

# **Former Bellport Gas Station Site**

**SUFFOLK COUNTY, NEW YORK**

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## **Final Engineering Report**

**NYSDEC Site Number: E-1-52-194**

**Prepared for:**

Suffolk County Department of Health Services  
Office of Pollution Control

15 Horseblock Place  
Farmingville, New York 11738

**Prepared by:**

P.W. Grosser Consulting Inc.  
630 Johnson Avenue, Bohemia, New York 11716

631-589-6353

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**NOVEMBER 22, 2013**

## CERTIFICATIONS

I, Paul Boyce, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Design was implemented and that construction activities were completed in substantial conformance with the Department-approved Remedial Design.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Design and in applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of Engineering Controls employed at the Site, including the proper maintenance of remaining monitoring wells, and that such plan has been approved by Department.

I certify that information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Paul K Boyce, of 630 Johnson Avenue, Suite 7, Bohemia, New York, am certifying as Owner's Designated Site Representative: and I have been authorized and designated by site owners to sign this certification for the site.

074604

NYS Professional Engineer #

November 22, 2013

Date

Paul Boyce

Signature



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# LIST OF ACRONYMS

<b>Acronym</b>	<b>Definition</b>
CAMP	Community Air Monitoring Plan
CPP	Citizen Participation Plan
EC/IC	Engineering Controls / Institutional Controls
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
MTBE	Methyl Tertiary Butyl Ether
NFA	No Further Action
NYSDEC	New York State Department of Environmental Conservation
PID	Photo-ionization Detector
PWGC	P.W. Grosser Consulting, Inc.
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objectives
RD	Remedial Design
RIWP	Remedial Investigation Work Plan
ROD	Record of Decision
SAC	State Assistance Contract
SCDHS	Suffolk County Department of Health Services
SCDPW	Suffolk County Department of Public Works
SMP	Site Management Plan
SVOCs	Semi-Volatile Organic Compounds
UIC	Underground Injection Control
UUSCO	Unrestricted Use Soil Cleanup Objectives
VOC	Volatile Organic Compound

# FINAL ENGINEERING REPORT

## **1.0 BACKGROUND AND SITE DESCRIPTION**

Suffolk County entered into a State Assistance Contract (SAC) with the New York State Department of Environmental Conservation (NYSDEC) in May 2008, to investigate and remediate a 0.3-acre property located in East Patchogue, Suffolk County, New York. Based upon the current status of the property, no active remediation was deemed necessary.

The site is located in the County of Suffolk, New York and is identified as District 200, Section 975.8, Block 4 and Lot 20 on the Suffolk County Tax Map # 200-975.8-4-20. The site is situated on an approximately 0.292-acre area bounded by residential properties to the north, Montauk Highway to the south, Lenox Avenue to the east, and commercial properties to the west (see Figure 1). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

## **2.0 SUMMARY OF SITE REMEDY**

### **2.1 REMEDIAL ACTION OBJECTIVES**

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

#### **2.1.1 Groundwater RAOs**

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Remove the source of ground or surface water contamination.

#### **2.1.2 Soil RAOs**

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

## **2.2 DESCRIPTION OF SELECTED REMEDY**

The site was remediated in accordance with the remedy selected by the NYSDEC in the Record of Decision (ROD) dated December 2010.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Maintenance of a soil cover system consisting of the five feet of clean soils, medium-fine sands with gravel, (15'-20' below grade) which lie above the impacted soils which begin at approximately 20' below grade to prevent human exposure to remaining contaminated soil/fill remaining at the site;
2. Groundwater monitoring program to ensure that there is a continuing downward trend regarding the petroleum related volatile organic compounds (VOCs) detected in site groundwater;
3. Execution and recording of an Environmental Easement to restrict land use for Restricted Residential or less restrictive uses and prevent future exposure to any contamination remaining at the site.
4. Restrict the use of groundwater as a source of potable or process water.
5. Prohibit agriculture or vegetable gardens on the controlled property.
6. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls (EC/IC), (2) monitoring, and (3) reporting;
7. Periodic certification of the EC/ICs listed above.

### **3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS**

The information and certifications made in the June 2010 Interim Remedial Measure (IRM) Report was relied upon to prepare this report and certify that the remediation requirements for the site have been met.

#### **3.1 INTERIM REMEDIAL MEASURES**

On October 7, 2008, Suffolk County Department of Public Works (SCDPW) performed an emergency IRM to address a safety hazard with a storm water drywell that was collapsing. Previous sampling performed by SCDHS indicated that the structure required remediation. Soil/sediment was removed from DW-2 and placed inside the building. An endpoint sample was collected which showed acceptable levels and the structure was abandoned.

Based upon the results from a sample collected from DW-2 by Suffolk County Department of Health Services (SCDHS), onsite underground injection control (UIC) structures were determined to be a potential environmental concern. In order to address this issue, P.W. Grosser Consulting, Inc. (PWGC) performed UIC structure sampling activities in accordance with the approved Remedial Investigation Work Plan (RIWP). Initial activities in March 2010 included a review of historic site documents and a field inspection. A single on-site cesspool (CP-1) and a single leaching drywell (DW-3) associated with the floor drain (FD-1) inside the service station were identified.

Baseline sampling was performed in March 2010. Soil/sludge analytical data indicated semi-volatile organic compounds (SVOCs) and/or metals were detected in CP-1 and DW-3 above both SCDHS Action Levels and Unrestricted Use Soil Cleanup Objectives (UUSCOs) specified in title 6 of the Official Compilation of NYCRR Part 375. Based on analytical data for initial sampling, PWGC recommended that CP-1, FD-1, and DW-3 be remediated.

In April 2010, an inspection of the single story building that existed on site revealed evidence of structure failure. Due to safety issues regarding the dilapidated building, Suffolk County proceeded with its demolition in accordance with all State and County applicable procedures. Since demolition activities may have damaged the integrity of the remaining on-site UIC structures, the UICs were addressed as an emergency IRM prior to building demolition.

An IRM Work Plan (Appendix B) was prepared for the site which detailed the selected remedy with closure of unused sanitary and storm drain structures in accordance with Article 12 of the Suffolk County Sanitary Code, Standard Operating Procedure 9-95 - Pumpout and Soil Cleanup Criteria, and Suffolk County “*Guidelines for Equipment and Procedures for the Remediation of Contaminated Leaching Pools*” and removal of stockpiled soils stored within the building. In a letter dated April 8, 2010, the NYSDEC approved the IRM Work Plan.

PWGC performed remedial activities on April 21, 2010. In general, remediation was conducted as follows:

Prior to remediation at the site, PWGC collected several waste characterization samples from the UIC structures that required remediation and the soil/sediment stockpile. Based upon the analytical data, soils were classified as non-hazardous. A Guzzler was used to remove impacted sediments from each structure requiring remediation until visually clean, native soils were encountered. SCDHS personnel were onsite to inspect each structure following remediation. Following removal of sediments from remediated UIC Structures, confirmatory endpoint soil samples were collected from the base of each structure to document the effectiveness of the cleanout. Endpoint samples were collected using a properly decontaminated hand auger, placed in laboratory supplied glassware, and stored in a cooler on ice for transport to the laboratory. The remediated floor drain was visually inspected by PWGC and SCDHS to confirm the integrity of the concrete vault. Based upon visual inspection, no cracks or penetrations in the vault providing a pathway to the subsurface were identified in the remediated floor drain.

Upon completion of the IRM, 8.14 tons of non-hazardous soil were generated and properly disposed of. Based upon endpoint analytical results, no further action for those structures were required. Based upon the results of the IRM, the NYSDEC issued a no further action (NFA) letter on July 28, 2010 with regard to the UIC structures. (Copy is attached as Appendix C).

The building was demolished on April 27, 2010. Building demolition was not performed under an IRM as soil disturbance was not part of the plan.



## **4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED**

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Design (RD) for the Former Bellport Gas Station site (March 2011). All deviations from the RD are noted below.

### **4.1 GOVERNING DOCUMENTS**

#### **4.1.1 Site Specific Health & Safety Plan (HASP)**

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

#### **4.1.2 Quality Assurance Project Plan (QAPP)**

The QAPP was included as Section 2.3 of the RD approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.'

#### **4.1.3 Community Air Monitoring Plan (CAMP)**

A CAMP was prepared to provide measures for protection of on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers) from potential airborne contaminant releases resulting from the remedial activities. The primary concerns for this site were VOCs associated with the site soils and groundwater and dust particulates.

The CAMP was performed daily during soil disturbance activities by PWGC. Dust and volatile organic vapors were screened for periodically throughout the day around the surrounding area as detailed in the CAMP. There were no exceedences of the concentrations established in the CAMP.

Copies of all field data sheets relating to the CAMP are provided Appendix D.

#### **4.1.4 Citizen Participation Plan (CPP)**

A CPP was prepared to provide members of the affected and interested public with information about how NYSDEC would inform and involve them during the investigation and remediation of the site. Fact sheets were sent out at key points of the project and a public meeting was held to discuss the chosen remedy. A copy of supporting documents is included in Appendix E.

### **4.2 REMEDIAL PROGRAM ELEMENTS**

#### **4.2.1 Contractors and Consultants**

PWGC Bohemia, NY – PWGC provided project management, environmental and engineering services during the course of the RD.

Associated Environmental Services, Hauppauge, NY – Associated Environmental Services provided drilling services at the site, including, but not limited to installation of groundwater monitoring wells and impacted soil handling.

The Engineer of Record responsible for inspection of the work is Paul Boyce.

#### **4.2.2 Site Preparation**

Since the nature of the RD did not require any large scale construction activities, site preparation was limited. Prior to drilling, utility mark out were performed by One Call. The drill rig was mobilized and demobilized in one day.

#### **4.2.3 General Site Controls**

The site is currently vacant with no improvements. Groundwater monitoring wells are secured by locking manhole covers and are finished at grade.

PWGC personnel keep daily notes in a dedicated bound field book. Field notes are translated into daily reports for the site and stored as an electronic file.

Equipment used during the RD was decontaminated utilizing the following protocol:

- Liquinox and tap water wash
- Tap Water Rinse
- Deionized Water Rinse

Wastes generated during the site were containerized in 55-gallon drums and properly disposed of by the remediation contractor.

#### **4.2.4 Reporting**

Monthly status reports were prepared at the beginning of each month for all work performed during the previous month and sent to the NYSDEC.

All monthly reports are included in electronic format in Appendix [F].

### **4.3 CONTAMINATION REMAINING AT THE SITE**

The Remedial Investigation identified slightly elevated concentrations of VOCs in the soil and groundwater beneath the site. The potential for human exposure to these contaminants is unlikely as the contaminants are contained at a depth of greater than 20 feet and groundwater at the site is not used. In addition, the NYSDEC has completed an extensive off-site groundwater investigation in order to determine the extent of impact. Based on information obtained during the offsite groundwater investigation, the NYSDEC concluded that impacts to private wells were eliminated through connections to public water, methyl tertiary butyl ether (MTBE) exposure at Dunton Lake and tidal creeks was not expected to cause adverse impacts to aquatic or terrestrial organism populations, and impacts to Bellport Bay were expected to be minimal.

Since contaminated soil and groundwater remains beneath the site, Institutional and Engineering Controls are required to protect human health and the environment. These ECs/ICs are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the SMP approved by the NYSDEC.

### **4.4 SOIL COVER SYSTEM**

Exposure to remaining contamination in soil at the site is prevented by a soil cover system placed over the site. This cover system is comprised of the five feet of clean soils, medium-fine sands with gravel, (15'-20' below grade) which lie above the impacted soils which begin at approximately 20' below grade. Soils above the cover system also consist of medium-fine sands with gravel. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix B of the SMP.

## **4.5 OTHER ENGINEERING CONTROLS**

Since remaining contaminated soil and groundwater exists beneath the site, ECs are required to protect human health and the environment. The site has the following primary ECs, as described in the following subsections.

### **4.5.1 Groundwater Monitoring System**

Groundwater monitoring activities to ensure that there is a continuing downward trend regarding the petroleum related VOCs detected in site groundwater will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Initially monitoring consisted of quarterly sampling of five onsite monitoring wells. Following the completion of one year of quarterly monitoring, the NYSDEC reduced the sampling frequency to semi-annual. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

Procedures for monitoring and maintaining the groundwater monitoring system are provided in the Operation and Maintenance Plan in Section 4 of the SMP. The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

## **4.6 INSTITUTIONAL CONTROLS**

The site remedy requires that an environmental easement be placed on the property to (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (2) limit the use and development of the site to Restricted Residential, Commercial, or Industrial uses only, (3) restrict the use of groundwater as a source of potable or process water, (4) prohibit agriculture or vegetable gardens on the controlled property.

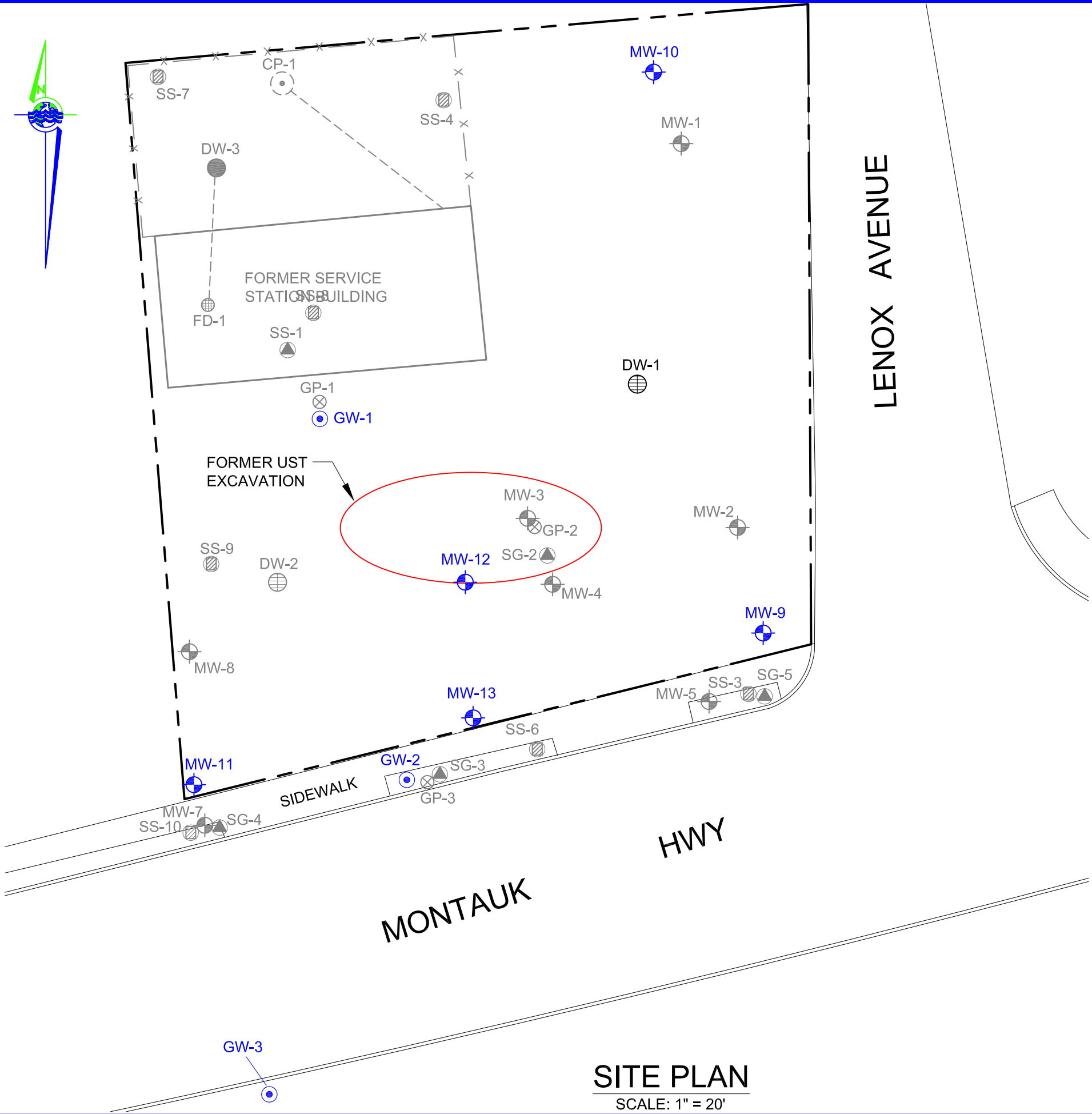
The environmental easement for the site was executed by the Department on August 21, 2013, and filed with the Suffolk County Clerk on September 17, 2013. The County Recording Identifier number for this filing is Liber: D 00012744, Page: 734. A copy of the easement and proof of filing is provided in Appendix G.

An environmental easement has been established for the site which incorporates approximately 97% of the lot. A small portion of the lot, approximately 325 square feet,

is not included in the environmental easement. There is a fence located approximately 3.3 feet south of the northern boundary of the Bellport Gas Station site. According to the title company, the County is “out of possession” of the area between the fence posts and the boundary. As a result, the easement does not apply to this area.

