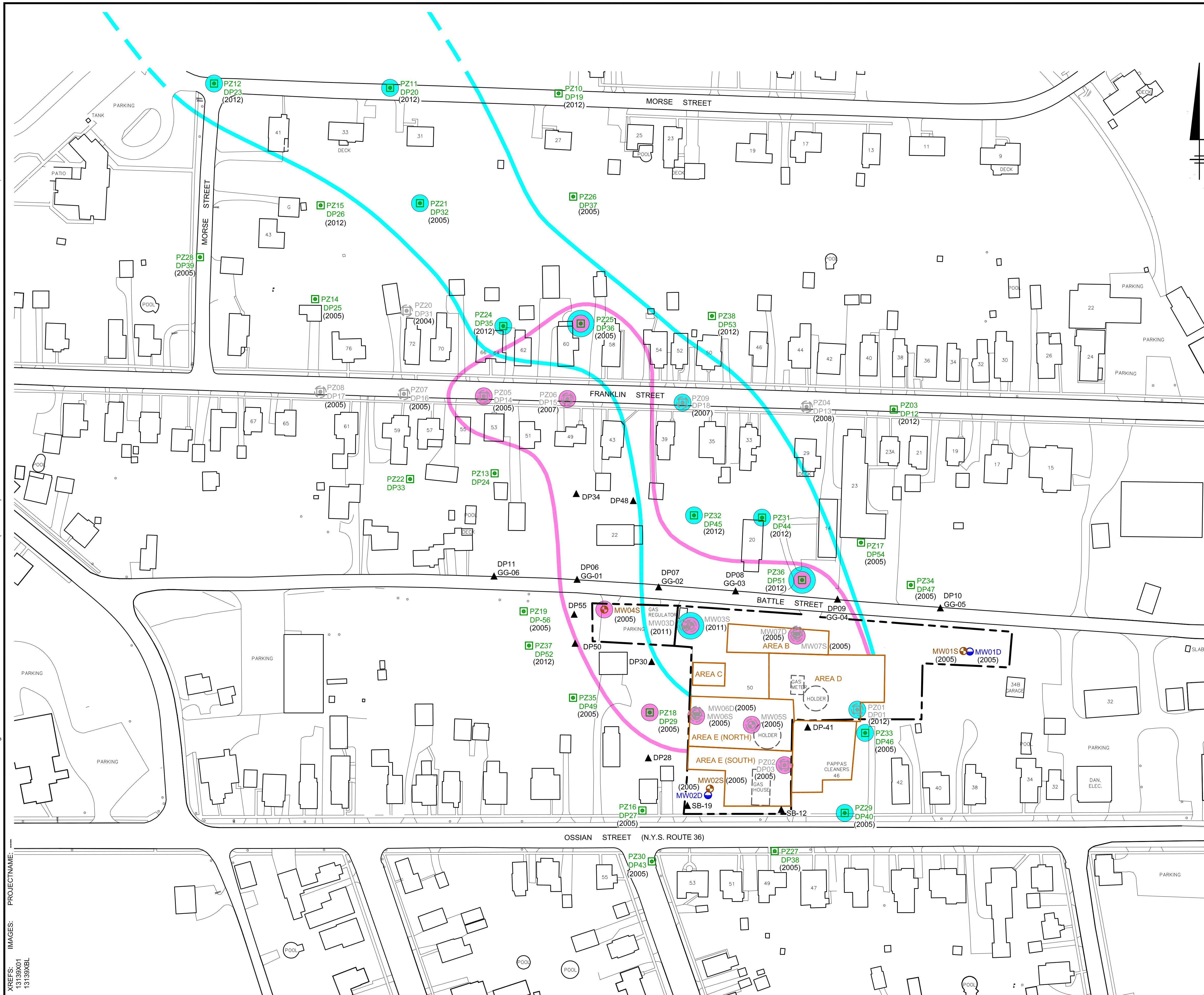
GRAPHIC SCALE

NYSEG
DANSVILLE FORMER MGP SITE (OU-2)
DANSVILLE, NEW YORK
FEASIBILITY STUDY REPORT

EXTENT OF BTEX AND PAHs > UNRESTRICTED USE SCOs

ARCADIS

FIGURE
4



LEGEND:

- SOIL BORING LOCATION
- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- ABANDONED OR DESTROYED WELL OR PIEZOMETER LOCATION
- NYSEG PROPERTY BOUNDARY
- FORMER MGP STRUCTURE
- LIMITS OF PREVIOUSLY COMPLETED EXCAVATIONS
- LOCATION CONTAINING ONE OR MORE BTEX/PAH COMPOUND GREATER THAN NYSDEC CLASS GA STANDARDS OR GUIDANCE VALUE
- APPROXIMATE EXTENT OF GROUNDWATER CONTAINING BTEX/PAH COMPOUNDS GREATER THAN NYSDEC CLASS GA STANDARDS AND GUIDANCE VALUES
- LOCATION CONTAINING ONE OR MORE CVOC COMPOUND GREATER THAN NYSDEC CLASS GA STANDARDS OR GUIDANCE VALUE
- APPROXIMATE EXTENT OF GROUNDWATER CONTAINING CVOC COMPOUNDS GREATER THAN NYSDEC CLASS GA STANDARDS AND GUIDANCE VALUES
- (2012) YEAR LAST SAMPLE COLLECTED

NOTES:

1. BASE MAP PREPARED FROM DWG FILE PROVIDED BY NYSEG, DATED 10/2/2006, TITLED EXPANDED DANSVILLE MGP SITE, AT A SCALE OF 1"=100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ONLY SELECT MONITORING WELL, SOIL BORING, PIEZOMETER, AND TEST PIT LOCATIONS ARE SHOWN ON THE NYSEG PROPERTY AS A MAJORITY OF THE LOCATIONS WERE REMEDIATED IN 2014. SEE PREVIOUS SITE REPORTS FOR ADDITIONAL INVESTIGATION LOCATIONS.
4. ADDITIONAL WELLS OR PIEZOMETERS SHOWN MAY BE ABANDONED OR DESTROYED.

