

**ATTACHMENT III**

**NEW YORK STATE ELECTRIC & GAS CORPORATION**

**SUPPLEMENTAL REMEDIAL INVESTIGATION**

**WORK PLAN ADDENDUM III**

**FORMER CLARK STREET MANUFACTURED GAS PLANT (SITE No. 7-06-008)**

**AUBURN, NEW YORK**

**August 28, 2006**

## **1.0 INTRODUCTION**

This Work Plan Addendum summarizes the work elements for the additional field investigations to be conducted as part of the Supplemental Remedial Investigation (SRI) at the NYSEG Clark Street former manufactured gas plant (MGP) site in Auburn, New York. This Work Plan Addendum must be used in conjunction with the existing Supplemental Remedial Investigation Work Plan, Quality Assurance Project Plan, Health and Safety Plan, and Field Sampling Plan (URS, October 2004). This addendum must be attached to the Supplemental Remedial Investigation Work Plan as Attachment III.

## **2.0 PURPOSE**

The primary objective of the additional field investigations is to determine whether sediments in the Owasco Lake Outlet have been impacted by MGP residuals farther downstream of the area that has been investigated to date. The additional work elements include additional qualitative characterization of the outlet sediments, downstream from TS-01 to approximately the dam near North Division Street. Work will include sediment probing along four additional transects (i.e., TS-17 through TS-20), and the north and south shorelines in this area, and probing along the shoreline below the dam near North Division Street to approximately 600 feet downstream of the dam (Figure 1). Sediment samples may be collected for laboratory analysis based upon field observations of sediment conditions.

## **3.0 SCOPE OF WORK**

The work scope is divided into the tasks listed below:

- Sediment probing along four stream transects in the Owasco outlet at the approximate locations shown on Figure 1. Transects will be performed by walking across the outlet on a line perpendicular to the stream flow while probing the bottom using a steel bar, such as ½-inch diameter re-bar, providing that the depth of water does not preclude wading. The bottom of the stream will be probed at five approximately equidistant intervals beginning near the shoreline. All observations made while probing along transects

#### 4.2 Sediment Sampling

Methods and procedures are described in Section 2.8 of the FSP.

#### 5.0 ANALYTICAL PROGRAM

Table 1 summarizes the laboratory analytical program for these additional investigations. Severn Trent Laboratories, Inc. (STL) in Amherst, New York, a New York State ASP Laboratory, will analyze sediment samples, if collected during this phase of work. STL will provide ASP Category B Quality Assurance/Quality Control (QA/QC) deliverables package for analytical data. META Environmental, Inc. of Watertown, Mass. will conduct the extended PAH analyses for forensic evaluation, if necessary. Table 2 summarizes the sample preservation requirements, bottle requirements, and holding times for the analytical parameters.

including information about sediment thickness, composition, and olfactory/visual evidence of impacts will be recorded in the field notebook. Any sheens, tar or non-aqueous phase liquid (NAPL) blebs, globules or any other indications of product will be recorded in the field notebook. Water depth and stream velocity will be measured and noted.