## FIGURES

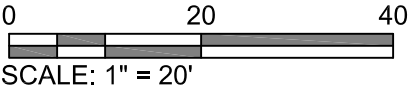
J:\Projects S-Z\SHD\1008 - Ballport Monitoring\Site Management Plan\CAD\Fig 1.dwg (11x17H) Jun 09 2011 10:21am By: guzman



- LEGEND**
- MW-10: GROUNDWATER MONITORING WELL
  - : EXISTING PIPE
  - CP-1: EXISTING CESSPOOL
  - DW-1: EXISTING DRYWELL
  - FD-1: EXISTING FLOOR DRAIN
  - DW-2: ABANDONED DRYWELL
  - MW-5: ABANDONED GROUNDWATER MONITORING WELL
  - SS-8: SURFACE SOIL SAMPLE PERFORMED BY: O'BRIEN & GERE
  - SG-5: SOIL GAS SAMPLE PERFORMED BY: O'BRIEN & GERE
  - GP-1: GEOPROBE SAMPLING LOCATIONS PERFORMED BY: O'BRIEN & GERE

**NOTE:**  
SS-1 IS A SUB SLAB AIR SAMPLE

BASEMAP & INFORMATION  
PROVIDED BY:  
O'BRIEN & GERE  
ENGINEERS INC.



CONSULTANTS

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING  
AND RELATED DOCUMENTS IS A VIOLATION OF  
SEC. 7209 OF THE N.Y.S. EDUCATION LAW

DRAWINGS PREPARED FOR

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION			
PROJECT:	SHD0902	APPROVED BY:	PWG
DESIGNED BY:	DE	DATE:	6/9/11
DRAWN BY:	LLG	SCALE:	AS SHOWN

SHEET TITLE

**SITE PLAN**  
  
FORMER BELLPORT GAS  
STATION SITE  
1401 MONTAUK HWY  
E. PATCHOGUE, NY

FIGURE NO

1

SHEET

- OF -

## **APPENDIX A**



Description of property to be acquired by Suffolk County  
Under the Suffolk County Environmental Restoration Program  
From County of Suffolk, reputed owner

Deed: Liber 11995 Page 605  
Tax Map No: 0200-975.80-04.00-020.000

All that certain plot, place or parcel of land known as Lots 35 to 37 inclusive and part of Lot 34 of Block 785 on "Map No. 10, Map of Property of The New York and Brooklyn Suburban Investment Company of New York", filed August 5, 1890 in the Suffolk County Clerk's Office as File Map No. 102, situate, lying and being at Bellport, Town of Brookhaven, County of Suffolk, State of New York and shown on a survey prepared by L.K. McLean Associates, P.C. dated December 10, 2007. Said parcel being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the westerly boundary line of Lenox Avenue and the northerly boundary line of Montauk Highway (Robinson Blvd.);

Thence from said point of beginning, South 87°18'20" West, along said northerly boundary line of Montauk Highway (Robinson Blvd.), a distance of 101.07 feet to a point of intersection with the division line between the subject parcel on the east and land now or formerly of Montauk Highway Realty Corp. on the west;

Thence North 05°38'00" East, along said division line, a distance of 134.40 feet to a point of intersection with the division line between the subject parcel on the south and land now or formerly of Victor Balabanow, on the north;

Thence South 84°22'00" East, along said division line, a distance of 100.00 feet to a point on the first mentioned westerly boundary line of Lenox Avenue;

Thence South 05°38'00" West, along said westerly boundary line of Lenox Avenue, a distance of 119.78' (Act.) 119.80 feet (Deed) to the point or place of beginning.

Description of Environment Easement to the People of the State of New York  
From County of Suffolk, reputed owner

Deed: Liber 11995 Page 605  
Part of Tax Map No: 0200-975.80-04.00-020.000

All that certain plot, place or parcel of land known as Lots 35 and 36 inclusive and part of Lots 34 and 37 of Block 785 on "Map No. 10, Map of Property of The New York and Brooklyn Suburban Investment Company of New York", filed August 5, 1890 in the Suffolk County Clerk's Office as File Map No. 102, situate, lying and being at Bellport, Town of Brookhaven, County of Suffolk, State of New York and shown on a survey prepared by L.K. McLean Associates, P.C. dated December 10, 2007. Said parcel being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the westerly boundary line of Lenox Avenue and the northerly boundary line of Montauk Highway (Robinson Blvd.);

Thence from said point of beginning, South 87°18'20" West, along said northerly boundary line of Montauk Highway (Robinson Blvd.), a distance of 101.07 feet to a point of intersection with the division line between the subject parcel on the east and land now or formerly of Montauk Highway Realty Corp. on the west;

Thence North 05°38'00" East, along said division line, a distance of 131.15 feet to a point;

Thence South 84°22'00" East, through said subject property, a distance of 100.00 feet to a point on the first mentioned westerly boundary line of Lenox Avenue;

Thence South 05°38'00" West, along said westerly boundary line of Lenox Avenue, a distance of 116.51 feet to the point or place of beginning.

CERTIFIED TO:

- COUNTY OF SUFFOLK
- FIRST AMERICAN TITLE INSURANCE COMPANY OF NEW YORK
- THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

I hereby certify that this map was made from an actual survey completed by me on 11/29/2007 and updated on 10/11/2010.

DANIEL P. JEDLICKA, P.L.S.  
NYSPLS No. 50098

SUFFOLK COUNTY REAL PROPERTY TAX MAP

DISTRICT 0200  
SECTION 975.80  
BLOCK 04.00  
LOT 020.000

WELL DESC'S PER S.C.D.H.S.

ADDED BY: GLB DATE: 05/01/2013

REV. ENG NOTES/MW LOC'S

ADDED BY: GLB DATE: 03/05/2013

SMP REQUIREMENTS

ADDED BY: GLB DATE: 10/28/2011

EASEMENT

ADDED BY: TLS DATE: 12/09/2010

CERTIFICATIONS

REVISED BY: TLS DATE: 11/16/2010

UPDATED BY: KG/BW DATE: 10/11/2010

MADE BY: JL/PL DATE: 11/29/2007

CHECKED BY: FPF DATE: 12/10/2007

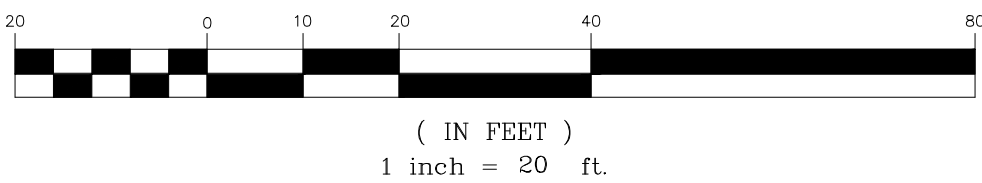
TRACED BY: TLS DATE: 12/10/2007

COMPARED BY: RRF DATE: 12/11/2007

MAP OF PROPERTY  
OF  
COUNTY OF SUFFOLK  
FORMER BELLPORT GAS STATION  
ERP SITE NO. E 152194  
AS SHOWN ON  
MAP NO. 10, MAP OF PROPERTY OF  
THE NEW YORK AND BROOKLYN SUBURBAN  
INVESTMENT COMPANY OF NEW YORK  
FILED: AUGUST 5, 1890 AS FILE MAP NO. 102  
LOTS 35 THRU 37 INCLUSIVE AND PART OF LOT 34  
IN BLOCK 785  
LOCATED AT  
BELLPORT  
TOWN OF BROOKHAVEN  
SUFFOLK COUNTY, NEW YORK

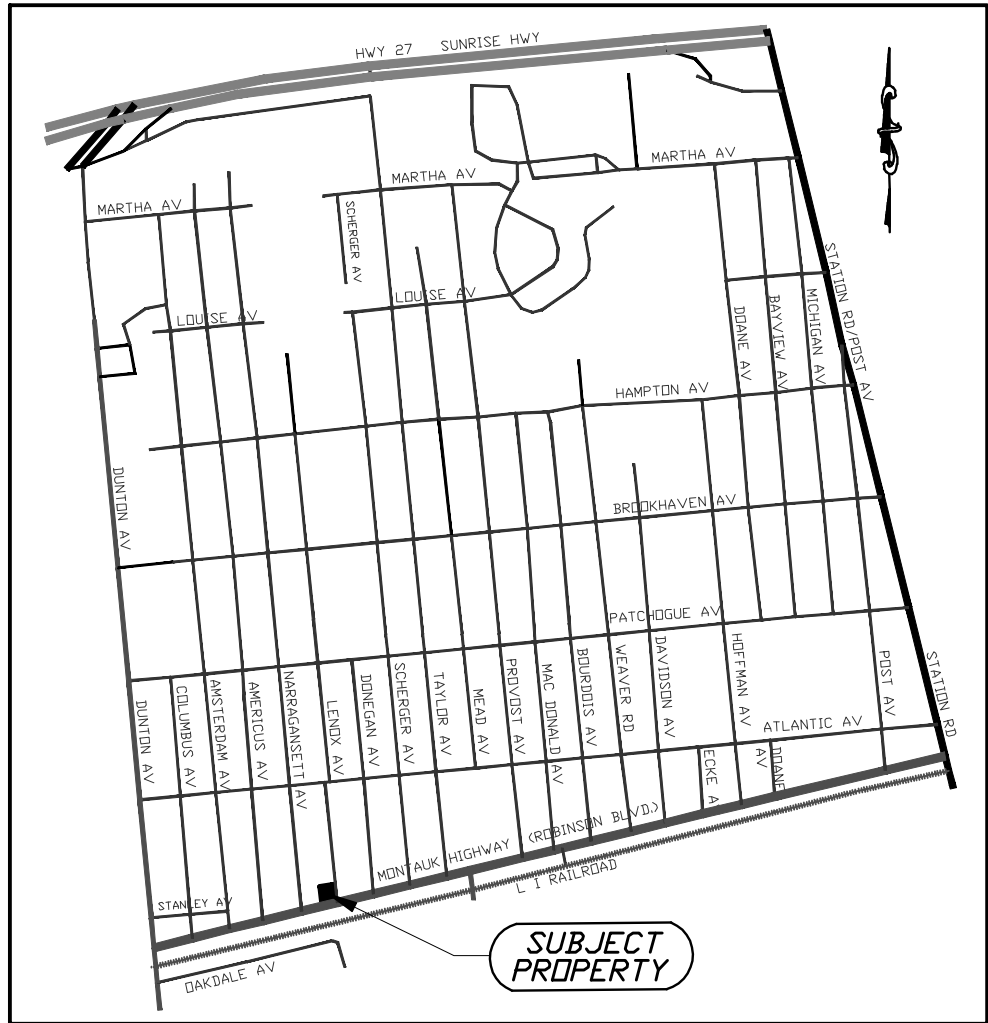
DECEMBER 10, 2007

GRAPHIC SCALE



AREA OF PARCEL = 12,708± SQ.FT. OR 0.292± ACRE

AREA OF ENVIRONMENTAL EASEMENT = 12,383± SQ.FT. OR 0.284± ACRE



LOCATION MAP  
NOT TO SCALE

NOTES

1. PARCEL ADDRESS: 1401 MONTAUK HIGHWAY, EAST PATCHOGUE, NY 11772.

2. MEASUREMENTS ARE IN ACCORDANCE WITH U.S. STANDARDS.

3. BEARINGS SHOWN ARE REFERENCED TO SUBJECT PARCEL DEED FILED IN THE SUFFOLK COUNTY CLERK'S OFFICE IN LIBER 10650, PAGE 536.

4. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

5. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S "EMBOSSED" OR "INKED" SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

7. RIGHTS-OF-WAY NOT SHOWN ARE NOT CERTIFIED.

9. THE SURVEY CLOSES MATHEMATICALLY.

L. K. McLEAN ASSOCIATES, P.C.  
CONSULTING ENGINEERS  
437 SO. COUNTRY ROAD  
BROOKHAVEN, NEW YORK

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law.

THE ENGINEERING AND INSTITUTIONAL CONTROLS for the Easement are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at [derweb@gw.dec.state.ny.us](mailto:derweb@gw.dec.state.ny.us).

ENGINEERING/INSTITUTIONAL CONTROLS

DIMENSIONS TO MONITORING WELLS FROM SET PROPERTY CORNERS

Ⓜ — Monitoring Well

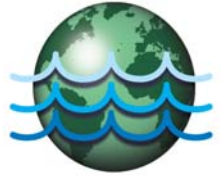
- Cover System—The cover system is comprised of 5 feet of clean soils. Disturbance of soil below 15' below grade is restricted without notification of the NYSDEC. Procedures for the inspection and maintenance of this cover system are referred to in the Excavation Work Plan in Appendix B of the SMP.
- Monitoring Wells—On-site monitoring wells shown on this survey shall be monitored, maintained and replaced as required in the SMP.
- Groundwater Use Prohibition—the use of groundwater from beneath the property as a source of potable or process water, without necessary water quality treatment as determined by the NYSDEC, NYSDOH or SCDHS, is prohibited.
- Vegetable gardens and farming on the property are restricted as set forth in 6 NYCRR Section 375–1.8(g)(2).
- Land Use – The use and development of the site is limited to "restricted residential," "commercial" and "industrial uses" (as defined by 6 NYCRR Section 375–1.8(g)(2)(ii),(iii) and (iv)) only.

ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT.

This Survey has been revised with the benefit of Abstract Search No. 10-CS-42798(811S23545), as prepared by Advantage Title, Title Insurance Company, Dated November 3, 2011. The items in Schedule B affect the parcel shown hereon: Item #5 :Sewer Easement, L 338 P 239;

## **APPENDIX B**



April 1, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, New York 11790-3409

**RE: Interim Remedial Measure Work Plan  
Suffolk County Bellport Gas Station Site – East Patchogue, New York  
ERP Site ID # 1-52-194**

Dear Mr. Sheehan:

P.W. Grosser Consulting, Inc. (PWGC) has prepared this Interim Remedial Measure (IRM) Work Plan for the above-referenced site. The scope of work for this site includes the removal of impacted sediments from CP-1, DW-3, and FD-1, removal of semi-volatile organic (SVOC) impacted sediments stored within the building, and the closure of the on-site structures prior to building demolition. Remediation will be performed under the supervision of SCDHS. The NYSDEC will be notified ten days prior to the start of remedial activities at the site.

## BACKGROUND

The former Bellport Gas Station site is located on Montauk Highway in the Town of Brookhaven, New York and is owned by Suffolk County. The area of concern is an abandoned gas station, approximately 0.3 acres in size (**Figure 1**). This property has been occupied by many different independent retail gasoline service stations, such as Eastern Petroleum (1983), Major Fuel (1986), National (1987), Independent (1991), and Ocean/Coastal (1991-1998). Suffolk County acquired the property in 1999 for failure to pay property taxes. An application for inclusion into the New York State Environmental Restoration Program (ERP) was submitted on February 5, 2007. The site was approved for the ERP program on June 26, 2007 (Site ID#1-52-194). A State Assistance Contract (SAC) #T303811 was finalized on May 8, 2008.

## PREVIOUS INVESTIGATIONS

On February 16, 1984, the SCDHS completed an inspection of this site when Gary's Auto and Truck Repair occupied the facility. This inspection revealed that there was an indoor floor drain which discharged waste liquid to a storm water drywell. In May 1998, the Suffolk County Department of Health Services (SCDHS) received laboratory results from an environmental audit report completed by Tyree Bros. Environmental Services. This report documented contamination in the floor drain and two outdoor storm water drywells. The floor drain contained elevated levels of volatile organic compounds (VOCs) and metals.

In 2008, Suffolk County conducted an investigation associated with a collapsing onsite storm-water drywell. Prior to abandonment of the structure, the SCDHS sampled storm water drywell DW-2 at the site. Analytical results from the sediment sample indicated concentrations of chrysene and lead above SCDHS Action Levels. Based on the results, the SCDHS proposed remediation of DW-2 as per

their NYSDEC-approved IRM Work Plan. The dry well was remediated and closed on October 7, 2008. Sediments which were removed from DW-2 were placed on poly sheeting inside the building. Approximately five cubic yards of sediments are staged inside the building, awaiting disposal.

The site was accepted into the NYDEC ERP program (Site ID #1-52-194) on July 26, 2007 and a State Assistance Contract (#T303811) was finalized on May 8, 2008. As required in the ERP program, a Remedial Investigation Work Plan for the site was prepared in December of 2008. The objective of the investigation was to determine the vertical and horizontal extent of soil and groundwater contamination identified during previous investigations at the site. PWGC performed the Remedial Investigation in May and June of 2009 at the former Bellport Gas Station site. Results of the Remedial Investigation identified the following contaminants of concern:

- A single on-site cesspool (CP-1) and a single leaching drywell (DW-3) associated with the floor drain (FD-1) inside the service station were identified (**Figure 2**). Soil/sludge analytical data indicated SVOCs and/or metals were detected in CP-1 and DW-3 above both SCDHS Action Levels and Restricted Residential Use Soil Cleanup Objectives (RRSCOs) specified in the NYSDEC 6 NYCRR Part 375.
- Slightly elevated concentrations of VOCs in the soil and groundwater beneath the site were identified.

Based upon the results of the Remedial Investigation, PWGC recommended that the impacted underground injection control (UIC) structures be remediated by removing and disposing of impacted sediments from the base of each structure and that groundwater monitoring be performed for the site for a period of one year to document natural attenuation.