0 150' 300'

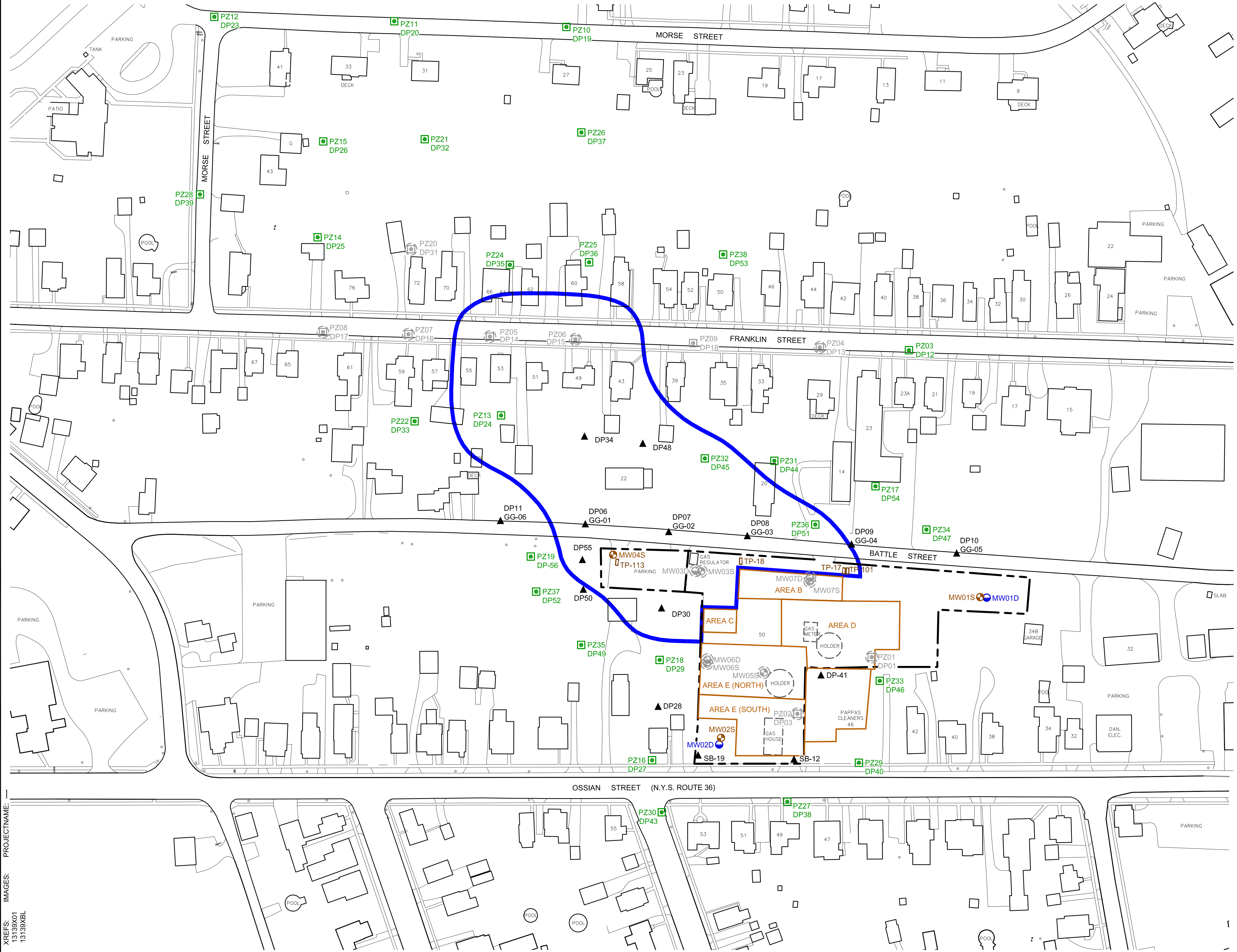
GRAPHIC SCALE

NYSEG
DANSVILLE FORMER MGP SITE (OU-2)
DANSVILLE, NEW YORK
FEASIBILITY STUDY REPORT

EXTENT OF GROUNDWATER IMPACTS

ARCADIS

FIGURE
5



LEGEND:

- SOIL BORING LOCATION
- TEST PIT LOCATION
- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- ABANDONED OR DESTROYED WELL OR PIEZOMETER LOCATION
- NYSEG PROPERTY BOUNDARY
- FORMER MGP STRUCTURE
- LIMITS OF PREVIOUSLY COMPLETED EXCAVATIONS
- APPROXIMATE EXCAVATION LIMITS

NOTES:

1. BASE MAP PREPARED FROM DWG FILE PROVIDED BY NYSEG, DATED 10/2/2006, TITLED EXPANDED DANSVILLE MGP SITE, AT A SCALE OF 1"=100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ONLY SELECT MONITORING WELL, SOIL BORING, PIEZOMETER, AND TEST PIT LOCATIONS ARE SHOWN ON THE NYSEG PROPERTY AS A MAJORITY OF THE LOCATIONS WERE REMEDIATED IN 2014. SEE PREVIOUS SITE REPORTS FOR ADDITIONAL INVESTIGATION LOCATIONS.
4. ADDITIONAL WELLS OR PIEZOMETERS SHOWN MAY BE ABANDONED OR DESTROYED.

0 150' 300'