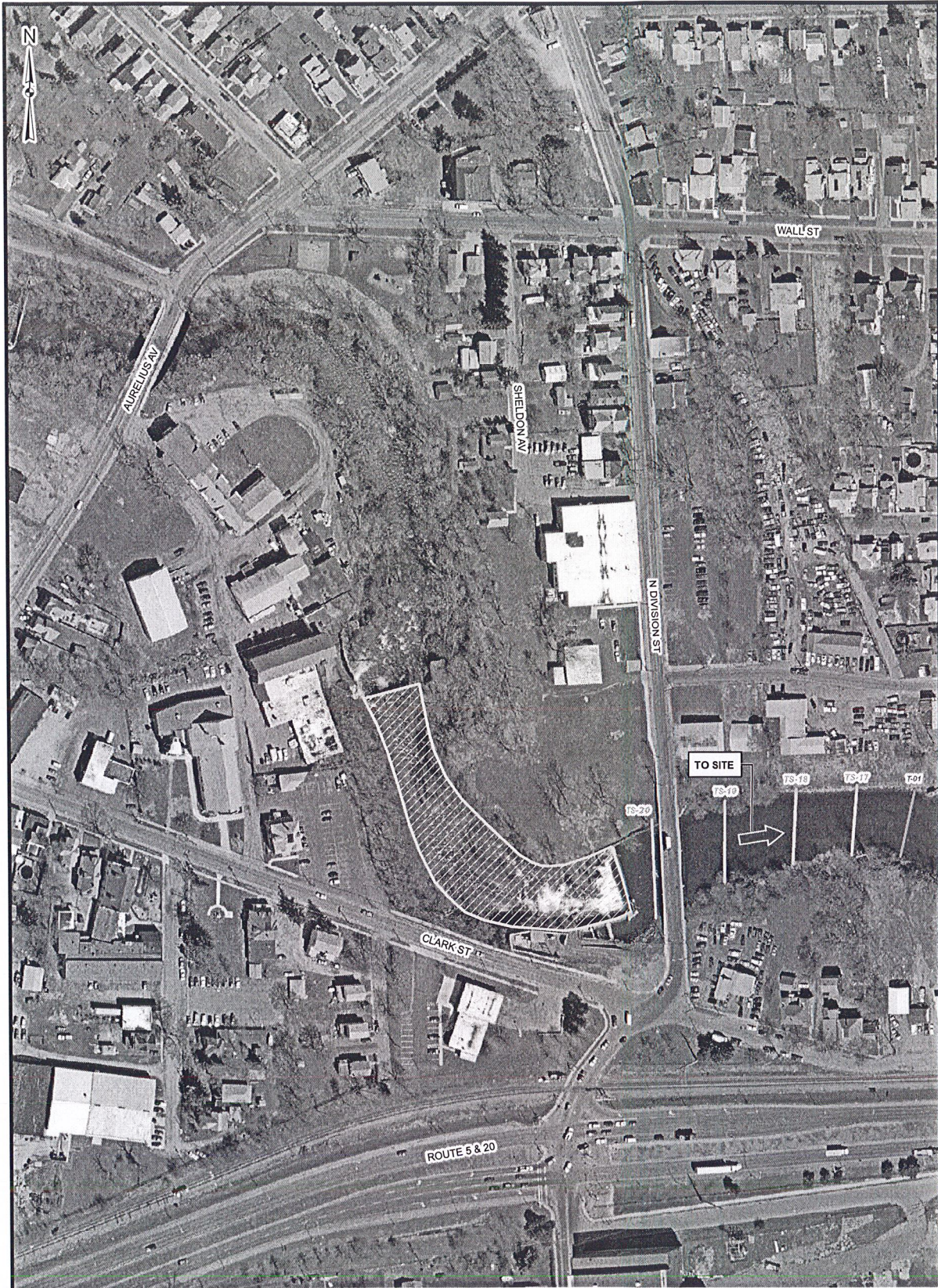
- Sediment probing along the shoreline of the outlet in the vicinity of the transects, and probing along the shoreline below the dam near North Division Street to approximately 600 feet downstream of the dam as depicted in Figure 1. The bottom of the stream will be probed along the north and south shorelines in areas where sediment is observed to accumulate, such as behind boulders and trees. A shovel or re-bar will be used. All observations made while probing along shoreline(s) including information about sediment thickness, composition, and olfactory/visual evidence of impacts will be recorded in the field notebook. Any sheens, tar or non-aqueous phase liquid (NAPL) blebs, globules or any other indications of product will be recorded in the field notebook. Major changes in stream velocity will be measured and noted.
- Sediment samples will be collected if there is visual evidence of MGP-related impacts observed while probing. Samples for extended PAH analysis may also be collected for forensic evaluation.
- If sediment samples are collected, they will be analyzed for the parameters listed in Table 1.
- The additional data gathered as part of this work phase will be incorporated into the draft SRI Report.