## **FUTURE PLANS**

SCDHS has indicated that due to safety issues at the site, the one story building is scheduled to be demolished. Since demolition activities may damage the integrity of the onsite UIC structures, the UICs will be addressed as an interim remedial measure. Groundwater monitoring will still be addressed within the Remedial Action Work Plan, which is being prepared for the site.

## **SCOPE OF WORK**

Remediation and closure of unused subsurface sanitary structures will be conducted in accordance with SCDHS protocol and applicable NYSDEC ERP procedures.

The remediation will include the following:

- Standing liquids (if present) will be removed using a vacuum powered truck. PWGC will coordinate and obtain SCDPW approval to dispose of the liquids at their waste water treatment facility. If the liquid is deemed not acceptable, the liquids will be disposed of in accordance with federal, state and local regulations.
- Following the removal of liquids, a vactor truck will be used to remove impacted soils from the base of each impacted structure (at minimum CP-1, FD-1, and DW-3) and from the soil stockpiled in the building from DW-2. A PWGC representative will be on-site to screen the removed soils with a PID and will direct the removal until visually clean soils (which do not exhibit a PID response) are encountered. The removal of impacted soils from the base of the structure using a vactor truck and proper off-site disposal will be conducted in accordance with federal, state, and local regulations.

- The floor drain will be visually inspected for cracks and/or penetrations. Should any cracks or penetrations be observed, the concrete base will be removed and impacted sediment will be removed until visually clean soils (which do not exhibit a PID response) are encountered.
- Endpoint sampling of CP-1 and DW-3 will be conducted. The endpoint sample will be collected using a properly decontaminated hand auger. Analytical results for the samples will be compared to both the restricted residential soil cleanup objectives (RRSCOs) specified in Table 375-6.8(b) of the NYSDEC 6 NYCRR Part 375 Subparts 375-1 to 375-4 and 375-6 (Part 375, RRSCOs for the protection of public health) and the Cleanup Objectives specified in the SCDHS Article 12, Standard Operation Procedure (SOP) 9-95, Pumpout and Soil Cleanup Criteria, January 7, 1999 to determine if remediation of the structures were successful.

Samples submitted for laboratory analysis will be sent to Chemtech, Mountainside, New Jersey a NYSDOH ELAP certified laboratory. Based upon the data from the RI investigation, which showed metal and SVOC impacts to be present in the impacted soils encountered in the sediment samples from these structures, endpoint samples will be analyzed for metals by USEPA Method 6010/7471 and SVOCs by USEPA Method 8270. Analysis will conform to NYSDEC Analytical Services Protocol (ASP). Category B data deliverables will be submitted for all samples analyzed.

Upon receipt of analytical data within NYSDEC RRSCOs and SCDHS cleanup objectives, CP-1, DW-1, and DW-3 will be backfilled to grade with certified clean fill material.

Following receipt of endpoint sample results, a report, which will detail the remedial effort, summarize the endpoint sample results, and include appropriate waste manifests, will be submitted to your office.

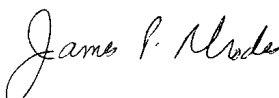
If you have any questions regarding the IRM Work Plan please contact me at (631) 589-6353.

Very truly yours,

**P.W. Grosser Consulting, Inc.**



Derek N. Ersbak  
Project Hydrogeologist



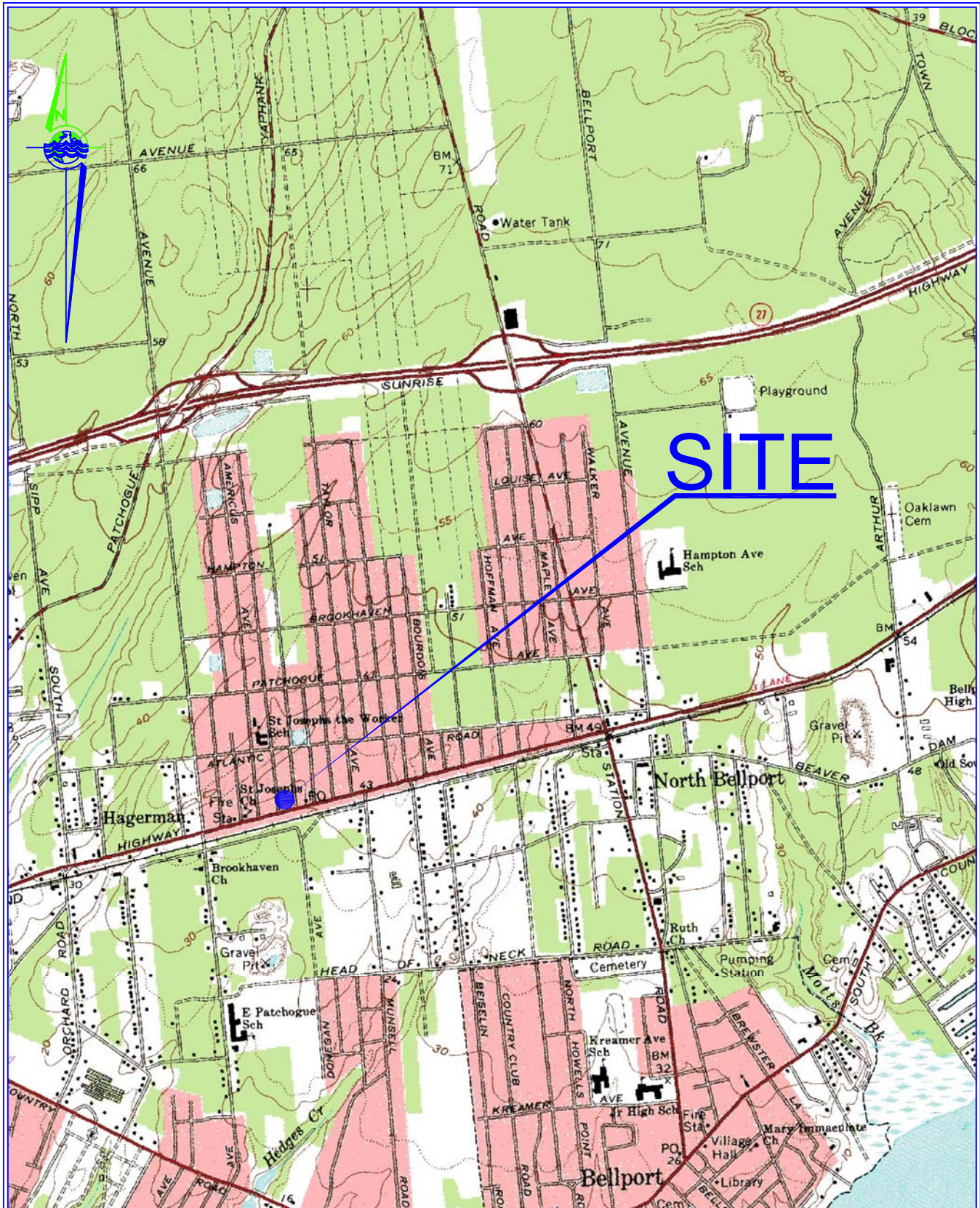
James P. Rhodes, CPG  
Vice-President

cc:

James Meyers, SCDHS  
E. Joungblood, SCDHS  
Robert Seyfarth, SCDHS

## FIGURES





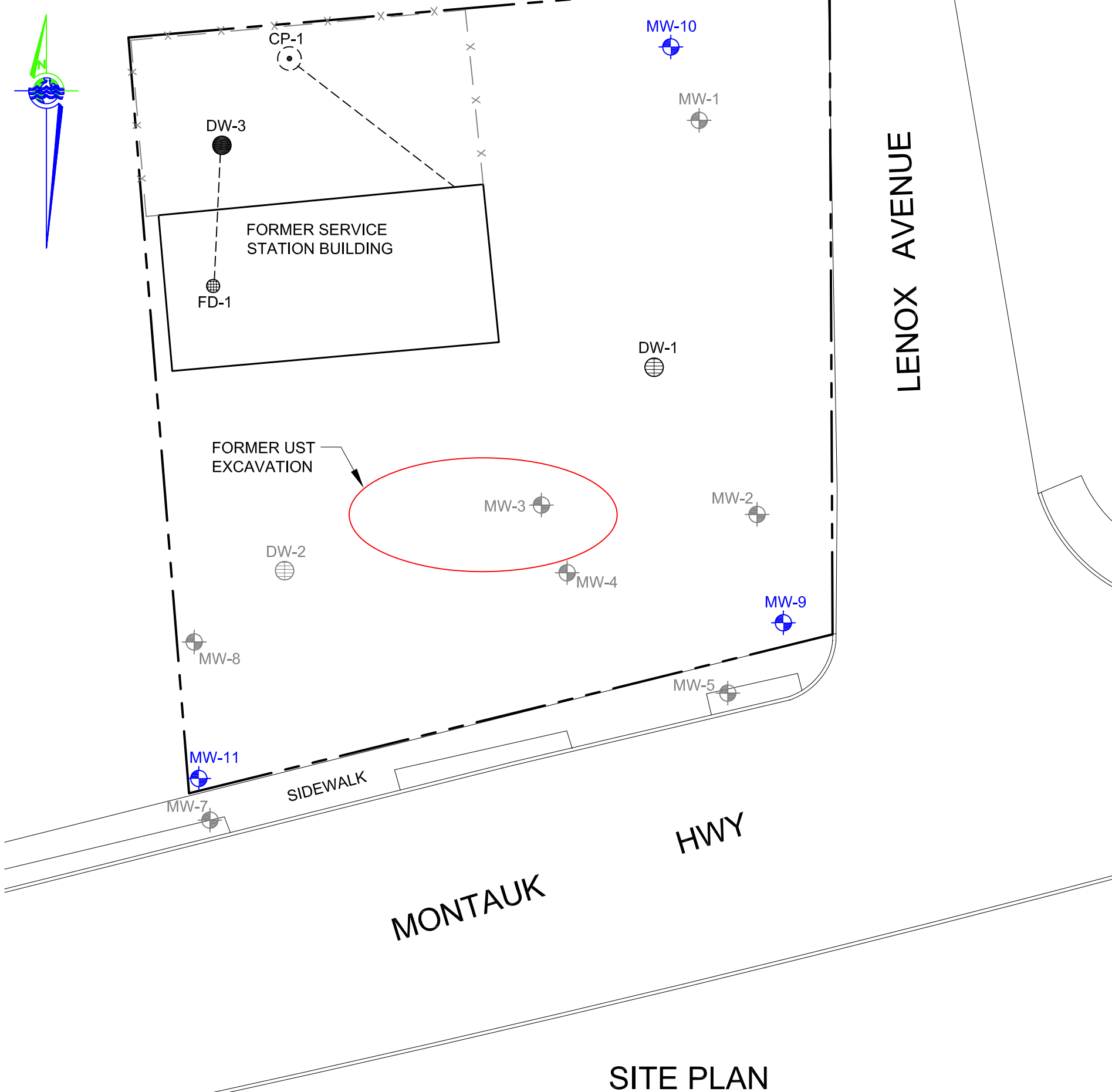
Mapped, edited, and published by the Geological Survey  
Revised in cooperation with New York  
Department of Transportation  
Control by USGS, USC&GS, and New Jersey Geodetic Survey

## VICINITY MAP

SCALE: 1:24,000

U:\Projects S-Z\SHD\0902 - Bellport\CAD\dwgs as of 6-22-09\Vicinity Map.dwg

L:\Projects S-Z\SHD\0902 - Bellport\cad\dwgs as of 6-22-09\Fig 2 8-13-09.dwg (11x17H) Aug 13, 2009-10:00am By: guzman




**SITE PLAN**  
SCALE: 1" = 20'

**LEGEND**

- MW-10: GROUNDWATER MONITORING WELL
- : EXISTING PIPE
- CP-1: EXISTING CESSPOOL
- DW-1: EXISTING DRYWELL
- FD-1: EXISTING FLOOR DRAIN
- DW-2: ABANDONED DRYWELL
- MW-5: ABANDONED GROUNDWATER MONITORING WELL

BASEMAP & INFORMATION PROVIDED BY:  
O'BRIEN & GERE ENGINEERS INC.

0 20 40  
SCALE: 1" = 20'



**PWGC**  
Strategic Environmental & Engineering Solutions

630 JOHNSON AVE. • SUITE 7  
BOHEMIA, NY • 11716-2618  
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CONSULTANTS

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING AND RELATED DOCUMENTS IS A VIOLATION OF SEC. 7209 OF THE N.Y.S. EDUCATION LAW

DRAWINGS PREPARED FOR

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION	
PROJECT: SHD0902	APPROVED BY: PWG
DESIGNED BY: DE	DATE: 6/22/09
DRAWN BY: LLG	SCALE: AS SHOWN

SHEET TITLE

**SITE PLAN**

FORMER BELLPORT GAS STATION SITE  
1401 MONTAUK HWY  
E. PATCHOGUE, NY

FIGURE NO 2

SHEET - OF -



**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation, Region One**  
**Stony Brook University**  
50 Circle Road, Stony Brook, New York 11790-3409  
**Phone:** (631) 444-0240 • **Fax:** (631) 444-0248  
**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



April 8, 2010

Mr. James W. Meyers, P.E.  
Principal Public Health Engineer  
Office of Pollution Control  
Suffolk County Department of Health Services  
15 Horseblock Place  
Farmingville, New York 11738

**Re: UIC Interim Remedial Measure (IRM) Work Plan**  
**Former Bellport Gas Station Site**  
**1401 Montauk Highway (Rt. 27A)**  
**East Patchogue, New York**  
**DEC Site #: E1-52-194**

Dear Mr. Meyers:

The New York State Department of Environmental Conservation (the Department) and the New York State Department of Health (NYSDOH) have reviewed Suffolk County Department of Health Services (SCDHS)'s revised Interim Remedial Measure (IRM) Work Plan regarding the former Bellport Gas Station Site. The scope of work of the IRM work plan includes the removal of impacted sediments from site dry well DW-3, floor drain FD-1, cesspool CP-1 and the removal of the semi-volatile organic impacted sediments that were generated and stockpiled on-site as the result of the remediation of site dry well DW-2. Once cleanout of the UIC structures has been completed, they will be backfilled to grade with clean fill material. Based on the Department's review of the revised plan, it has been determined that the proposed UIC IRM will be completed in accordance with the Department's applicable requirements and protocols, and thus the plan is hereby deemed complete and approved.

At this time, please begin the implementation of the IRM. The Department requests that it is notified five (5) days in advance of the field work associated with this IRM, so a representative of the Department can be present to observe the activities. Should you have questions, please contact me at (631)-444-0247 or via email at [jcsheeha@gw.dec.state.ny.us](mailto:jcsheeha@gw.dec.state.ny.us). Thank you for your

cooperation regarding this matter.

Sincerely,

A handwritten signature in cursive script, reading "John C. Sheehan".

John C. Sheehan  
Project Manager

cc: C. Vasudevan, NYSDEC  
W. Parish, NYSDEC  
R. Ockerby, NYSDOH  
R. Seyforth, SCDHS  
A. Juchatz, SCDEE  
Z. Youngman, P.W. Grosser

FORMER BELLPORT GAS STATION SITE  
1401 MONTAUK HIGHWAY  
EAST PATCHOGUE, NEW YORK  
ERP SITE ID: #1-52-194

**FINAL**

**INTERIM REMEDIAL MEASURE REPORT**

**Submitted To:**



Suffolk County Department of Health Services  
Office of Pollution Control  
15 Horseblock Place  
Farmingville, New York 11738

**Prepared By:**



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[dereke@pwgrosser.com](mailto:dereke@pwgrosser.com)

PWGC Project Number: SHD1005

**JUNE 2010**

P.W. GROSSER CONSULTING, INC.  
PROJECT No. SHD1005

FINAL

INTERIM REMEDIAL MEASURE REPORT

FORMER BELLPORT GAS STATION SITE  
1401 MONKTAUK HIGHWAY  
EAST PATCHOGUE, NEW YORK  
ERP SITE ID: 1-52-194

JUNE 2010

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## APPENDICES

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## 1.0 INTRODUCTION

This Interim Remedial Measure (IRM) Report has been prepared by P.W. Grosser Consulting Inc. (PWGC), on behalf of the Suffolk County Department of Health Services (SCDHS), for the former Bellport Gas Station Site. This report documents the results of the IRM activities performed at the above referenced property. The scope of work was based upon the Remedial Investigation Report prepared by PWGC in March 2010, and the requirements of the Suffolk County Department of Health Services (SCDHS) and New York State Department of Environmental Conservation (NYSDEC) for the subject property. IRM activities were performed under the NYSDEC Environmental Restoration Program (ERP).

### 1.1 Site Description

The area of concern is an abandoned gas station, approximately 0.3 acres in size (**Figure 1**). The site is located at 1401 Montauk Highway in East Patchogue, New York. The property is located on the north side of Montauk Highway and is bounded on the east by Lenox Avenue, on the north by residential properties, and on the west and south by commercial properties.