GRAPHIC SCALE

NYSEG
DANSVILLE FORMER MGP SITE (OU-2)
DANSVILLE, NEW YORK
FEASIBILITY STUDY REPORT

ALTERNATIVE 4

ARCADIS

FIGURE
6

ARCADIS

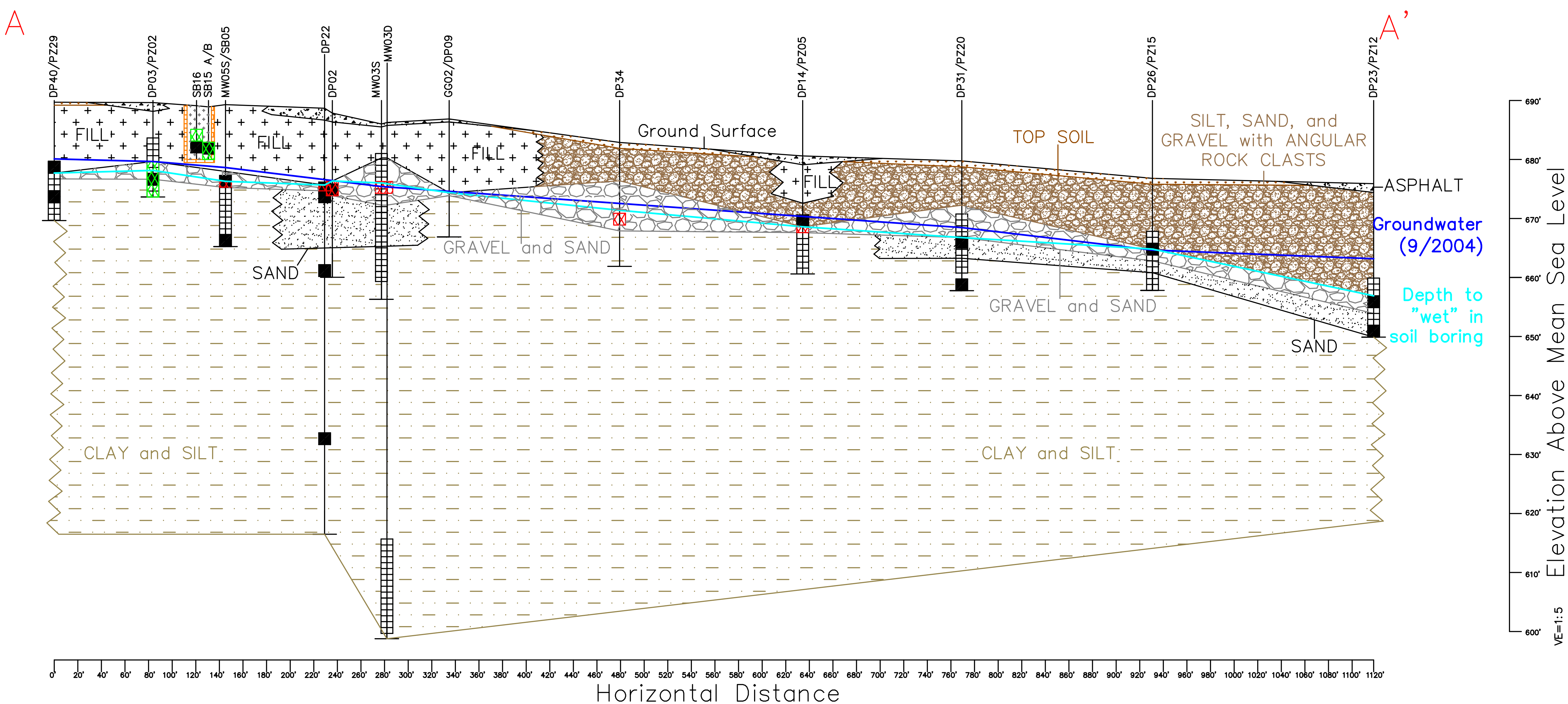
Appendix A

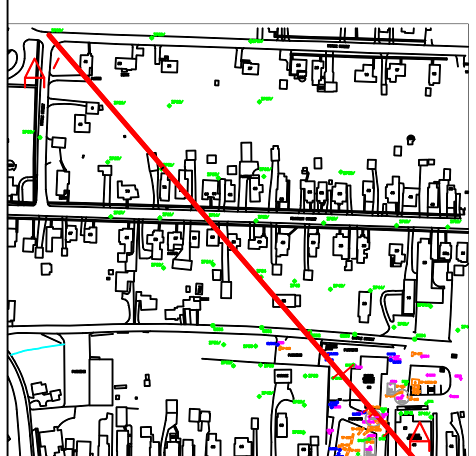
Figures Prepared by Others

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META

Figure A-7
Location of Geologic Cross Sections

Filename:	Drawn by:	Approved by:	Date:
Copy of mgp-exp	LMG	PJD	5/5/2006





Legend

Well Screen

Bottom of Boring

Soil Sample

Sheens in matrix