## **4.0 METHODS**

### **4.1 Stream Transects and Sediment Probing**

Methods and procedures are described in Section 2.6 of the FSP.





**Legend**

- Proposed Additional Transect Location
- Previous Transect Location
- Proposed Area of Additional Qualitative Sediment Probing



NYSEG - FORMER CLARK STREET MGP SITE  
PROPOSED SEDIMENT SAMPLE LOCATIONS

FIGURE 1



TABLE 1  
 WORK PLAN ADDENDUM ANALYTICAL SUMMARY  
 FORMER CLARK STREET MGP SITE  
 AUBURN, NY

Analytical Method <sup>1</sup>	No. of Samples Collected	Field Duplicates	Equipment Blanks	Trip Blanks	MS/MSD (Pairs)	Total No. of Samples Collected
<b>Sediment Sampling</b>						
BTEX (USEPA Method 8260B)	6	1	1	0	1	10
TCL SVOCs (USEPA Method 8270C)	6	1	1	0	1	10
Fingerprint/Extended PAHs (Modified Methods 8100/8270C)	2	0	0	0	0	2
Total Phenols (USEPA Method 9065)	6	1	1	0	1	10
Total Cyanide (USEPA Method 9012A)	6	1	1	0	1	10
Total Organic Carbon (Lloyd Kahn)	6	1	0	0	1	9

1. Test Methods for Evaluating Solid Waste, Physical Chemical Methods (SW-846) USEPA Final Update III, June 1997  
 Determination of Total Organic Carbon in Sediment, Lloyd Kahn, USEPA Region II, July 1988

TCL/TAL - USEPA Superfund Target Compound List/Target Analyte List  
 BTEX - Benzene, toluene, ethylbenzene, and xylene  
 SVOCs - Semivolatile Organic Compounds

**TABLE 2**  
**SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES**  
**FORMER CLARK STREET MGP SITE**  
**AUBURN, NY**

Test Type	Container	Preservation	Holding time
<i><b>NON-AQUEOUS SAMPLES (SEDIMENT)</b></i>			
BTEX (USEPA Method 8260B)	2-2 oz. Glass jar, Teflon cap	Cool 4 °C	Analyze within 14 days.
TCL SVOCs (USEPA Method 8270C)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Extract within 14 days; analyze within 40 days.
Fingerprint/Extended PAHs (Modified USEPA Methods 8100/8270C)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Extract within 14 days; analyze within 40 days.
TAL Metals (USEPA Method 6010B/7471A)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Analyze within 6 months/28 days for mercury.
Cyanide, Total (USEPA 9012A)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Analyze within 14 days.
Total Phenols (USEPA Method 9065)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Analyze within 28 days.
TOC (Lloyd Kahn)	1-4oz. Glass jar, Teflon cap	Cool 4 °C	Analyze within 14 days.
<i><b>AQUEOUS SAMPLES (EQUIPMENT BLANK)</b></i>			
BTEX (USEPA Method 8260B)	Two (2) 40 ml septa vials, Glass	HCl to pH < 2	Analyze within 14 days.
TCL SVOCs (USEPA Method 8270C)	Two (2) 1L Amber Glass	Cool 4 °C	Extract within seven days; analyze within 40 days
Cyanide, Total (USEPA 9012A)	500 mL Plastic	NaOH to pH > 12 0.6g ascorbic acid	Analyze within 14 days.
Total Phenols (USEPA Method 9065)	1L Amber Glass	H <sub>2</sub> SO <sub>4</sub> to pH < 2	Analyze within 28 days.

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

BTEX - Benzene, toluene, ethylbenzene, and xylene

SVOCs - Semivolatile Organic Compounds