### 1.2 Site History

On February 16, 1984, the SCDHS completed an inspection of this site when Gary's Auto and Truck Repair occupied the facility. This inspection revealed that there was an indoor floor drain which discharged waste liquid to a storm water drywell. In May 1998, the Suffolk County Department of Health Services (SCDHS) received laboratory results from an environmental audit report completed by Tyree Bros. Environmental Services. This report documented contamination in the floor drain and two outdoor storm water drywells. The floor drain contained elevated levels of volatile organic compounds (VOCs) and metals. To further evaluate the contaminated media revealed to exist at the site, a site characterization was conducted in 2006.

To address the areas of environmental impacts identified at the site, Suffolk County applied for inclusion into the DEC's ERP in February 2007. The site was accepted into the NYDEC ERP program (Site ID #1-52-194) on July 26, 2007 and a State Assistance Contract (#T303811) was finalized on May 8, 2008.

Prior to commencing the Remedial Investigation under the ERP, a storm water drywell at the site (DW-2), was found partially collapsed due to heavy rains. Since the collapsed drywell posed a hazardous condition to the surrounding public, an emergency action IRM was performed in 2008 by Suffolk County. Prior to abandonment of the structure, the SCDHS sampled the drywell. Analytical results from the sediment sample indicated concentrations of chrysene and lead above both SCDHS Action Levels and Unrestricted Use Soil Cleanup Objectives (UUSCOs) specified in the NYSDEC 6 NYCRR Part 375. Based on the results, the SCDHS proposed remediation of DW-2 as per their NYSDEC-approved IRM Work Plan. The dry well was remediated and closed on October 7, 2008. Sediments which were removed from DW-2 were placed on poly sheeting inside the building. Approximately five cubic yards of sediments are staged inside the building, awaiting disposal.

As required in the ERP program, a Remedial Investigation Work Plan for the site was prepared in December of 2008. The objective of the investigation was to determine the vertical and horizontal extent of soil and groundwater contamination identified during previous investigations at the site.

### 1.2.1 Remedial Investigation Report

PWGC completed the Remedial Investigation in March of 2010 at the former Bellport Gas Station site. Results of the Remedial Investigation identified the following contaminants of concern:

- A single on-site cesspool (CP-1) and a single leaching drywell (DW-3) associated with the floor drain (FD-1) inside the service station were identified (**Figure 1**). Soil/sludge analytical data indicated SVOCs and/or metals were detected in CP-1 and DW-3 above both SCDHS Action Levels and Unrestricted Use Soil Cleanup Objectives (UUSCOs) specified in the NYSDEC 6 NYCRR Part 375.
- Slightly elevated concentrations of VOCs in the soil and groundwater beneath the site were identified.

Based upon the results of the Remedial Investigation, PWGC recommended that the impacted underground injection control (UIC) structures be remediated as part of the Remedial Actions to be performed at the site. The UIC structures were to be remediated by removing and disposing of impacted sediments from the base of each structure and groundwater monitoring be performed in the vicinity of the former USTs.

### 1.2.2 Interim Remedial Measure Work Plan

In April 2010, an inspection of the single story building that existed on site revealed evidence of structure failure. Due to safety issues regarding the dilapidated building, Suffolk County proceeded with its demolition in accordance with all State and County applicable procedures. Since demolition activities may damage the integrity of the remaining on-site UIC structures, the UICs were addressed as an emergency IRM prior to building demolition.

The IRM was implemented on April 21, 2010. The scope of work included the removal of impacted sediments from one leaching drywell (DW-3), one floor drain (FD-1), one cesspool (CP-1), closure of the on-site structures, and the removal of SVOC impacted sediments from DW-2 that were being stored within the building. Remediation was performed under the supervision of the SCDHS and the DEC.

The selected remedy detailed in the IRMWP includes:

- Closure of unused subsurface sanitary and storm drain structures in accordance with Article 12 of the Suffolk County Sanitary Code, Standard Operating Procedure 9-95 - Pumpout and Soil Cleanup Criteria, and Suffolk County "Guidelines for Equipment and Procedures for the Remediation of Contaminated Leaching Pools", and applicable ERP procedures,
- Removal of stockpiled soils stored within the building.

In a letter dated April 8, 2010, the NYSDEC approved the IRM Work Plan.

## 2.0 FIELD ACTIVITIES

PWGC and their subcontractor, AARCO Environmental Services Corporation (AARCO), performed remedial activities at the site on April 21, 2010 in accordance with the approved IRM work plan. Remediation activities were witnessed by representatives from the NYSDEC and SCDHS. Remedial activities are discussed in detail below.

### 2.1 UIC Remediation

Based upon the findings of the remedial investigation, PWGC recommended remediation of the remaining on-site UICs. These structures contained concentrations of SVOCs and/or metals above both the UUSCOs and SCDHS Action Levels.

#### 2.1.1 Waste Characterization

Prior to remediation at the site, PWGC collected several waste characterization samples from the UIC structures that required remediation. Based upon the analytical data, soils were classified as non-hazardous.

#### 2.1.2 Scope of Work

A Guzzler truck was used to remove impacted sediments from the structures until visually clean, native soils were encountered (**Photo 1**).

Following the removal of sediments from the UIC Structures, endpoint samples were collected from the bases of the structures to document the effectiveness of the cleanout. The endpoint samples were collected using a properly decontaminated hand auger, placed in laboratory supplied glassware, and submitted to Chemtech for analysis, as required by the SCDHS (**Photo2**).

The floor drain was visually inspected for cracks or penetrations. The floor drain was observed to have a solid bottom with no signs of cracks or penetrations to the subsurface (**Photo3**).

### 2.2 Soil Stockpile Remediation

PWGC recommended removal of the soil stockpiled inside the building by SCDPW from the IRM of DW-2.

#### 2.2.1 Waste Characterization

Prior to remediation at the site, PWGC collected a composite waste characterization sample of the stockpile. Based upon the analytical data, soils were classified as non-hazardous.

#### 2.2.2 Soil Removal

A Guzzler truck was used to remove the impacted soils from the stockpile (**Photo4**).

The floor beneath the stockpile was inspected for cracks and/or penetrations where contamination could have been spread to the subsurface. No cracks or penetrations were observed (**Photo 5**).

### 2.3 UIC Closure



Following the collection of endpoint samples, the three UIC structures (DW-1, DW-3, and CP-1) were backfilled with clean fill material to grade (**Photo 6**). The floor drain was filled with clean fill material and then sealed with concrete to grade (**Photo 7**). Clean fill receipts are included in **Appendix A**.

## 2.4 Laboratory Analysis

Samples were collected in pre-cleaned, pre-preserved (where applicable), laboratory supplied glassware and stored in a cooler packed with ice for shipment to the analytical laboratory. Samples were shipped under proper chain-of-custody procedures via UPS to Chemtech of Mountainside, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory (ELAP ID: 11376).

Samples were analyzed for the compounds which initially exceeded the NYSDEC UUSCOs and the SCDHS Action Levels. Analytical services performed in accordance with NYSDEC Analytical Sampling Protocol (ASP) with Category B deliverables (ASP-B). Laboratory analytical reports (results only) are included as **Appendix B**; full ASP-B reports are included on the enclosed CD-ROM.

## 2.5 Waste Disposal

A total of 8.14 tons of non-hazardous soils were generated during implementation of the IRM. Nonhazardous soils were transported to Earthcare's permitted Part 375 transfer facility in Deer Park. The soils were later transported with similar soils for final disposal. Waste manifests and disposal receipts are included as **Appendix C**.

### 3.0 ANALYTICAL RESULTS

The analytical results of the samples collected during the IRM were compared to the unrestricted use soil cleanup objectives (UUSCOs) specified in Table 375-6.8(a) of the NYSDEC 6 NYCRR Part 375 Subparts 375-1 to 375-4 and 375-6 (Part 375, UUSCOs for the protection of public health). In the absence of an applicable clean-up objective under the Part 375 unrestricted use soil cleanup objectives, the results were compared to the cleanup objectives specified in the SCDHS Article 12, Standard Operation Procedure (SOP) 9-95, Pumpout and Soil Cleanup Criteria, January 7, 1999.

SVOCs were not detected above laboratory method detection limits.

Several metals were detected above laboratory method detection limits in the samples from CP-1 and DW-3. The detected concentrations of arsenic, cadmium, chromium, copper, lead, and nickel were below their respectable UUSCOs. Analytical data are summarized **Tables 1 -2**. Laboratory analytical reports are included as **Appendix B**.

## 4.0 QUALITY ASSURANCE/QUALITY CONTROL

The overall quality assurance/quality control (QA/QC) objective for the field investigation was to develop and implement procedures that provide data of known and documented quality. QA/QC characteristics for data include precision, accuracy, representativeness, completeness, and comparability. The purpose of the QA/QC activities developed for this site were to verify the integrity of the work performed and data collected is of the appropriate type and quality for the intended use.

### 4.1 QA/QC Samples

To assess the adequacy of the sample collection and decontamination procedures performed in the field, QA/QC samples were collected and analyzed throughout the field sampling program. QA/QC samples included trip blanks, field blanks, blind duplicates, matrix spike (MS), and matrix spike duplicates (MSD). Types and frequencies of field QA/QC samples are listed below.

<u>Type</u>	<u>Frequency</u>
Trip Blank	One per cooler (when VOC samples collected)
Field Blank	One per day per matrix sampled
Blind Duplicate	One per 20 samples per matrix
Matrix Spike/Matrix Spike Duplicate	One per 20 samples per matrix

In general, QA/QC samples confirmed that the procedures performed in the field were consistent and acceptable. Targeted analytes were not detected above the laboratory MDL in field blank or trip blank samples submitted for analysis, indicating that sample collection procedures and/or ambient conditions are unlikely to have impacted environmental samples collected from the site during implementation of the IRM.

### 4.2 Data Usability and Validation

A Data Validation Report and a Data Usability Summary Report (DUSR) were prepared by Stone Environmental, Inc. (Stone) of Montpelier, Vermont. A copy of the DUSR (with the Data Validation Report included as an attachment) is included as **Appendix D**.

#### Data Validation

In accordance with the approved IRMWPs, full data validation was performed on 5% of the data generated or one sample per Sample Delivery Group (SDG), whichever was greater. Remaining data received a summary validation as detailed in the DUSR. The findings and recommendations of the Data Validation Report (included as Attachment C to the DUSR) are summarized as follows:

- The validation deemed the SVOA analyses valid as reported.
- The result for Cadmium in CP-1 was reported as less than the reporting limit (U).
- The result for CP-1 was qualified as estimated (J).

### **Data Usability**

The DUSR was prepared in accordance with USEPA Region II SOPs for validating organic and inorganic analyses and was based on a review of each SDG case narrative and full Data Validation Report (detailed above). The findings and recommendations of the DUSR are summarized as follows:

- Data are representative of adequate method accuracy and precision with regard to project objectives.
- The data was deemed usable by the data validator.
- Results for cadmium were qualified as less than the reporting limit due to laboratory contamination in the analytical blanks.
- Results for lead were qualified as estimated (J) due to the presence of this compound in the field blank.
- The completeness level attained for the analysis of the field samples was greater than 95%. For all data, the overall quality of the data was acceptable and all results as qualified are considered usable.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

PWGC implemented an IRM for UIC structures on behalf of SCDHS at the Bellport Gas Station site as a component of the ERP. The scope of work was based upon the Remedial Investigation Report prepared by PWGC in March 2010, and the requirements of the NYSDEC for the subject site.

The scope of work for the IRM consisted of remediation of impacted storm water drywells and sanitary systems, as identified in the Remedial Investigation Report. Remedial activities were performed by AARCO Environmental Services Corporation (AARCO) of Deer Park, New York under the oversight of PWGC personnel.

### **5.1 UIC Structure Remediation**

Based upon the findings of the Remedial Investigation Report, one leaching drywell (DW-3), one floor drain (FD-1), one cesspool (CP-1), and a soil stockpile required remediation. Characterization samples collected from each of these structures contained compounds above UUSCOs and/or SCDHS Action levels.

A Guzzler was used to remove impacted sediments from each structure requiring remediation until visually clean, native soils were encountered. Following removal of sediment from remediated UIC structures, confirmatory endpoint soil samples were collected from the base of each structure to document the effectiveness of the cleanout.

The remediated floor drain was inspected to confirm the integrity of the concrete vault. Based upon visual inspection, no cracks or penetrations in the vault providing a pathway to the subsurface were identified in the remediated floor drain.

A total of 8.14 tons of non-hazardous soils were generated during implementation of the IRM. Nonhazardous soils were transported to Earthcare's permitted Part 375 transfer facility in Deer Park. The soils were later transported with similar soils for final disposal.

### **5.2 Endpoint Sample Data**

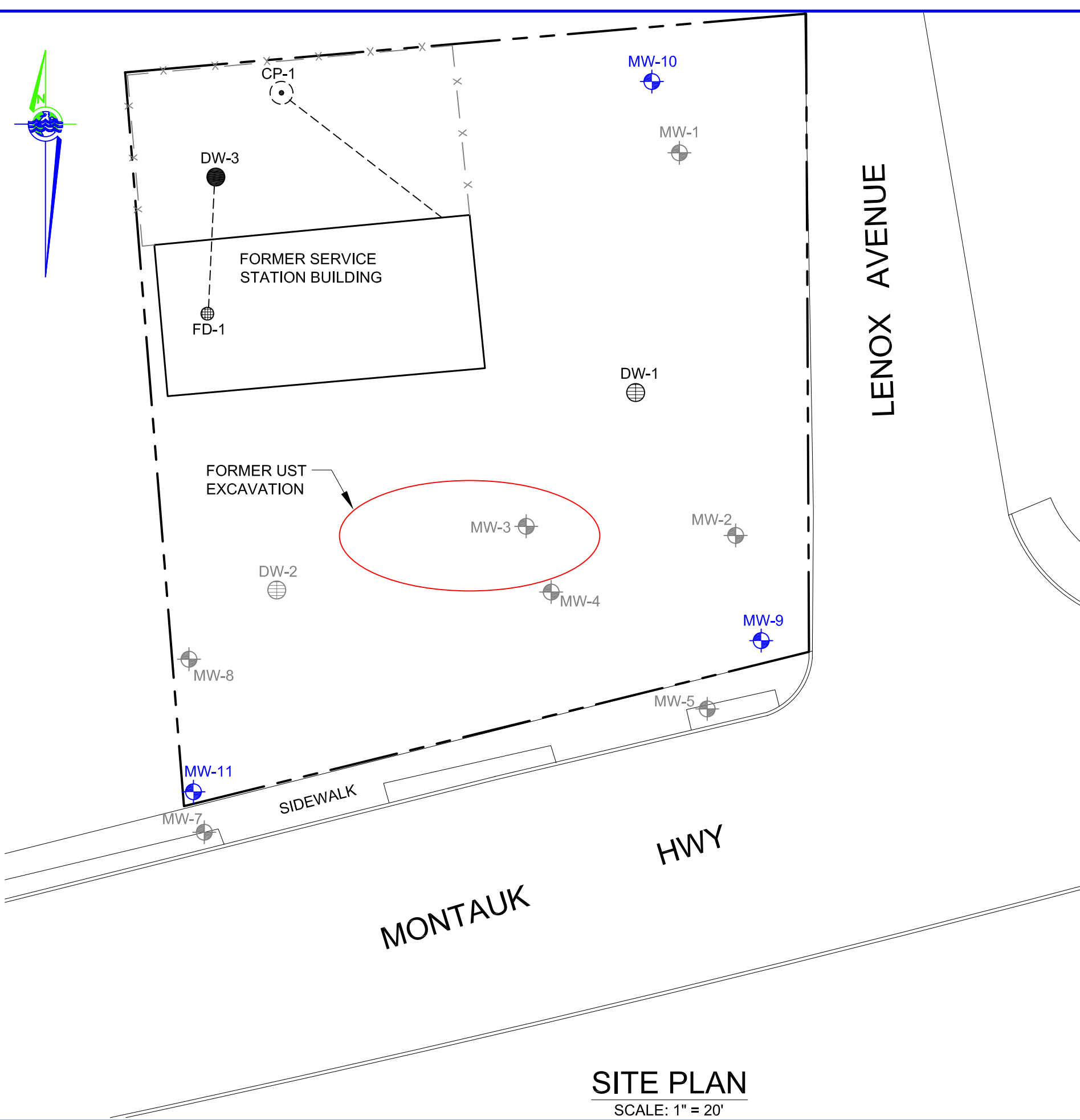
Endpoint soil samples were collected from each open bottomed structure: drywell DW-3 and cesspool CP-1. SVOCs and metals were not detected at concentrations above UUSCOs and SCDHS Cleanup Objectives. The analytical results demonstrated that the UICs were successfully remediated.

### **5.3 Recommendations**

Based on the results of the IRM, the UICs located at the site that had required remedial action have been addressed in accordance with applicable ERP and SCDHS requirements. Thus, PWGC recommends the remaining remedial action for the site include performing groundwater monitoring in accordance with the Proposed Remedial Action Plan (PRAP), which is currently being developed by the NYSDEC.