NAPL in matrix

Holder

Top Soil

Asphalt

Fill

Holder Fill

Gravel and Sand

Sand

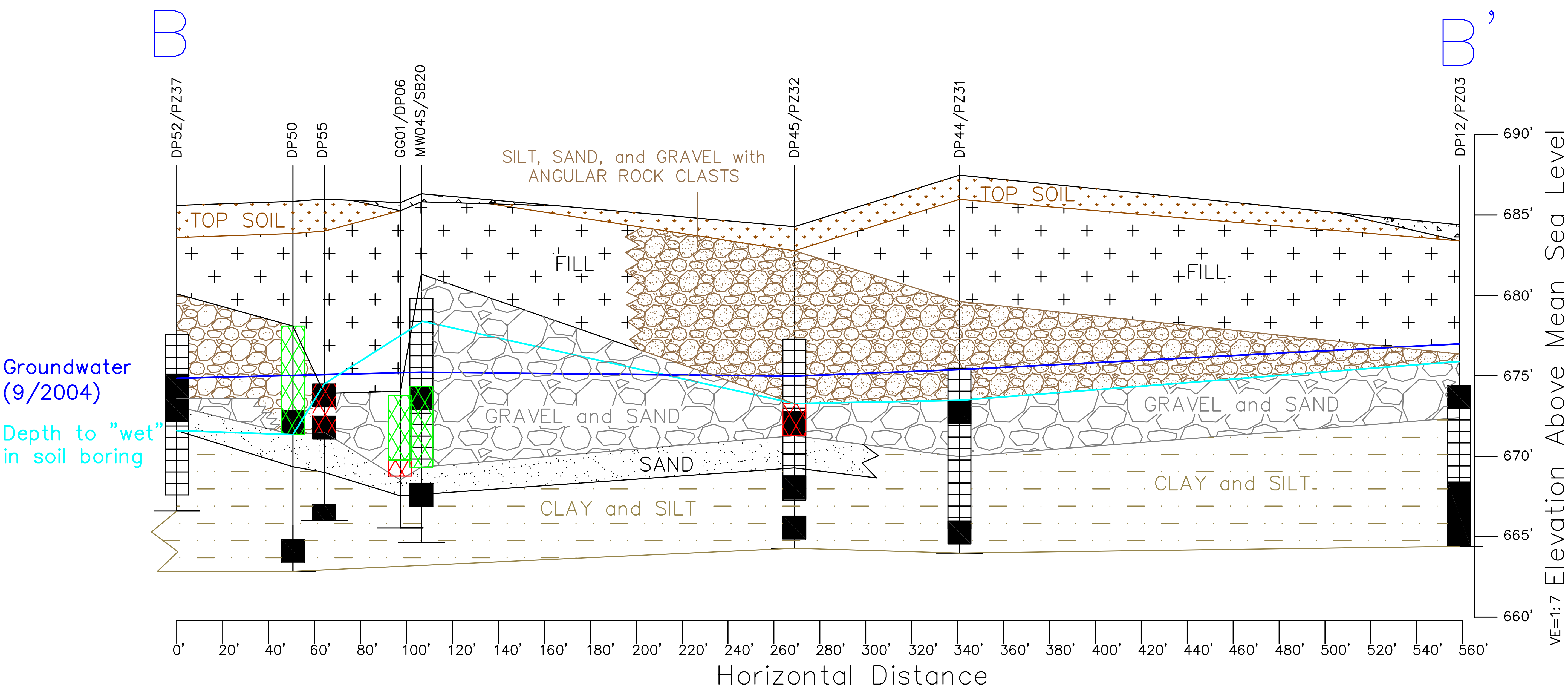
Clay and Silt

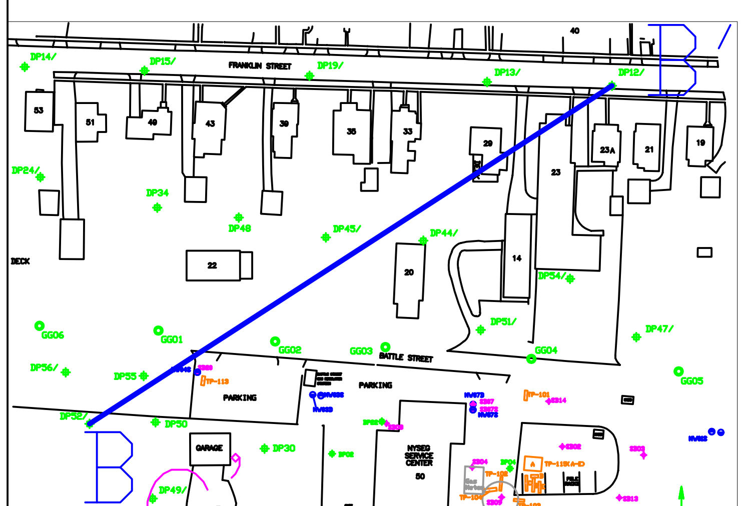
Silt, Sand, and Gravel with Angular Rock Clasts

Note:

Observations of NAPL and sheens are from this SRI except at MW03S and MW03D, where observations were made in 1986 by TRC.

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META
Figure A-8 Geologic Cross-Section A-A'		
Filename: Cross Section	Drawn by: AJB	Approved by: PJD	Date: 5/5/2006