## FIGURES

J:\Projects S-Z\SHD1005 - Bellport [RM]cad\Fig 1.dwg (11x17H) May 11, 2010 12:59pm By: guzman



**SITE PLAN**  
SCALE: 1" = 20'

**LEGEND**

- MW-10  
 GROUNDWATER MONITORING WELL
- EXISTING PIPE
- CP-1  
 EXISTING CESSPOOL
- DW-1  
 EXISTING DRYWELL
- FD-1  
 EXISTING FLOOR DRAIN
- DW-2  
 ABANDONED DRYWELL
- MW-5  
 ABANDONED GROUNDWATER MONITORING WELL

BASEMAP & INFORMATION PROVIDED BY:  
O'BRIEN & GERE ENGINEERS INC.

0 20 40  
SCALE: 1" = 20'

**PWGC**  
Strategic Environmental & Engineering Solutions

630 JOHNSON AVE. • SUITE 7  
BOHEMIA • NY • 11716-2618  
PH: (631)589-6353 • FX: (631)589-8705  
E-MAIL: INFO@PWGROSSER.COM

CONSULTANTS

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DRAWINGS PREPARED FOR

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION	
PROJECT: SHD1005	APPROVED BY: PWG
DESIGNED BY: DE	DATE: 5/11/10
DRAWN BY: LLG	SCALE: AS SHOWN

SHEET TITLE

**SITE PLAN**

FORMER BELLPORT GAS STATION SITE  
1401 MONTAUK HWY  
E. PATCHOGUE, NY

FIGURE NO 1

SHEET OF

## TABLES



TABLE 1

**SOIL ANALYTICAL RESULTS FOR UIC ENDPOINT SAMPLES - SEMI-VOLATILE ORGANIC COMPOUNDS  
USEPA METHOD 8270 (SCDHS ANALYTE LIST)**

**FORMER BELLPORT GAS STATION - 1401 MONTAUK HIGHWAY - EAST PATCHOGUE - NEW YORK**

Client Sample ID:	SCDHS Cleanup Objectives <sup>(1)</sup>	Unrestricted		Restricted			CP-1	DW-3
Laboratory ID:		Use	Residential	Residential	Commercial	Industrial	B2008-01	B2008-04
Sampling Date:		SCO (2)	SCO(3)	SCO(3)	SCO(3)	SCO(3)	4/21/2010	4/21/2010
<b>Semi-Volatile Organic Compounds - USEPA Method 8270 - ug/kg</b>								
Acenaphthene	50,000	20,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Anthracene	50,000	NS	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Benzo(a)anthracene	3,000	1,000 <sup>c</sup>	1,000 <sup>f</sup>	1,000 <sup>f</sup>	5,600	11,000	340 U	350 U
Benzo(a)pyrene	11,000	1,000 <sup>c</sup>	1,000 <sup>f</sup>	1,000 <sup>f</sup>	1,000 <sup>f</sup>	1,100	340 U	350 U
Benzo(b)fluoranthene	1,100	1,000 <sup>c</sup>	1,000 <sup>f</sup>	1,000 <sup>f</sup>	5,600	11,000	340 U	350 U
Benzo(g,h,i)perylene	50,000	100,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Benzo(k)fluoranthene	1,100	800 <sup>c</sup>	1,000	3,900	56,000	110,000	340 U	350 U
Chrysene	400	1,000 <sup>c</sup>	1,000 <sup>f</sup>	3,900	56,000	110,000	340 U	350 U
Dibenzo(a,h)anthracene	50,000	330 <sup>b</sup>	330 <sup>c</sup>	330 <sup>c</sup>	560	1,100	340 U	350 U
Fluoranthene	50,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Fluorene	50,000	30,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Indeno(1,2,3-cd)pyrene	3,200	500 <sup>c</sup>	500 <sup>f</sup>	500 <sup>f</sup>	5,600	11,000	340 U	350 U
Phenanthrene	50,000	100,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U
Pyrene	50,000	100,000	100,000 <sup>a</sup>	100,000 <sup>a</sup>	500,000 <sup>b</sup>	1,000,000 <sup>c</sup>	340 U	350 U

## Notes:

<sup>(1)</sup>Suffolk County Dept. of Health Services, Article 12 - SOP 9-95, Cleanup Objectives, July 1998.

(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06

(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Restricted Use of Soil Cleanup Objective Table 375-6.8b 12/06

a - The SCO for residential, restricted residential and ecological resources use were capped at a maximum value of 100 ppm.

b - The SCOs for commercial use were capped at a maximum value of 500 ppm.

c - The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm.

f - For constituents where the calculated SCO was lower than the rural soil background concentration, the rural soil background concentration is used as the Track 2 SCO value for f

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit. The associated numerical value is the sample quantitation limit.

**Bold / Shaded text denotes concentrations exceeding NYSDEC Unrestricted Use SCO**

**TABLE 2**  
**SOIL ANALYTICAL RESULTS FOR UIC ENDPOINT SAMPLES - METALS**  
**USEPA METHOD 6010 (SCDHS ANALYTE LIST)**

**FORMER BELLPORT GAS STATION - 1401 MONTAUK HIGHWAY - EAST PATCHOGUE - NEW YORK**

Client Sample ID: Laboratory ID: Sampling Date:	SCDHS Cleanup Objectives <sup>(1)</sup>	Unrestricted Use SCO (2)	Residential SCO(3)	Restricted Residential SCO(3)	Commercial SCO(3)	Industrial SCO(3)	CP-1 B2008-01 4/21/2010	DW-3 B2008-04 4/21/2010
<b>Metals - USEPA Method 6010 - mg/kg</b>								
Arsenic	7.5	13 <sup>c</sup>	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	1.04 U	1.8
Beryllium	1.6	7	14	72	590	2,700	0.31 U	0.24 U
Cadmium	1	2.5 <sup>c</sup>	2.5 <sup>f</sup>	4.3	9.3	60	0.1 UJ	0.13 UJ
Chromium	10	30 <sup>c</sup>	36	180	1,500	6,800	1.18	1.78
Copper	25	50	270	270	270	10,000 <sup>d</sup>	1.09	2.46
Lead	100	63 <sup>c</sup>	400	400	1,000	3,900	1.2 J	4.85 J
Mercury	0.1	0.18 <sup>c</sup>	0.81 <sup>j</sup>	0.81 <sup>j</sup>	2.8 <sup>j</sup>	5.7 <sup>j</sup>	0.01 U	0.01 U
Nickel	13	30	140	310	310	10,000 <sup>d</sup>	2.07 U	0.56 J
Silver	5	2	36	180	1,500	6,800	0.52 U	0.39 U

**Notes:**

<sup>(1)</sup>Suffolk County Dept. of Health Services, Article 12 - SOP 9-95, Cleanup Objectives, July 1998.

(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06

(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Restrictd Use of Soil Cleanup Objective Table 375-6.8b 12/06

a - The SCO for residential, restricted residential and ecological resources use were capped at a maximum value of 100 ppm.

b - The SCOs for commercial use were capped at a maximum value of 500 ppm.

c - The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm.

d - The SCOs for metals were capped at a maximum value of 10,000 ppm.

f - For constituents where the calculated SCO was lower than the rural soil background concentration, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

j - This SCO is the lowe of the values for mercury.

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit. The associated numerical value is the sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit or quantitation necessary to accurately and precisely measure the analyte in the sample.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**Bold / Shaded text denotes concentrations exceeding NYSDEC Restricted Residential SCO**

## PHOTOS



Photo 1: Guzzler truck set up to remove impacted sediment from DW-3.



Photo 2: Endpoint samples collected from base of remediated structures.





Photo 3: View of floor drain after remediation.



Photo 4: Guzzler removing soil stockpile.



Photo 5: View of slab after stockpile was removed.



Photo 6: View of backfilled structures.





Photo 7: Floor drain backfilled and sealed with concrete.

## **APPENDIX A CLEAN FILL RECEIPTS**



Global Land Materials, Inc.  
20 Arthur Avenue  
PO Box 86  
Brookhaven, NY 11719

Ticket No :1148501  
Date :4/21/10  
Phone :(631)286-3322  
Fax :(631)363-2307

Customer: AAR01  
AARCO ENVIRONMENTAL SERVICES  
90 GEAR AVE

LINDENHURST, NY 11757

Truck : ARCO  
Location: 1 SUFFOLK COUNTY

Gross : 35400 lb Scale 1 Out 1:04 pm  
Tare : 25120 lb Scale 1 In 12:59 pm  
Net : 10280 lb  
5.140 tn

Weigh Master: TONI TONI

Remarks: FINE SAND - SCREENED  
FROM EAST COAST MINES

Driver:

*Anthony*  
ON 4/21/10 1:05PM

Material \$  
Delivery \$  
Misc \$  
Tax \$

Total \$  
Received \$  
Check #

MATERIAL	DESCRIPTION	QTY	UNIT-\$	DELIVERY-\$	MISC-\$	TAX-\$	TOTAL-\$
3SANT	FINE SAND	5.140	tn				

Not responsible for sidewalks, curbs, driveways or any property damage which may result from this service .

CUSTOMER COPY

TELEPHONES

# 110 Sand Company

170 Cabot Street  
West Babylon, New York 11704

Office - 631-249-4108  
Scalehouse - 631-694-2822  
Landfill - 631-694-2848

CUSTOMER NO.	P.O. NUMBER	TRUCK NO.	TYPE OF SALE	JOB NO.	OUR ORDER NUMBER	TICKET NO.
0001		6138	SHIPPING		012110	505243

CUSTOMER NAME - 17V  
MATERIAL SALE - CHECK

DATE	TAX PERCENTAGE	TRUCK CODE	MATERIAL CODE
7/21/10	Y		110

MATERIAL DESCRIPTION - CONCRETE SAND (A) - 10-34F

GROSS	TARE	NET	UNIT	WEIGHED BY
43.47	25.45	18.02	TONS	CKK
IN	OUT	CHECK NO./CHARGE TYPE	LICENSE NO.	
	11:13	AMEX 61308JL		

DELIVERY ADDRESS

RECEIVED BY:

DRIVER SIGNATURE

CUSTOMER SIGNATURE

SEE REVERSE SIDE FOR COLLECTION TERMS

TOTAL TODAY

QUANTITY THIS ORDER TODAY

LOADS THIS ORDER TODAY

OFFICE USE ONLY

## **APPENDIX B**

### **LABORATORY ANALYTICAL REPORT**

## **ANALYTICAL RESULTS SUMMARY**

**PROJECT NAME : BELLPORT ERP**

**P.W. GROSSER CONSULTING**

**630 Johnson Ave.**

**Suite 7**

**Bohemia , NY - 11716**

**Phone No: 6315896353**

**ORDER ID : B2008**

**ATTENTION : Zeb Youngman**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**FORM S-I**  
**SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY**

<b>NYSDEC Sample ID/Code</b>	<b>Laboratory Sample ID/Code</b>	<b>VOA GC/MS (Method #)</b>	<b>BNA GC/MS (Method #)</b>	<b>VOA GC (Method #)</b>	<b>Pest PCBs (Method #)</b>	<b>Metals (Method #)</b>	<b>Other (Method #)</b>
CP-1	B2008-01	8260B	8270C			6010B, 7471A	Chemtech - SOP
DW-3	B2008-04	8260B	8270C			6010B, 7471A	Chemtech - SOP
DUP-01	B2008-05	8260B	8270C			6010B, 7471A	Chemtech - SOP
FIELDBLANK	B2008-06	8260B	8270C			6010B, 7470A	

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IIa**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
SEMIVOLATILE (BNA) ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Rec'd at Lab</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>
B2008-01	SOIL	04/21/10	04/22/10	04/23/10	04/23/10
B2008-04	SOIL	04/21/10	04/22/10	04/23/10	04/24/10
B2008-05	SOIL	04/21/10	04/22/10	04/23/10	04/24/10
B2008-06	WATER	04/21/10	04/22/10	04/23/10	04/24/10

\* Details For Test :SVOCMS Group1

---

**NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
B2008-01	Solid	8270C	3541		
B2008-02	Solid	8270C	3541		
B2008-03	Solid	8270C	3541		
B2008-04	Solid	8270C	3541		
B2008-05	Solid	8270C	3541		
B2008-06	Water	8270C	3510		

---

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IV**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Metals Requested</b>	<b>Date Rec'd at Lab</b>	<b>Date Digested</b>	<b>Date Analyzed</b>
B2008-01	SOIL	Mercury	04/22/10	05/03/10	05/04/10
B2008-04	SOIL	Mercury	04/22/10	05/03/10	05/04/10
B2008-05	SOIL	Mercury	04/22/10	05/03/10	05/04/10
B2008-06	WATER	Mercury	04/22/10	04/30/10	05/03/10

\* Details For Test :Mercury

---



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IV**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Metals Requested</b>	<b>Date Rec'd at Lab</b>	<b>Date Digested</b>	<b>Date Analyzed</b>
B2008-01	SOIL	Metals ICP- Group1	04/22/10	05/04/10	05/04/10
B2008-04	SOIL	Metals ICP- Group1	04/22/10	05/04/10	05/04/10
B2008-05	SOIL	Metals ICP- Group1	04/22/10	05/04/10	05/04/10
B2008-06	WATER	Metals ICP- Group1	04/22/10	05/04/10	05/04/10

\* Details For Test :Metals ICP-Group1

---

## Cover Page

**Order ID :** B2008

**Project ID :** Bellport ERP

**Client :** P.W. Grosser Consulting

**Lab Sample Number**

B2008-01  
B2008-02  
B2008-03  
B2008-04  
B2008-05  
B2008-06

**Client Sample Number**

CP-1  
B2008-01MS  
B2008-01MSD  
DW-3  
DUP-01  
FIELDBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_



## **CASE NARRATIVE**

**P.W. Grosser Consulting**  
**Project Name: Bellport ERP**  
**Project # N/A**  
**Chemtech Project # B2008**

### **A. Number of Samples and Date of Receipt:**

5 Solid samples were received on 4/22/10.  
1 Water sample was received on 4/22/10.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: SVOCMS Group1, and VOCMS Group1. This data package contains results for SVOCMS Group1.

### **C. Analytical Techniques:**

The samples were analyzed on instrument BNA E using GC Column RTX-5 SILMS which is 20 meters, 0.18 mm ID, 0.36 um df, Catalog # 42704. The samples were analyzed on instrument BNA F using GC Column RTX-5 SILMS which is 20 meters, 0.18 mm ID, 0.36 um df, Catalog # 42704.

The analysis of SVOCMS Group1 was based on method 8270C and extraction was done based on method 3541 and 3510.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.  
The Surrogate recoveries met the acceptable criteria.  
The Internal Standards Areas met the acceptable requirements.  
The Retention Times were acceptable for all samples.  
The MS recoveries met the requirements for all compounds.  
The MSD recoveries met the acceptable requirements.  
The RPD recoveries met criteria.  
The Blank Spike met requirements for all samples.  
The Blank analysis did not indicate the presence of lab contamination.  
The Calibration met the requirements.  
The Tuning criteria met requirements.

### **E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_



## **CASE NARRATIVE**

**P.W. Grosser Consulting**  
**Project Name: Bellport ERP**  
**Project # N/A**  
**Chemtech Project # B2008**

**A. Number of Samples and Date of Receipt:**

5 Solid samples were received on 4/22/10.

1 Water sample was received on 4/22/10.

**B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, ICP Metals, SVOCMS Group1, and VOCMS Group1. This data package contains results for ICP Metals and Mercury.

**C. Analytical Techniques:**

The analysis of ICP Metals was based on method 6010B and Mercury was based on method 7470A/7471

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

**E. Additional Comments:**

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP-1

Lab Name: Chemtech Contract: PWGR01

Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008

Matrix (soil/water): SOIL Lab Sample ID: B2008-01

Sample wt/vol: 30.05 (g/mL) g Lab File ID: BE063608.D

Level: (low/med) LOW Date Received: 04/22/10

% Moisture: 3 Decanted: (Y/N) N Date Extracted: 04/23/10

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/23/10

Injection Volume: 1 Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: N/A Extraction: (Type) SOXH

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/Kg	Q
83-32-9	Acenaphthene	340		U
86-73-7	Fluorene	340		U
85-01-8	Phenanthrene	340		U
120-12-7	Anthracene	340		U
206-44-0	Fluoranthene	340		U
129-00-0	Pyrene	340		U
56-55-3	Benzo(a)anthracene	340		U
218-01-9	Chrysene	340		U
205-99-2	Benzo(b)fluoranthene	340		U
207-08-9	Benzo(k)fluoranthene	340		U
50-32-8	Benzo(a)pyrene	340		U
193-39-5	Indeno(1,2,3-cd)pyrene	340		U
53-70-3	Dibenz(a,h)anthracene	340		U
191-24-2	Benzo(g,h,i)perylene	340		U

Comments: \_\_\_\_\_



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DW-3

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): SOIL Lab Sample ID: B2008-04Sample wt/vol: 30.05 (g/mL) g Lab File ID: BF036446.DLevel: (low/med) LOW Date Received: 04/22/10% Moisture: 5 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/24/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: N/A Extraction: (Type) SOXH

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

83-32-9	Acenaphthene	350	U
86-73-7	Fluorene	350	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

Comments: \_\_\_\_\_



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-01

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): SOIL Lab Sample ID: B2008-05Sample wt/vol: 30.07 (g/mL) g Lab File ID: BF036447.DLevel: (low/med) LOW Date Received: 04/22/10% Moisture: 3 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/24/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: N/A Extraction: (Type) SOXH

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

83-32-9	Acenaphthene	340	U
86-73-7	Fluorene	340	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

Comments: \_\_\_\_\_





1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): WATER Lab Sample ID: B2008-06Sample wt/vol: 990 (g/mL) ml Lab File ID: BF036448.DLevel: (low/med) LOW Date Received: 04/22/10% Moisture: 100 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/24/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: 5 Extraction: (Type) SEPF

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

Comments: \_\_\_\_\_



**Hit Summary Sheet**  
**SW-846**

**SDG No.:**

**Client:**

---

Sample ID	Client ID	Parameter	Concentration	C	RDL	MDL	Units
Client ID	:						

**Total Concentration:**



-2D-

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Chemtech

Contract: PWGR01

Lab Code: CHEM Case No.: B2008

SAS No.: B2008 SDG No.: B2008

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 () #	S5 () #	S6 () #	S7 () #	S8 () #	TOT OUT
04	CP-1	87	86	77						0
05	PB48846B	85	85	76						0
08	PB48846BS	78	81	75						0
09	CP-1MS	87	89	82						0
10	CP-1MSD	80	82	72						0
26	DW-3	82	86	78						0
27	DUP-01	87	87	78						0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5

(30-150)

S2 (FBP) = 2-Fluorobiphenyl

(19-182)

S3 (TPH) = Terphenyl-d14

(24-191)

S4() =

S5() =

S6() =

S7 () =

S8 () =

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogate Diluted Out



-2C-

WATER SEMIVOLATILE SURROGATE RECOVER

Lab Name: Chemtech

Contract: PWGR01

Lab Code: CHEM Case No.: B2008

SAS No.: B2008 SDG No.: B2008

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 ( ) #	S5 ( ) #	S6 ( ) #	S7 ( ) #	S8 ( ) #	TOT OUT
07	PB48845B	95	94	81						0
11	PB48845BS	97	97	85						0
12	PB48845BSD	100	97	89						0
17	FIELDBLANK	98	101	88						0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5

(20-139)

S2 (FBP) = 2-Fluorobiphenyl

(10-173)

S3 (TPH) = Terphenyl-d14

(20-171)

S4() =

S5() =

S6() =

S7 () =

S8 () =

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogate Diluted Out

**SOLID SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**
**Lab Name:** CHEMTECH **Contract:** PWGR01
**Lab Code:** CHEM **Cas No:** B2008 **SAS No :** B2008 **SDG No:** B2008
**Matrix Spike - EPA Sample No :** B2008-02

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC#	QC LIMITS REC
Acenaphthene	1700	0	1500	88	(32-146)
Fluorene	1700	0	1500	88	(17-166)
Phenanthrene	1700	0	1500	88	(30-149)
Anthracene	1700	0	1500	88	(27-158)
Fluoranthene	1700	0	1500	88	(26-155)
Pyrene	1700	0	1500	88	(22-173)
Benzo(a)anthracene	1700	0	1500	88	(27-159)
Chrysene	1700	0	1500	88	(23-166)
Benzo(b)fluoranthene	1700	0	1400	82	(21-171)
Benzo(k)fluoranthene	1700	0	1500	88	(26-165)
Benzo(a)pyrene	1700	0	1500	88	(26-157)
Indeno(1,2,3-cd)pyrene	1700	0	1500	88	(10-188)
Dibenzo(a,h)anthracene	1700	0	1500	88	(18-147)
Benzo(g,h,i)perylene	1700	0	1500	88	(10-177)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 1 Out of 78 outside limits

**SOLID SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**
**Lab Name:** CHEMTECH **Contract:** PWGR01
**Lab Code:** CHEM **Cas No:** B2008 **SAS No :** B2008 **SDG No:** B2008
**Matrix Spike - EPA Sample No :** B2008-03

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %    % (ug/Kg)		QC LIMITS	
					RPD	REC
Acenaphthene	1700	1300	76	15	20	(32-146)
Fluorene	1700	1400	82	7	20	(17-166)
Phenanthrene	1700	1300	76	15	20	(30-149)
Anthracene	1700	1300	76	15	20	(27-158)
Fluoranthene	1700	1300	76	15	20	(26-155)
Pyrene	1700	1300	76	15	20	(22-173)
Benzo(a)anthracene	1700	1300	76	15	20	(27-159)
Chrysene	1700	1300	76	15	20	(23-166)
Benzo(b)fluoranthene	1700	1200	71	14	20	(21-171)
Benzo(k)fluoranthene	1700	1300	76	15	20	(26-165)
Benzo(a)pyrene	1700	1300	76	15	20	(26-157)
Indeno(1,2,3-cd)pyrene	1700	1300	76	15	20	(10-188)
Dibenzo(a,h)anthracene	1700	1300	76	15	20	(18-147)
Benzo(g,h,i)perylene	1700	1300	76	15	20	(10-177)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 9    Out of    78    outside limits

Spike Recovery :    1    Out of    156    outside limits



3B

## WATER SEMIVOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: PWGR01Lab Code: CHEM Cas No: B2008 SAS No : B2008 SDG No: B2008Matrix Spike - EPA Sample No : PB48845BS

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Acenaphthene	50		47	94	(51-118)
Fluorene	50		47	94	(55-121)
Phenanthrene	50		47	94	(55-126)
Anthracene	50		48	96	(59-122)
Fluoranthene	50		48	96	(61-127)
Pyrene	50		47	94	(62-128)
Benzo(a)anthracene	50		47	94	(52-136)
Chrysene	50		47	94	(55-136)
Benzo(b)fluoranthene	50		45	90	(48-149)
Benzo(k)fluoranthene	50		47	94	(54-138)
Benzo(a)pyrene	50		46	92	(55-139)
Indeno(1,2,3-cd)pyrene	50		49	98	(10-145)
Dibenzo(a,h)anthracene	50		46	92	(45-150)
Benzo(g,h,i)perylene	50		47	94	(54-138)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 78 outside limits

Comments: \_\_\_\_\_  
\_\_\_\_\_



3B

## WATER SEMIVOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: PWGR01Lab Code: CHEM Cas No: B2008 SAS No : B2008 SDG No: B2008Matrix Spike - EPA Sample No : PB48845BSD

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Acenaphthene	50	49	98	4	20	(51-118)
Fluorene	50	49	98	4	20	(55-121)
Phenanthrene	50	48	96	2	20	(55-126)
Anthracene	50	49	98	2	20	(59-122)
Fluoranthene	50	49	98	2	20	(61-127)
Pyrene	50	50	100	6	20	(62-128)
Benzo(a)anthracene	50	51	102	8	20	(52-136)
Chrysene	50	50	100	6	20	(55-136)
Benzo(b)fluoranthene	50	47	94	4	20	(48-149)
Benzo(k)fluoranthene	50	50	100	6	20	(54-138)
Benzo(a)pyrene	50	48	96	4	20	(55-139)
Indeno(1,2,3-cd)pyrene	50	51	102	4	20	(10-145)
Dibenzo(a,h)anthracene	50	49	98	6	20	(45-150)
Benzo(g,h,i)perylene	50	49	98	4	20	(54-138)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 7 Out of 78 outside limits

Spike Recovery : 1 Out of 78 outside limits

Comments: \_\_\_\_\_  
\_\_\_\_\_





3A

## SOIL SEMIVOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: PWGR01Lab Code: CHEM Cas No: B2008 SAS No : B2008 SDG No: B2008Matrix Spike - EPA Sample No : PB48846BS

COMPOUND	SPIKE ADDED (ug/Kg)	CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS	QC
				% REC#	LIMITS REC
Acenaphthene	1700		1300	76	(54-113)
Fluorene	1700		1300	76	(56-113)
Phenanthrene	1700		1300	76	(56-113)
Anthracene	1700		1300	76	(56-113)
Fluoranthene	1700		1300	76	(54-117)
Pyrene	1700		1300	76	(58-117)
Benzo(a)anthracene	1700		1400	82	(57-112)
Chrysene	1700		1300	76	(59-114)
Benzo(b)fluoranthene	1700		1200	71	(53-120)
Benzo(k)fluoranthene	1700		1200	71	(56-117)
Benzo(a)pyrene	1700		1200	71	(56-117)
Indeno(1,2,3-cd)pyrene	1700		1300	76	(49-120)
Dibenzo(a,h)anthracene	1700		1200	71	(52-119)
Benzo(g,h,i)perylene	1700		1300	76	(53-119)

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 1 Out of 78 outside limits

Comments: \_\_\_\_\_  
\_\_\_\_\_



4B

## SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB48845B

Lab Name: CHEMTECHContract: PWGR01Lab Code: CHEM Case No.: B2008SAS No.: B2008 SDG NO.: B2008Lab File ID: BE063609.DLab Sample ID: PB48845BInstrument ID: BNAEDate Extracted: 04/23/2010Matrix: (soil/water) WATERDate Analyzed: 04/23/2010Level: (low/med) LOWTime Analyzed: 23:15

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB48845BS	PB48845BS	BE063617.D	04/24/2010
PB48845BSD	PB48845BSD	BE063618.D	04/24/2010
FIELDBLANK	B2008-06	BF036448.D	04/24/2010

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



4B

## SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB48846B

Lab Name: CHEMTECHContract: PWGR01Lab Code: CHEM Case No.: B2008SAS No.: B2008 SDG NO.: B2008Lab File ID: BE063610.DLab Sample ID: PB48846BInstrument ID: BNAEDate Extracted: 04/23/2010Matrix: (soil/water) SOILDate Analyzed: 04/23/2010Level: (low/med) LOWTime Analyzed: 23:45

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
CP-1	B2008-01	BE063608.D	04/23/2010
PB48846BS	PB48846BS	BE063616.D	04/24/2010
CP-1MS	B2008-02MS	BE063619.D	04/24/2010
CP-1MSD	B2008-03MSD	BE063620.D	04/24/2010
DW-3	B2008-04	BF036446.D	04/24/2010
DUP-01	B2008-05	BF036447.D	04/24/2010

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PB48845B

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): WATER Lab Sample ID: PB48845BSample wt/vol: 1000 (g/mL) ml Lab File ID: BE063609.DLevel: (low/med) LOW Date Received: \_\_\_\_\_% Moisture: 100 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/23/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SEPF

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

Comments: \_\_\_\_\_



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PB48846B

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): SOIL Lab Sample ID: PB48846BSample wt/vol: 30.01 (g/mL) g Lab File ID: BE063610.DLevel: (low/med) LOW Date Received: \_\_\_\_\_% Moisture: 0 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/23/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SOXH

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

83-32-9	Acenaphthene	330	U
86-73-7	Fluorene	330	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

Comments: \_\_\_\_\_



8B

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG NO.: B2008

EPA Sample No.: SSTD040 Date Analyzed: 04/23/2010

Lab File ID: BE063598.D Time Analyzed: 17:43

Instrument ID: BNAE GC Column: RTX-5 SILM ID: 0.18 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	67474	4.52	249054	5.69	123312	7.32
UPPER LIMIT	134948	5.02	498108	6.19	246624	7.82
LOWER LIMIT	33737	4.02	124527	5.19	61656	6.82
EPA SAMPLE NO.						
01 CP-1	69474	4.51	257529	5.69	122849	7.32
02 PB48845B	67649	4.51	254662	5.68	123891	7.32
03 PB48846B	69931	4.51	256773	5.69	125981	7.33
04 PB48846BS	74836	4.51	266022	5.69	129015	7.33
05 PB48845BS	73278	4.51	258844	5.69	124044	7.33
06 PB48845BSD	75074	4.51	266064	5.69	127545	7.33
07 CP-1MS	70724	4.51	256654	5.69	121224	7.33
08 CP-1MSD	72332	4.51	260392	5.69	124586	7.33

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8C

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG NO.: B2008

EPA Sample No.: SSTD040 Date Analyzed: 04/23/2010

Lab File ID: BE063598.D Time Analyzed: 17:43

Instrument ID: BNAE GC Column: RTX-5 SILMS ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
01	12 HOUR STD	193216	8.95	143306	12.11	122131	13.81
	UPPER LIMIT	386432	9.45	286612	12.61	244262	14.31
	LOWER LIMIT	96608	8.45	71653	11.61	61065.5	13.31
	EPA SAMPLE NO.						
	CP-1	184256	8.95	140629	12.10	120674	13.80
	PB48845B	186056	8.94	148935	12.10	126989	13.80
	PB48846B	184134	8.95	137391	12.10	122373	13.81
	PB48846BS	198459	8.95	139036	12.10	126847	13.81
	PB48845BS	190818	8.95	140247	12.10	126595	13.81
	PB48845BSD	198741	8.95	140324	12.10	128025	13.81
07	CP-1MS	185237	8.95	133277	12.10	117409	13.81
08	CP-1MSD	194047	8.95	142505	12.10	124068	13.81

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8B

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG NO.: B2008

EPA Sample No.: SSTD040 Date Analyzed: 04/24/2010

Lab File ID: BF036427.D Time Analyzed: 04:22

Instrument ID: BNAF GC Column: RTX-5 SILM ID: 0.18 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	185944	4.12	709088	5.32	329945	6.94
UPPER LIMIT	371888	4.62	1418176	5.82	659890	7.44
LOWER LIMIT	92972	3.62	354544	4.82	164972.5	6.44
EPA SAMPLE NO.						
01 FIELDBLANK	130123	4.12	497916	5.32	228151	6.94
02 DW-3	125654	4.12	508611	5.32	233862	6.94
03 DUP-01	131442	4.12	496169	5.32	228963	6.94

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.





8C

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG NO.: B2008

EPA Sample No.: SSTD040 Date Analyzed: 04/24/2010

Lab File ID: BF036427.D Time Analyzed: 04:22

Instrument ID: BNAF GC Column: RTX-5 SILMS ID: 0.18 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	460798	8.77	344751	12.76	255273	14.84
UPPER LIMIT	921596	9.27	689502	13.26	510546	15.34
LOWER LIMIT	230399	8.27	172375.5	12.26	127636.5	14.34
EPA SAMPLE NO.						
01 FIELDBLANK	335473	8.77	260331	12.75	234052	14.84
02 DW-3	337683	8.77	232205	12.76	196414	14.84
03 DUP-01	320505	8.77	234302	12.76	201462	14.84

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

**Metals**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

CP-1

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Lab Sample ID: B2008-01

Level (low/med): LOW Date Received: 4/22/2010

% Solids: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.040	U		P
7440-41-7	Beryllium	0.31	U		P
7440-43-9	Cadmium	0.10	J		P
7440-47-3	Chromium	1.180			P
7440-50-8	Copper	1.090			P
7439-92-1	Lead	1.200			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	2.070	U		P
7440-22-4	Silver	0.52	U		P

Color Before: BROWN Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Metals**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

DW-3

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Lab Sample ID: B2008-04

Level (low/med): LOW Date Received: 4/22/2010

% Solids: 95.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.800			P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.13	J		P
7440-47-3	Chromium	1.780			P
7440-50-8	Copper	2.460			P
7439-92-1	Lead	4.850			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	0.56	J		P
7440-22-4	Silver	0.39	U		P

Color Before: BROWN Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Metals**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

DUP-01

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Lab Sample ID: B2008-05

Level (low/med): LOW Date Received: 4/22/2010

% Solids: 96.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.810			P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.12	J		P
7440-47-3	Chromium	1.940			P
7440-50-8	Copper	2.460			P
7439-92-1	Lead	4.420			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	0.46	J		P
7440-22-4	Silver	0.33	U		P

Color Before: BROWN Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Metals**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

FIELDBLANK

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting  
Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008  
Matrix (soil/water): WATER Lab Sample ID: B2008-06  
Level (low/med): LOW Date Received: 4/22/2010  
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-41-7	Beryllium	3.000	U		P
7440-43-9	Cadmium	3.000	U		P
7440-47-3	Chromium	5.000	U		P
7440-50-8	Copper	10.0	U		P
7439-92-1	Lead	6.580			P
7439-97-6	Mercury	0.18	J		CV
7440-02-0	Nickel	20.0	U		P
7440-22-4	Silver	5.000	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Hit Summary Sheet  
SW-846