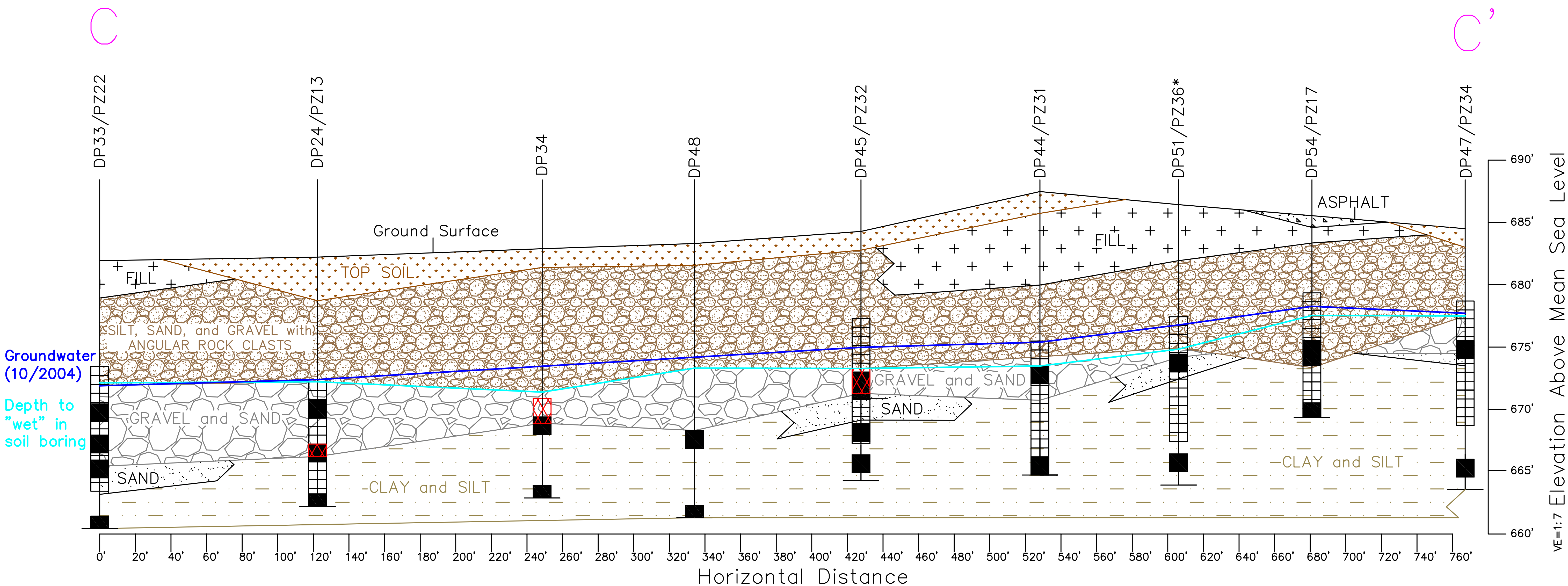
Legend

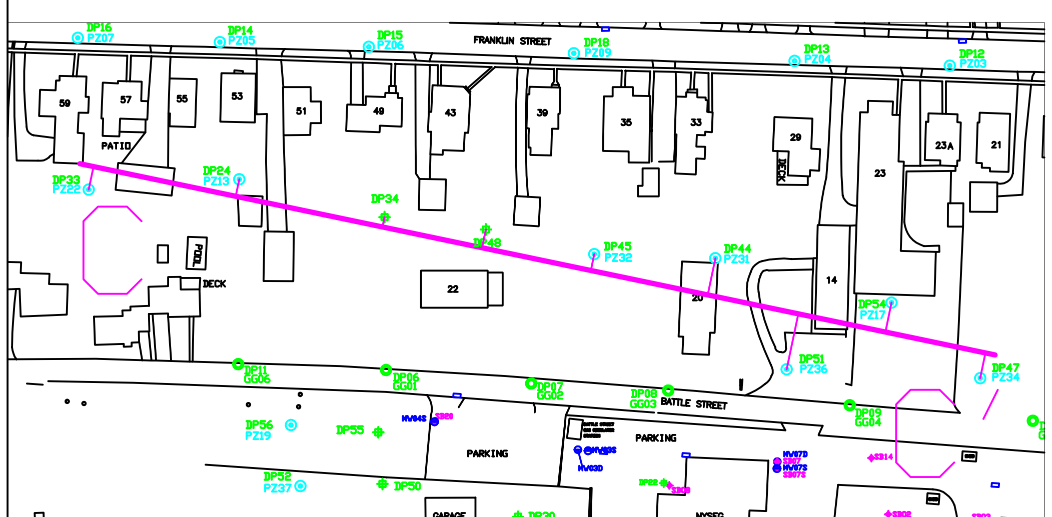
- Well Screen
- Bottom of Boring
- Soil Sample
- Sheens in matrix
- NAPL in matrix
- Top Soil
- Asphalt
- Fill
- Gravel and Sand
- Sand
- Clay and Silt
- Silt, Sand, and Gravel with Angular Rock Clasts

Note:

Observations of NAPL and sheens are from this SRI.

Project: DANSVILLE/103023	Client: NYSEG	Ish Inc./META	
Figure A-9 Geologic Cross-Section B-B'			
Filename: Cross Section	Drawn by: AJB	Approved by: PJD	Date: 5/5/2006





Legend

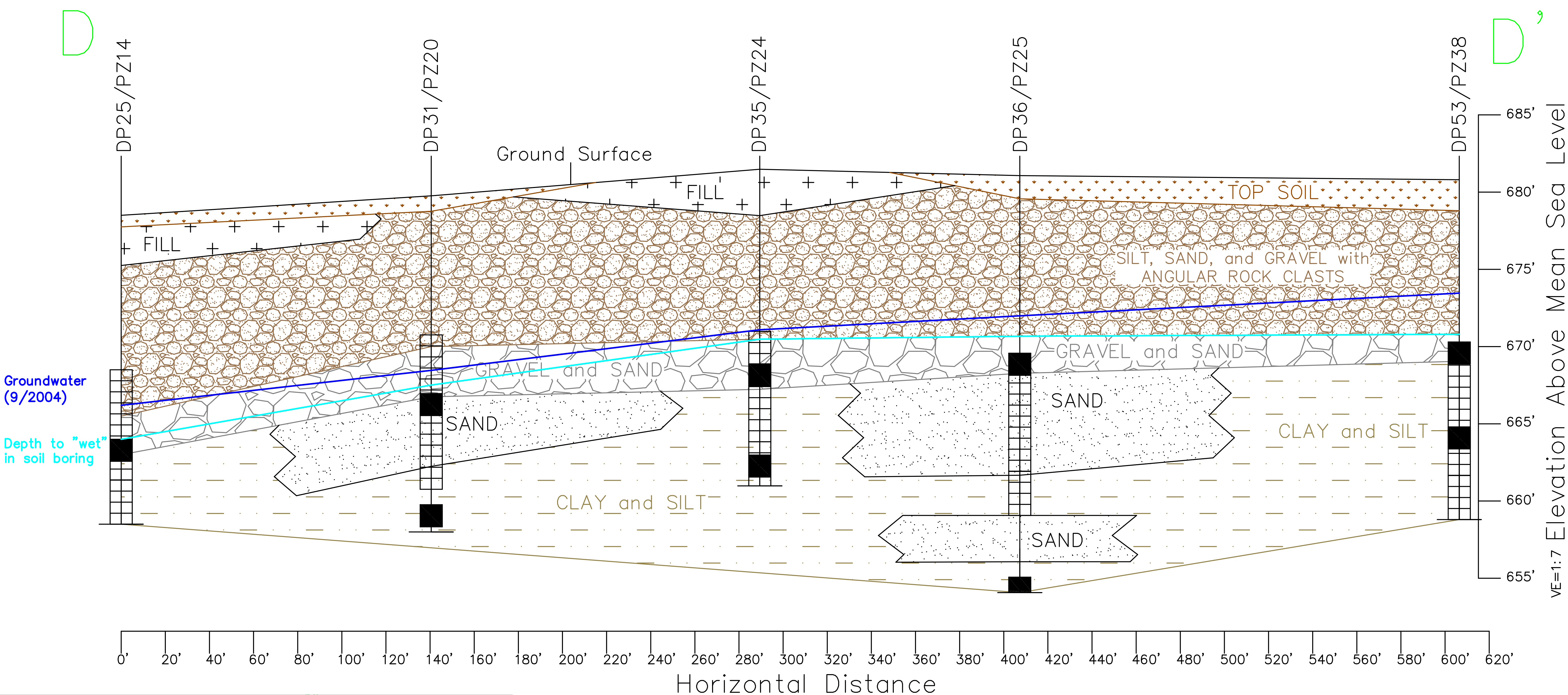
- NAPL in matrix
- Well Screen
- Bottom of Boring
- Soil Sample
- Top Soil
- Asphalt
- Fill
- Silt, Sand, and Gravel with Angular Rock Clasts
- Gravel and Sand
- Sand
- Clay and Silt