SDG No.:	B2008			Order ID:	B2008			
Client:	P.W. Grosser Consulting			Project ID:	Bellport ERP			
Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID:	CP-1							
B2008-01	CP-1	SOIL	Cadmium	0.10	J	0.31	0.06	mg/Kg
B2008-01	CP-1	SOIL	Chromium	1.180		0.52	0.13	mg/Kg
B2008-01	CP-1	SOIL	Copper	1.090		1.040	0.33	mg/Kg
B2008-01	CP-1	SOIL	Lead	1.200		0.62	0.40	mg/Kg
Client ID:	DUP-01							
B2008-05	DUP-01	SOIL	Arsenic	1.810		0.66	0.22	mg/Kg
B2008-05	DUP-01	SOIL	Cadmium	0.12	J	0.20	0.04	mg/Kg
B2008-05	DUP-01	SOIL	Chromium	1.940		0.33	0.09	mg/Kg
B2008-05	DUP-01	SOIL	Copper	2.460		0.66	0.21	mg/Kg
B2008-05	DUP-01	SOIL	Lead	4.420		0.40	0.26	mg/Kg
B2008-05	DUP-01	SOIL	Nickel	0.46	J	1.320	0.30	mg/Kg
Client ID:	DW-3							
B2008-04	DW-3	SOIL	Arsenic	1.800		0.79	0.26	mg/Kg
B2008-04	DW-3	SOIL	Cadmium	0.13	J	0.24	0.05	mg/Kg
B2008-04	DW-3	SOIL	Chromium	1.780		0.39	0.10	mg/Kg
B2008-04	DW-3	SOIL	Copper	2.460		0.79	0.25	mg/Kg
B2008-04	DW-3	SOIL	Lead	4.850		0.47	0.31	mg/Kg
B2008-04	DW-3	SOIL	Nickel	0.56	J	1.580	0.36	mg/Kg
Client ID:	FIELDBLANK							
B2008-06	FIELDBLANK	WATER	Lead	6.580		6.000	2.600	ug/L
B2008-06	FIELDBLANK	WATER	Mercury	0.18	J	0.20	0.09	ug/L

## USEPA - CLP

3-IN

## BLANKS

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser ConsultingLab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Arsenic	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Beryllium	3.0	U	3.0	U	3.0	U	3.0	U	0.300	U	P
Cadmium	3.0	U	3.0	U	0.9	J	1.1	J	0.300	U	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	0.500	U	P
Copper	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Lead	6.0	U	6.0	U	6.0	U	3.0	J	0.600	U	P
Mercury	0.200	U	0.200	U	0.200	U	0.200	U	0.002	U	CV
Nickel	20.0	U	20.0	U	20.0	U	20.0	U	2.000	U	P
Silver	5.0	U	5.0	U	5.0	U	5.0	U	0.500	U	P

## USEPA - CLP

3-IN

## BLANKS

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser ConsultingLab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Arsenic			10.0	U	10.0	U	10.0	U	10.000	U	P
Beryllium			3.0	U	3.0	U	3.0	U	3.000	U	P
Cadmium			3.0	U	3.0	U	3.0	U	3.000	U	P
Chromium			5.0	U	5.0	U	5.0	U	5.000	U	P
Copper			10.0	U	10.0	U	10.0	U	10.000	U	P
Lead			6.0	U	6.0	U	6.0	U	6.000	U	P
Mercury			0.200	U	0.200	U					CV
Nickel			20.0	U	20.0	U	20.0	U	20.000	U	P
Silver			5.0	U	5.0	U	5.0	U	5.000	U	P



## USEPA - CLP

3-IN

## BLANKS

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser ConsultingLab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Arsenic			10.0	U	10.0	U	10.0	U			P
Beryllium			3.0	U	3.0	U	3.0	U			P
Cadmium			1.1	J	3.0	U	3.0	U			P
Chromium			5.0	U	5.0	U	5.0	U			P
Copper			10.0	U	10.0	U	10.0	U			P
Lead			3.9	J	6.0	U	6.0	U			P
Nickel			20.0	U	20.0	U	20.0	U			P
Silver			5.0	U	5.0	U	5.0	U			P

## USEPA - CLP

3-IN

## BLANKS

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser ConsultingLab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Arsenic			10.0	U							P
Beryllium			3.0	U							P
Cadmium			3.0	U							P
Chromium			5.0	U							P
Copper			10.0	U							P
Lead			6.0	U							P
Nickel			20.0	U							P
Silver			5.0	U							P

## USEPA - CLP

3-IN

## BLANKS

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser ConsultingLab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	
Mercury	0.11	J	0.20	U	-0.14	J	0.20	U	0.098	J	CV

# Metals

5A-IN

## MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

CP-1S

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	73 - 114	77.8850		1.0363	U	82.90	94.0		P
Beryllium	79 - 112	20.1233		0.3109	U	20.73	97.1		P
Cadmium	73 - 114	18.4135		0.0974	J	20.73	88.4		P
Chromium	68 - 122	45.9586		1.1762		41.45	108.0		P
Copper	59 - 132	32.6093		1.0943		31.09	101.4		P
Lead	66 - 125	94.2166		1.2041		103.63	89.8		P
Mercury	34 - 153	0.2016		0.0104	U	0.21	96.0		CV
Nickel	64 - 129	47.9772		2.0725	U	51.81	92.6		P
Silver	54 - 131	7.5575		0.5181	U	7.77	97.3		P

Comments:

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# Metals

5A-IN

## MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

CP-1SD

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	73 - 114	78.0964		1.0363	U	82.90	94.2		P
Beryllium	79 - 112	20.1948		0.3109	U	20.73	97.4		P
Cadmium	73 - 114	18.6850		0.0974	J	20.73	89.7		P
Chromium	68 - 122	46.3461		1.1762		41.45	109.0		P
Copper	59 - 132	32.8031		1.0943		31.09	102.0		P
Lead	66 - 125	95.4425		1.2041		103.63	90.9		P
Mercury	34 - 153	0.2047		0.0104	U	0.21	97.5		CV
Nickel	64 - 129	48.5140		2.0725	U	51.81	93.6		P
Silver	54 - 131	7.5316		0.5181	U	7.77	96.9		P

Comments:

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**5B-IN**  
**POST-DIGESTION SPIKE SAMPLE RECOVERY**

EPA SAMPLE NO.

Lab Name: \_\_\_\_\_ Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ NRAS No.: \_\_\_\_\_ SDG NO.: \_\_\_\_\_

Matrix (soil/water): \_\_\_\_\_ Level (low/med): \_\_\_\_\_

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)		Sample Result (SR)		Spike Added (SA)	%R	Q	M
			C		C				

Comments:

USEPA - CLP  
6-IN  
DUPLICATES

EPA SAMPLE NO.

CP-1D

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting  
 Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008  
 Matrix (soil/water): SOIL Level (low/med): LOW  
 % Solids for Sample: 96.5 % Solids for Duplicate: 96.5  
 Concentration Units:(ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S) C		Duplicate (D) C		RPD	Q	M
Arsenic		1.0363	U	1.0363	U			P
Beryllium		0.3109	U	0.3109	U			P
Cadmium		0.0974	J	0.0870	J	11.3		P
Chromium	0.5181	1.1762		1.1036		6.4		P
Copper	1.0363	1.0943		1.0922		0.2		P
Lead	0.6218	1.2041		1.1472		4.8		P
Mercury		0.0104	U	0.0104	U			CV
Nickel		2.0725	U	2.0725	U			P
Silver		0.5181	U	0.5181	U			P

USEPA - CLP  
6-IN  
DUPLICATES

EPA SAMPLE NO.

CP-1SD

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting

Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 96.5 % Solids for Duplicate: 96.5

Concentration Units:(ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Arsenic		77.8850	78.0964	0.3		P
Beryllium		20.1233	20.1948	0.4		P
Cadmium		18.4135	18.6850	1.5		P
Chromium		45.9586	46.3461	0.8		P
Copper		32.6093	32.8031	0.6		P
Lead		94.2166	95.4425	1.3		P
Mercury		0.2016	0.2047	1.5		CV
Nickel		47.9772	48.5140	1.1		P
Silver		7.5575	7.5316	0.3		P



# Metals

7 - IN

## LABORATORY CONTROL SAMPLE

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting  
 Lab Code: CTECH Case No.: B2008 NRAS No: B2008 SDG NO.: B2008  
 Solid LCS Source: PLASMA-PURE  
 Aqueous LCS Source: PLASMA-PURE

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits		%R
Arsenic	800.0	732.59	91.6	80.0	72.4		82.0	112.0	90.5
Beryllium	200.0	187.99	94.0	20.0	18.5		84.0	113.0	92.5
Cadmium	200.0	174.88	87.4	20.0	17.2		82.0	117.0	86.0
Chromium	400.0	402.05	100.5	40.0	40.2		84.0	115.0	100.5
Copper	300.0	297.35	99.1	30.0	29.3		80.0	115.0	97.7
Lead	1000.0	898.66	89.9	100.0	88.4		82.0	117.0	88.4
Mercury	4.000	4.280	107.0	0.200	0.206		73.0	121.0	103.0
Nickel	500.0	449.35	89.9	50.0	44.5		85.0	118.0	89.0
Silver	75.0	70.09	93.5	7.5	7.0		81.0	123.0	93.3

## **APPENDIX C WASTE MANIFESTS**

10 17823

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1  
of

47248

3. Generator's Name and Mailing Address

1401 Montauk Highway  
E. Patchogue, NY 11772

Suffolk County Department of  
Health Services

4. Generator's Phone ( )

5. Transporter 1 Company Name

AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number

NY R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone

631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Earth Core  
972 Nicolls Rd  
Deer Park

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. Non Haz Solids

1

11

6

Y

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Derek Eckert (As Agent for SCDHS)

Signature

[Signature] (As Agent for SCDHS)

Month Day Year

4 21 10

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Ronald Cress

Signature

[Signature]

Month Day Year

4 21 10

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Charles Seickel

Signature

[Signature]

Month Day Year

4 21 10

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

## **APPENDIX D**

### **DATA VALIDATION REPORT**



## STONE ENVIRONMENTAL INC

### DATA USABILITY SUMMARY REPORT (DUSR)

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Site Name: Bellport Gas Station Site, East Patchogue, NY

Performing Laboratory: CHEMTECH, Mountainside, NJ 07092

P.W. Grosser Project No. SHD0902, April 2010 Sampling

Project Manager Zeb Youngman, Project Manager

Stone Project Number: 082074-F, Phase III April 2010 Sampling.

Analyses/Methods: Selected Metals by Method 6010B/7471/7470, SVOAs by Method 8270C,

Data Validation Level Limited. Full on 5% or one sample from each SDG.

Prepared by: Kim Watson, Stone Environmental, Inc. Completed on: 5/20/2010

Reviewed by: Lesley Allen, Stone Environmental, Inc. SDG No.: B2008

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Stone Environmental, Inc. (Stone) has completed the validation and quality assurance (QA) evaluation on the analysis data prepared by CHEMTECH in Mountainside, NJ, for three soil samples and one field blank collected April 21, 2010. The laboratory reported the data under Sample Delivery Group (SDG) No. B2008 received by Stone on May 10, 2010. The sample and laboratory identifiers and the selected analyses as shown on the chain of custody records are provided in Attachment A. Semivolatile organic analyses (SVOA) were performed according to SW846 Methods 3541 and Method 8270 and metals and mercury analyses were performed according to Sw846 Methods 6010B\7470\7471. The target compound lists are as specified by the Suffolk County Department of Health Services (SCDHS) Office of Pollution Control. For the SVOA analyses, the compounds were limited to polycyclic aromatic hydrocarbons (PAH) and the metals were limited to arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, and silver. This DUSR is based on review of the laboratory SDG case narratives and the full "Tier III" third-party data validation report, which are provided in Attachment B and Attachment C, respectively. Full Tier III data validation was performed on 5% of the data or one sample from the SDG for semivolatiles and metals in soil samples in accordance with EPA Region II's Standard Operating Procedures (SOPs) for validating organic and inorganic analyses and the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation (DRAFT DER-10, Nov. 2009) Appendix 2B Guidance for Data Deliverables and Development of Data Usability Summary Reports. Professional judgment was applied as necessary and appropriate. The remaining data in this SDG received a summary validation or Tier II validation as defined by EPA Region I guidelines.

This DUSR data evaluation included a review of the following as based on the case narratives, data summary tables, and the full data validation:

- Technical holding times

- Sample preservation
- Instrument tuning and calibration
- Instrument and preparation blanks
- Surrogate and internal standard recoveries
- Laboratory control and field sample spike recoveries
- Field and laboratory duplicates
- Sample quantitation and quantitation limits
- Calculation checks (not evaluated in a Tier II validation)

All laboratory deliverables were received in accordance with the work plan and general reporting requirements from NYSDEC's ASP (2005). Any deviations from acceptable QC specifications are discussed in detail in the case narrative and data validation report, and laboratory qualifiers (as defined in the data deliverables) were added to the data, when appropriate, to indicate potential concerns with data usability. These qualifiers were reported on the Form I's by the laboratory and by the third-party validator. Final validated results are annotated with the following codes, as defined in EPA Region II SOPs.

- U - The analyte was analyzed for but was not detected above the reported sample quantitation limit. The associated numerical value is the sample quantitation limit. The sample quantitation limit accounts for sample-specific dilution factors and percent solids corrections or sample sizes that deviate from those required by the method.
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. The "J" data may be biased high or low.
- UU -The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. The R replaces the numerical value or sample quantitation limit. In some instances such as dilutions and reanalyses a result may be indicated as "rejected" to avoid confusion when a more quantitatively accurate result is available.

## **Summary of Data Usability**

The validation and usability assessment indicate that the data from this sample set are usable as qualified during the validation assessment. The overall quality control data provided in the laboratory reports and in the case narrative indicate that the data are representative of adequate method accuracy and precision with regard to project objectives. As noted in the full data validation report, results for cadmium were qualified as less than the reporting limit (U) and results for lead were qualified as estimated (J) due to field blank contamination. As a result of the laboratory contamination for cadmium, any results for cadmium reported in these soils below the reporting limit should be reported as less than the reporting limit (U), and based on the field blank contamination results for lead reported in samples less than 10X, the reporting limit should be reported as estimated (J). These qualifications are summarized in the full validation report and are summarized below:

- Based on laboratory contamination in the analytical blanks, the result for cadmium in CP-1 was reported as less than the reporting limit (U).

- Based on contamination in the field blank, the result lead for CP-1 was qualified as estimated (J).

The completeness level attained for the analysis of the field samples was greater than 95%. For all data, the overall quality of the data was acceptable and all results as qualified are considered usable.

**ATTACHMENT A**

**CHAIN OF CUSTODY RECORD  
SDG No. B2008  
Semivolatiles and Metals in Soil Samples**





**ATTACHMENT B**

**CASE NARRATIVE  
SDG No. B2008**

**Semivolatiles and Metals in Soil Samples**

## Cover Page

**Order ID :** B2008

**Project ID :** Bellport ERP

**Client :** P.W. Grosser Consulting

### Lab Sample Number

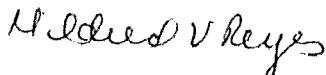
B2008-01  
B2008-02  
B2008-03  
B2008-04  
B2008-05  
B2008-06

### Client Sample Number

CP-1  
B2008-01MS  
B2008-01MSD  
DW-3  
DUP-01  
FIELDBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :



Mildred V. Reyes  
I am approving this document  
2010.05.05 15:21:31 -04'00'



## CASE NARRATIVE

**P.W. Grosser Consulting**  
**Project Name: Bellport ERP**  
**Project # N/A**  
**Chemtech Project # B2008**

### **A. Number of Samples and Date of Receipt:**

5 Solid samples were received on 4/22/10.  
1 Water sample was received on 4/22/10.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: SVOCMS Group1, and VOCMS Group1. This data package contains results for SVOCMS Group1.

### **C. Analytical Techniques:**

The samples were analyzed on instrument BNA E using GC Column RTX-5 SILMS which is 20 meters, 0.18 mm ID, 0.36 um df, Catalog # 42704. The samples were analyzed on instrument BNA F using GC Column RTX-5 SILMS which is 20 meters, 0.18 mm ID, 0.36 um df, Catalog # 42704.

The analysis of SVOCMS Group1 was based on method 8270C and extraction was done based on method 3541 and 3510.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.  
The Surrogate recoveries met the acceptable criteria.  
The Internal Standards Areas met the acceptable requirements.  
The Retention Times were acceptable for all samples.  
The MS recoveries met the requirements for all compounds.  
The MSD recoveries met the acceptable requirements.  
The RPD recoveries met criteria.  
The Blank Spike met requirements for all samples.  
The Blank analysis did not indicate the presence of lab contamination.  
The Calibration met the requirements.  
The Tuning criteria met requirements.

### **E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_

*Mildred V Reyes*

Mildred V. Reyes  
I am approving this document  
2010.05.05 15:20:53 -04'00'

**DATA REPORTING QUALIFIERS- ORGANIC**

For reporting results, the following " Result Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U. This is the detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the compound was analyzed for but was not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L, and a concentration of 3ug/L was calculated, report as 3 J.
B	Indicates the analyte was found in the blank as well as the sample.
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected Aldol-condensation product.



## CASE NARRATIVE

**P.W. Grosser Consulting**  
**Project Name: Bellport ERP**  
**Project # N/A**  
**Chemtech Project # B2008**

**A. Number of Samples and Date of Receipt:**

5 Solid samples were received on 4/22/10.

1 Water sample was received on 4/22/10.

**B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, ICP Metals, SVOCMS Group1, and VOCMS Group1. This data package contains results for ICP Metals and Mercury.