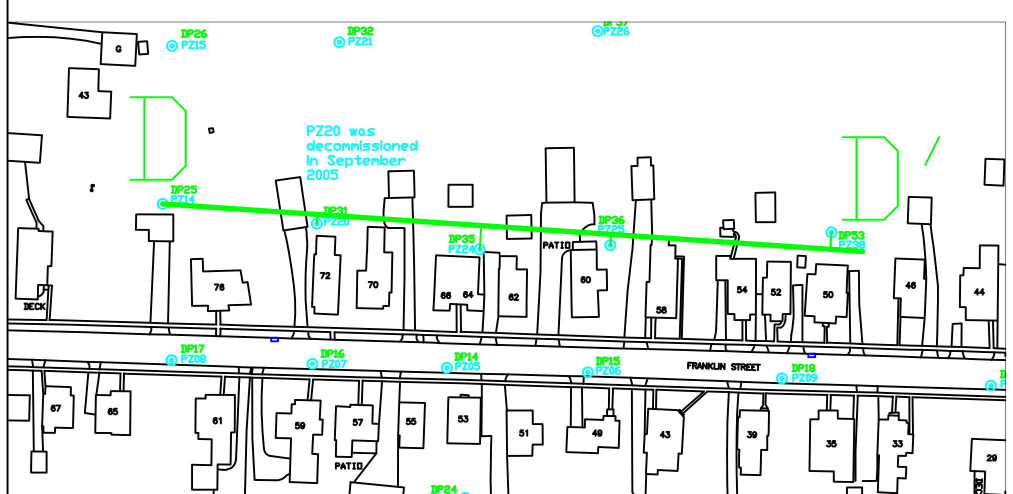
Note:

Observations of NAPL are from this SRI.

*NAPL observed during groundwater development and sampling.

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META	
Figure A-10 Geologic Cross-Section C-C'			
Filename: Cross Section	Drawn by: AJB	Approved by: PJD	Date: 5/5/2006





Legend

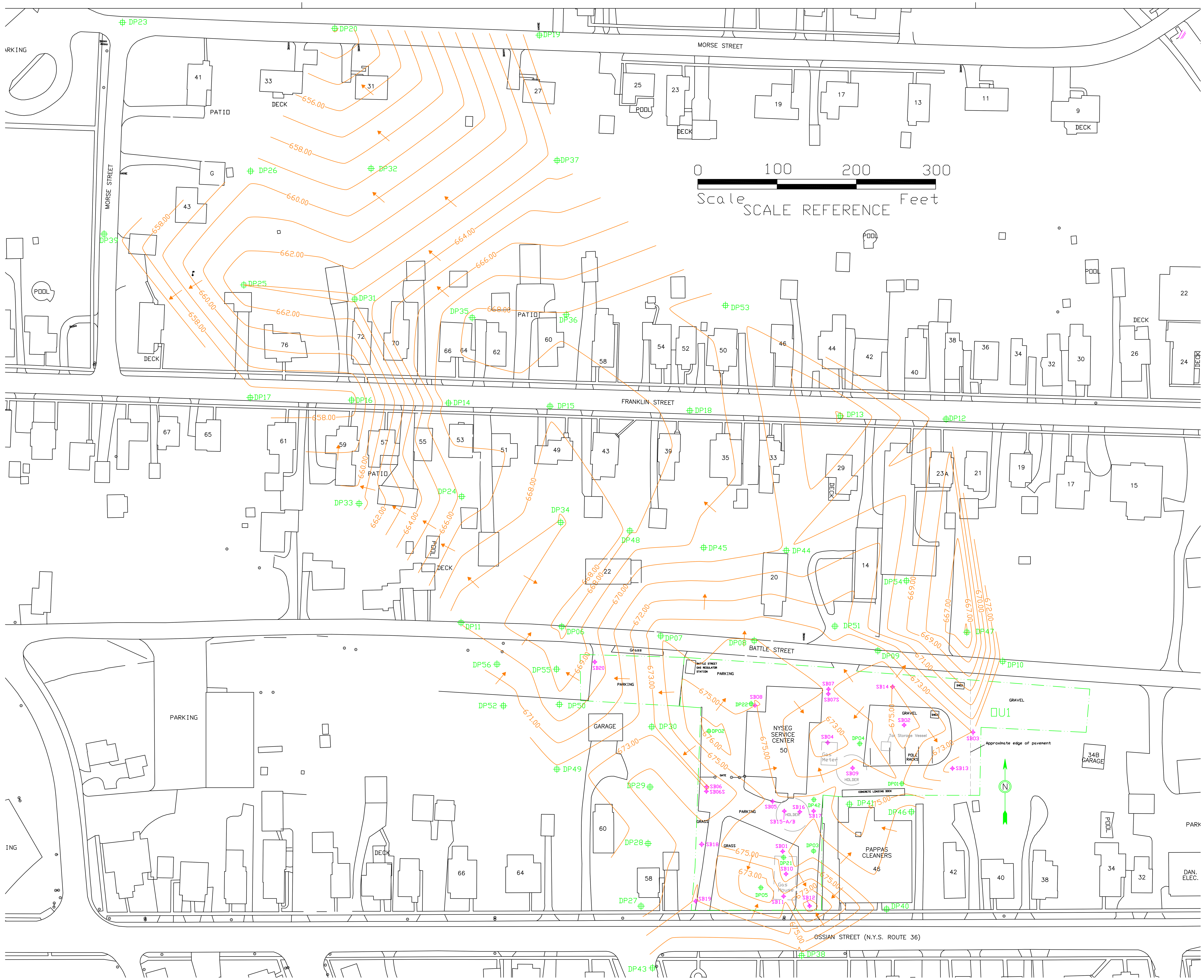
- Well Screen
- Bottom of Boring
- Soil Sample
- Top Soil
- Asphalt
- Fill
- Silt, Sand, and Gravel with Angular Rock Clasts
- Gravel and Sand
- Sand
- Clay and Silt

Note:

Observations of NAPL are from this SRI.

Project: DANSVILLE/103023	Client: NYSEG	Ish Inc./META
Figure A-11 Geologic Cross-Section D-D'		

Filename: Cross Section	Drawn by: AJB	Approved by: PJD	Date: 5/5/2006



LEGEND

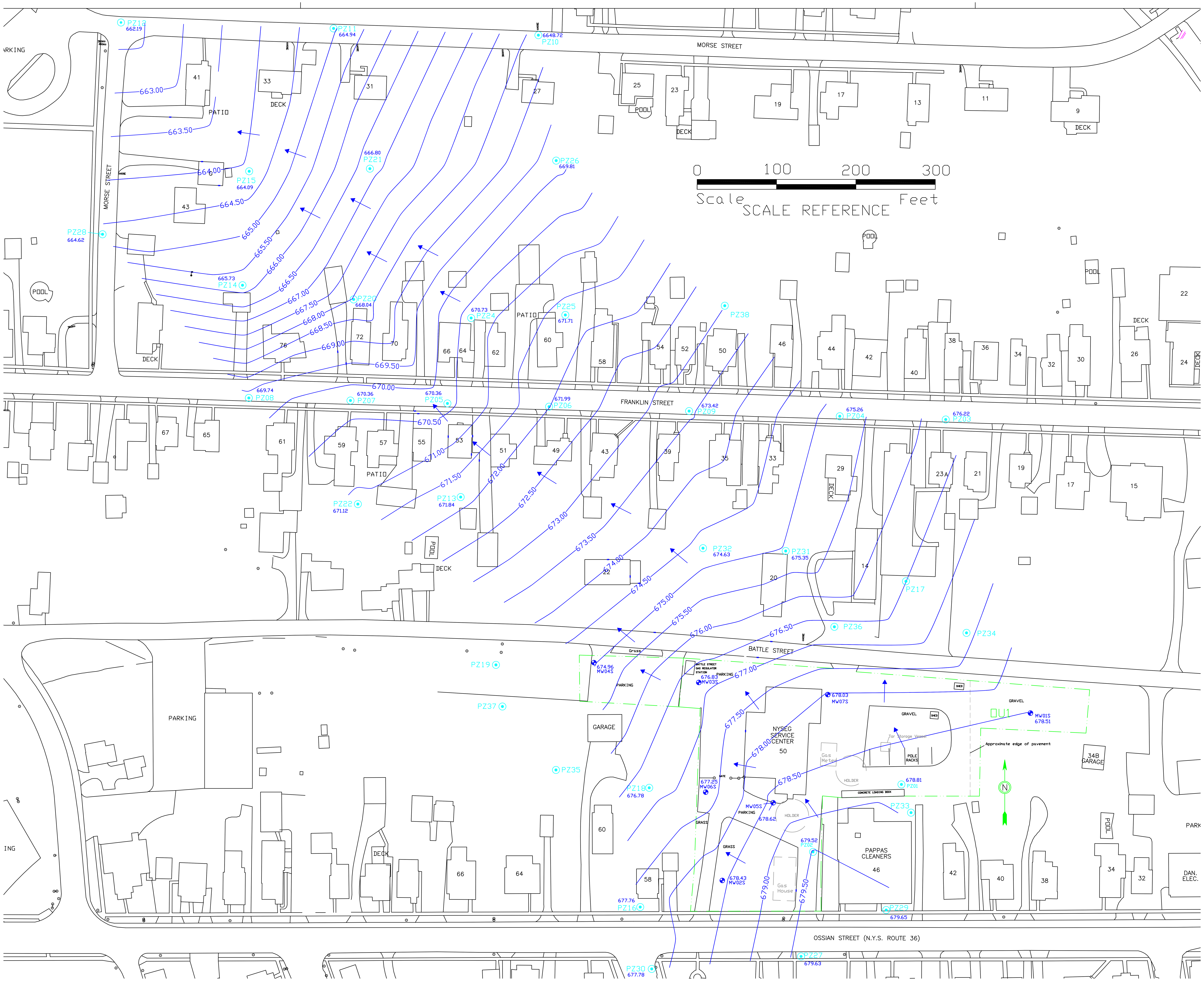
Soil Boring

Direct Push

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META

Figure A-12
Silty Clay Layer Elevation Contour

Filename: Dansville SRI	Drawn by: LMG	Approved by: PJD	Date: 5/5/2006



LEGEND

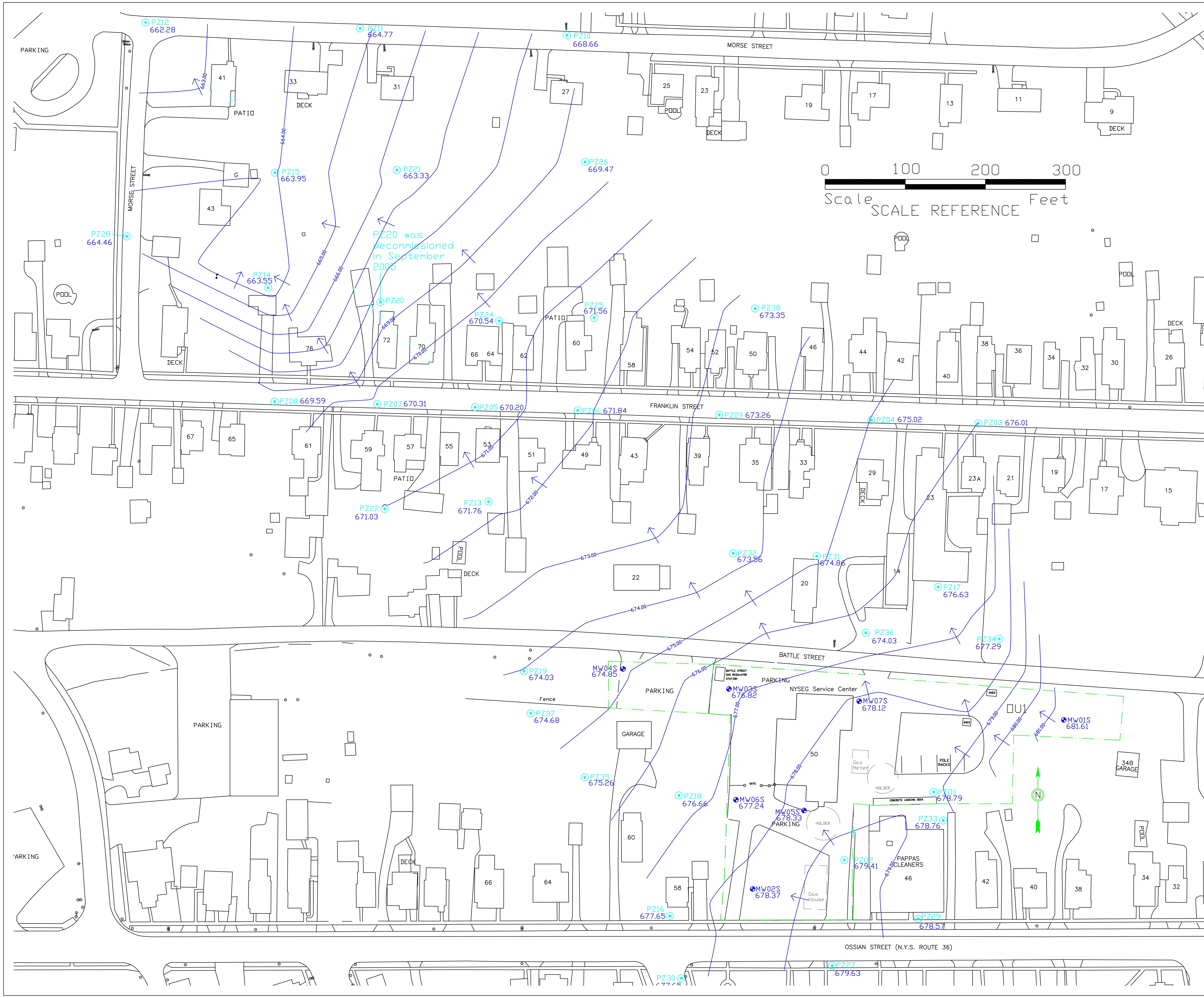
- Piezometer
- Shallow Monitoring Well

Note:
Piezometers without associated groundwater elevation were not installed at the time of this gauging event.

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META

Figure A-13
Shallow Groundwater Elevation Contour
May 16, 2005

Filename: Dansville SRI	Drawn by: LMG	Approved by: PJD	Date: 5/5/2006



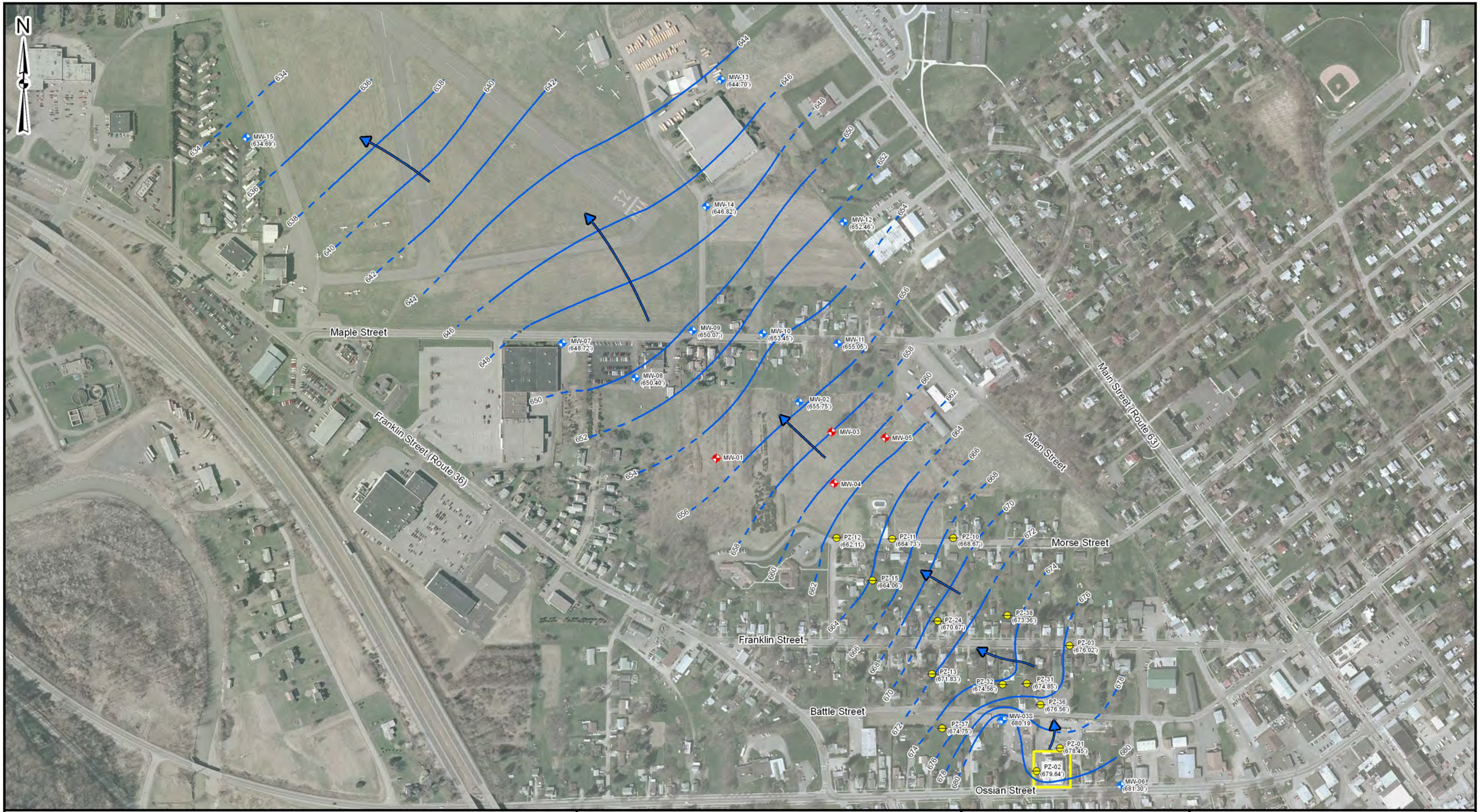
LEGEND

- Shallow Monitoring Well
- Piezometer

Project: DANSVILLE/I03023	Client: NYSEG	Ish Inc./META

Figure A-4
Shallow Groundwater Elevation Contour
November 7, 2005

Filename:	Drawn by:	Approved by:	Date:
Copy of mgp-exp	AJB	PJD	4/20/06



Legend

- Approximate Site Boundary
- On-Site Monitoring Well
- Piezometer
- Piezometer - Abandoned
- Monitoring Well
- Monitoring Well - Abandoned
- Interpolated Groundwater Contour (Dashed where inferrred)
- Groundwater Flow Direction

Note:

(681.30') = Groundwater Elevation (ft amsl)

Source: NYS GIS Clearing House

FORMER PAPPAS DRY CLEANERS (826018)
REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT - 2 (GROUNDWATER)
DANSVILLE, NEW YORK

FIGURE 3-6
Groundwater Contour Map
(November 2012)

Feet
0 200 400 800
1 inch = 400 feet

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	ALK	ALK	RSC	AS SHOWN	FEBRUARY 2013	14907.11	GIS/PROJECTS/ FIGURE3-6.MXD