**C. Analytical Techniques:**

The analysis of ICP Metals was based on method 6010B and Mercury was based on method 7470A/7471

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

**E. Additional Comments:**

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V. Reyes

Mildred V. Reyes  
I am approving this document  
2010.05.05 15:13:32 -04'00'

**DATA REPORTING QUALIFIERS- INORGANIC**

For reporting results, the following " Results Qualifiers" are used:

<b>J</b>	If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
<b>U</b>	If the analyte was analyzed for, but not detected.
<b>E</b>	The reported value is estimated because of the presence of interference
<b>M</b>	Duplicate injection precision not met.
<b>N</b>	Spiked sample recovery not within control limits.
<b>S</b>	The reported value was determined by the Method of Standard Addition (MSA).
<b>W</b>	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while absorbance is less than 50% of spike absorbance.
<b>*</b>	Duplicate analysis not within control limits.
<b>+</b>	Correlation coefficient for the MSA is less than 0.995.
<b>***</b>	Entering "S", "W " or " +" is mutually exclusive. NO combination of these qualifiers can appear in the same field for an analyte.
<b>D</b>	The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	Method qualifiers "P" for ICP instrument "A" for Flame AA "PM" for ICP when Microwave Digestion is used "AM" for flame AA when Microwave Digestion is used "FM" for furnace AA when Microwave Digestion is used "CV" for Manual Cold Vapor AA "AV" for automated Cold Vapor AA "CA" for MIDI-Distillation Spectrophotometric "AS" for Semi -Automated Spectrophotometric "C" for Manual Spectrophotometric "T" for Titrimetric "NR" for analyte not required to be analyzed
<b>OR</b>	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.



**ATTACHMENT C**

**DATA VALIDATION REPORT  
SDG No. B2008  
Semivolatiles and Metals in Soil Samples**

**DATA VALIDATION**  
**FOR**  
**BELLPORT GAS STATION SITE**  
**EAST PATCHOGUE, NEW YORK**  
**April 2010 Sampling Round**

**ANALYSIS DATA**  
**Semivolatiles and Metals in Soil Samples**  
**Sample Delivery Group (SDG) No. B2008**

**Chemical Analyses Performed By:**

**CHEMTECH**  
**284 Sheffield Street**  
**Mountainside, NJ 07092**

**For:**

**Zeb Youngman**  
**P.W. Grosser Consulting**  
**630 Johnson Avenue, Suite 7**  
**Bohemia, NY 11716**

**Data Validation Report By:**

**Kim B. Watson**  
**Stone Environmental, Inc.**  
**535 Stone Cutters Way**  
**Montpelier, VT 05602**

**May 20, 2010**

Reference #082074-F Phase III\_May  
Validation Report\_B2008/kbw

### **EXECUTIVE SUMMARY**

Stone Environmental, Inc. (Stone) has completed third-party data validation on the organic and inorganic analyses for semivolatile organic (SVOA), and metals analyses in soil samples as prepared by CHEMTECH in Mountainside, NJ from the Bellport Gas Station Site in East Patchogue, New York. The laboratory reported the data under Sample Delivery Group (SDG) No. B2008 that was submitted as a single data package received by Stone on May 10, 2010. As required by the Project plan, approximately 5% of the samples, or one sample from each SDG, whichever is greater, were considered for validation. The sample below was selected for validation as follows:

Sample No.	Laboratory ID	Parameter
CP-1	B2008	SVOA, Metals

The sample in this data set represents the sample collections from April 21, 2010.

The validation effort deemed the SVOA analyses valid as reported and the metals analyses resulted in the following qualifications of sample results:

- The result for cadmium in CP-1 was reported as less than the reporting limit (U).
- The result lead for CP-1 was qualified as estimated (J).

The Overall Evaluation of Data (Section XVIII) presents the rationale for the decisions that have been implemented and are summarized above. The validation findings and conclusions for each analytical parameter are detailed in the remaining sections of this report and are based on the following information.

QC Criteria	Were acceptance criteria met for Contaminants of Concern?		
	Yes	No	NA
Chain of custody (COC)/sample integrity/holding times	√		
Data completeness	√		
Holding times and sample preservation	√		
GC/MS performance checks	√		
Calibrations	√		
CRQL Standards (metals only)	√		
Laboratory method blanks/equipment blanks		√	
ICP Interference Check Sample (metals only)	√		
Matrix spike/matrix spike duplicate (MS/MSD) results	√		
Post Digestion Spike (metals only)			√
Laboratory control samples and blank spikes	√		
Field duplicate results	√		
ICP Serial Dilution	√		
Surrogate recoveries	√		
Internal standard results	√		
Compound identification	√		
Sample results	√		
% solids	√		
Calculations/transcriptions	√		
NA - Not applicable indicates that either the QC is not applicable to this data set or not required by the method.			

Documentation problems observed in the data package and on the chain of custody records are described in Section XIV.

This validation report shall be considered part of the data package for all future distributions of the semivolatiles and metals analysis data.

## **INTRODUCTION**

Analyses of soil samples were performed according to US EPA SW846 Methodologies: Method 8270 GC/MS analyses for semivolatiles, (extractions: 3510 water separatory funnel extraction/3541 automated soxhlet soil-extraction), and 6010B/7471/7470 for metals/mercury. The target compound lists are as specified by the Suffolk County Department of Health Services (SCDHS) Office of Pollution Control. The compounds for the SVOA analysis were limited to polycyclic aromatic hydrocarbons (PAH) and the metals analysis were limited to arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel and silver.

Tentative identification of non-target analyte peaks (i.e., tentatively identified compounds, or TICs) was not requested for these analyses.

To the extent possible, Stone's validation was performed in conformance with Tier III guidelines as defined by EPA Region I, "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses", March 1996. The data were evaluated in accordance with EPA Region II's Standard Operating Procedures (SOPs) from the EPA Hazardous Waste Support Branch: SOP#HW-22 "Validating Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8270D", and "Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3" (SOP Revision 13). EPA's "National Functional Guidelines for Organic Data Review" (EPA 540/R-99/008, 10/99) and EPA's "National Functional Guidelines for Inorganic Data Review" (EPA 540-R-04-004, October 2004) were also considered during the evaluation, and professional judgment was applied as necessary and appropriate.

As specified in the workplan, an independent third party data validation was performed on 5% of the sample data or on one sample (sometimes more) from each sample delivery group (SDG). The validation effectively was used to complete the data usability evaluation for data collected during the remediation investigation. The data usability summary report (DUSR) was prepared based on findings in this validation report and extrapolated to all deliverables.

The data validation process evaluates data on a technical basis for chemical analyses conducted under the CLP or other well-defined methods. Contract compliance is evaluated only in specific situations. Issues pertaining to contractual compliance are noted where applicable. It is assumed that the data package is presented in accordance with the CLP requirements. It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data validator as necessary and appropriate. Raw data is examined in detail to check calculations, compound identification, and/or transcription errors in reference to samples in the Executive Summary only. Validated results are either qualified or unqualified; if results are unqualified, this means that the reported values may be used without reservation. Final validated results are annotated with the following codes, as defined in EPA Region II Standard Operating

Procedures:

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated numerical value is the sample quantitation limit. The sample quantitation limit accounts for sample-specific dilution factors and percent solids corrections or sample sizes that deviate from those required by the method.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. The R replaces the numerical value or sample quantitation limit. In some instances (e.g., a dilution) a result may be indicated as "rejected" to avoid confusion when a more quantitatively accurate result is available.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

JN - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

These codes are recorded in the Analysis Data Sheets (Form I) in Attachment A of this validation report to indicate qualifications placed on the data as a result of the validation effort.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is completely unusable. The analysis is invalid due to significant quality control problems and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they have no useful purpose under any circumstances. Second, no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable. While strict quality control conformance provides well-defined confidence in the reported results, any analytical result will always contain some uncertainty as demonstrated in the laboratory-derived control limits.

The user is also cautioned that the validation effort is based on the materials provided by the laboratory. Software manipulation, resulting in misleading raw data printouts, cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

### **Detailed Findings of Measurement Error Associated with the Analytical Analysis**

#### **I. Preservation and Technical Holding Times (Sample Integrity)**

The soil sample for these analyses was collected April 21, 2010. The samples collected on this day were received at the laboratory on April 22, 2010. According to chain of custody records and laboratory records, all samples were appropriately preserved in the field prior to collection. All holding times for analysis were met for all samples. The temperature of the cooler upon receipt at the laboratory was recorded on the chain-of-custody (COC) record and was acceptable ( $4\pm 2^{\circ}\text{C}$ ).

#### **II. GC/MS Instrument Performance Check (Tuning) and Calibration Verification**

The tuning of the instruments for SVOA analyses was demonstrated with analysis of decafluorotriphenylphosphine (DFTPP); tunes were analyzed for each shift (12-hour period) during which the samples or associated standards were analyzed. All tunes, as recorded on the Form V-like summaries in this data set, were acceptable.

Initial and continuing calibration verification (ICV/CCV) standards were run at the required frequencies in the ICP/CV analysis series for all target elements. Results for all ICV/CCV standards bracketing samples were correctly reported on the summary forms and recoveries of all target analytes were within the applicable acceptance limits. The reported correlation coefficient of the initial calibration for the mercury analysis was greater than the minimum acceptance limit of 0.995.

Contract required quantitation limit (CRQL) standards as specified in the EPA Inorganic (ILM) Statement of Work were analyzed at the required frequencies for selected metals and concentrations for all applicable analytes on the ICP analyzers. Percent recoveries were accurately reported and were acceptable.

Initial calibrations and continuing calibration verifications were performed for all organic analyses and were acceptable for the compounds of interest.

#### **III. Blanks: Laboratory, and Preparation and/or Method Blanks.**

Preparation blanks and/or laboratory method blanks (MB) were prepared with each preparation batch and were acceptable with exceptions as noted below.

No target analytes were detected in any of the SVOA method blanks.

The initial and continuing blanks for the metals analyses detected trace amounts of the target elements ( $<$  reporting limit for cadmium, 1.1 ug/L and lead, 3.9 ug/L). Based on laboratory contamination in the calibration blanks, the result for cadmium in CP-1 was reported as less than the reporting limit (U). Preparation blanks were reported with each preparation batch of twenty samples. No target compounds were reported in the preparation blanks.

A single field blank (FB) was submitted with the samples in the data set. No target analytes were detected in the FB with the exception of lead (6.58 ug/L) and mercury (0.11 ug/L). Although the FB is a water sample, conversions from ug/L to the concentration in soils mg/kg was performed to assess FB contamination to the soil samples; therefore, based on contamination in the FB, the result for lead in CP-1 was qualified as estimated (J).

#### **IV. Surrogate Compounds**

Percent recoveries of the SVOA surrogates (nitrobenzene-d5, 2-fluorobiphenyl, p-terphenyl-d14, 1,2-dichlorobenzene-d4, 2,4,6-tribromophenol, 2-chlorophenol-d4, 2-fluorobiphenyl, phenol-d6,) were correctly reported on the Form I summaries and within acceptance limits for the samples in this data set.

#### **V. Internal Standards (IS)**

All IS areas and retention times (RT), as reported on the Form VIII summaries, were within the established QC limits for all reported sample analyses.

#### **VI. Matrix Spike/Matrix Spike Duplicate/Laboratory Duplicate (MS/MSD/Dup)**

Sample CP-1 was analyzed for matrix spike/matrix spike duplicate, and duplicate analyses. All MS/MSD recoveries (R) or relative percent differences (RPD) between pair results were met for these analyses.

#### **VII. Field Duplicate Precision**

Sample DUP-01 was identified as field duplicate of DW-3. Target compounds were non-detect in the field duplicate pair for SVOA analysis; therefore, no assessment of precision could be made. Paired results were acceptable in the metals analysis and no qualification of data was required.

#### **VIII. Performance Evaluation Samples (PES)/Accuracy Check**

Zero blank PE samples, commonly known as laboratory control samples or blank spikes (ASP specification), and their duplicates were analyzed at the required frequency and results were provided on Form III-like summaries for all analyses. Recoveries were within the laboratory-derived acceptance limits.

An ICP serial dilution was performed on the same sample as the MS/MSD pair. Percent difference (%D) values were less than the maximum acceptance limit of 15% for all target analytes



in which the original concentration (in the undiluted sample) was greater than 50 times the MDL.

#### **IX. Target Compound Identification**

Reported target compounds were correctly identified with supporting spectra present for all field samples in this data set.

#### **X. Compound Quantitation, Reported Quantitation Limits and Sensitivity Checks.**

Target compound concentrations and quantitation limits were appropriately reported on the Form I. For the both the inorganic and organic analyses, the laboratory appropriately applied "J" qualifiers to the sample Form Is when the concentration of an analyte was less than the sample-specific reporting limit (RL) but greater than the reported method detection limit. The validator did not remove these qualifiers.

Method detection limit studies were not provided nor requested for the SVOA analyses, The low standard of the calibration curve supports the laboratory quantitation limit in the SVOA methodology.

Method detection limit studies (MDLs) for metals; P4 (2/14/09) and mercury (1/15/09) were performed last year and appropriately reported on the Form 9 provided within the data packages, although based on the dates provided are due for an update. The laboratory reports results to the CRQL on the Form Is; however if an element is detected above the MDL the laboratory appropriately reports that result on the Form I with a "J" qualifier.

The data packages appropriately provided the annual (1/15/09) ICP-AES Interelement Correction Factors [ICF] (Form 10A and B) and the quarterly (1/15/10) ICP-AES Linear Ranges (Form 11) documentation.

Sample-specific results for all analytes may be found on the laboratory-generated Form Is for each sample, and the laboratory generated Form Is have been annotated with the data validation qualifiers as defined in this report and provided in Attachment A.

#### **XI. Tentatively Identified Compounds (TICs)**

Evaluation of unidentified, non-target analyte peaks was not requested; however, the laboratory did report these within the data packages for these samples.

## **XII. System Performance**

The analytical systems appear to have been working well at the time of these analyses based on evaluation of the available raw data.

## **XIII. Overall Evaluation of Data**

Findings of the validation effort resulted in the following qualifications of sample results:

- Based on laboratory contamination in the calibration blanks, the result for cadmium in CP-1 was reported as less than the reporting limit (U).
- Based on contamination in the FB, the result lead for CP-1 was qualified as estimated (J).

## **XIV. Documentation**

The chain of custody record was present and accurately completed for all reported samples in this data set, and the data package was complete with the following exceptions:

- Preparation methods were missing for one or more of the method detection limit study, Form 9s in the metals data package. For future sampling efforts, these methods should be available.

This validation report shall be considered part of the data package for all future distributions of the semivolatiles and metals analysis data.

**ATTACHMENT A**

**ANALYSIS DATA SUMMARY SHEETS (Form I)  
SDG No. B2008  
Semivolatile and Metals in Soil Samples**



1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP-1

Lab Name: Chemtech Contract: PWGR01Lab Code: CHEM Case No.: B2008 SAS No.: B2008 SDG No.: B2008Matrix (soil/water): SOIL Lab Sample ID: B2008-01Sample wt/vol: 30.05 (g/mL) g Lab File ID: BE063608.DLevel: (low/med) LOW Date Received: 04/22/10% Moisture: 3 Decanted: (Y/N) N Date Extracted: 04/23/10Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/23/10Injection Volume: 1 Dilution Factor: 1GPC Cleanup: (Y/N) N pH: N/A Extraction: (Type) SOXH

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

83-32-9	Acenaphthene	340	U
86-73-7	Fluorene	340	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

Comments: \_\_\_\_\_

FORM I SV-1

KRM  
5/19/10

**Metals**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

CP-1

Lab Name: Chemtech Consulting Group Contract: P.W. Grosser Consulting  
Lab Code: CTECH Case No.: B2008 NRAS No.: B2008 SDG NO.: B2008  
Matrix (soil/water): SOIL Lab Sample ID: B2008-01  
Level (low/med): LOW Date Received: 4/22/2010  
% Solids: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.040	U		P
7440-41-7	Beryllium	0.31	U		P
7440-43-9	Cadmium	0.10	<i>J</i>	<i>U</i>	P
7440-47-3	Chromium	1.180			P
7440-50-8	Copper	1.090			P
7439-92-1	Lead	1.200	<i>J</i>		P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	2.070	U		P
7440-22-4	Silver	0.52	U		P

*KBN*  
*5/20/10*

Color Before: BROWN Clarity Before: \_\_\_\_\_ Texture: MEDIUM  
Color After: YELLOW Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **APPENDIX C**

# New York State Department of Environmental Conservation

## Division of Environmental Remediation, Region One

**Stony Brook University**

50 Circle Road, Stony Brook, New York 11790-3409

**Phone:** (631) 444-0240 • **Fax:** (631) 444-0248

**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



Alexander B. Grannis  
Commissioner

July 28, 2010

Mr. James W. Meyers, P.E.  
Principal Public Health Engineer  
Office of Pollution Control  
Suffolk County Department of Health Services  
15 Horseblock Place  
Farmingdale, New York 11738

Re: Former Bellport Gas Station Site  
1401 Montauk Highway  
East Patchogue, Suffolk County  
NYSDEC Site Number: E152194  
UIC IRM Report

Dear Mr. Meyers:

The New York State Department of Environmental Conservation (the Department) is in receipt of Suffolk County Department of Health Service's revised Underground Injection Control (UIC) Interim Remedial Measures (IRM) Report dated June 2010 regarding the above referenced Environmental Restoration Program (ERP) site. The revised report, which was prepared by your environmental consultant, P. W. Grosser Consulting, Inc., was reviewed by the Department and the New York State Department of Health (NYSDOH). Based on the review, the Department is satisfied that the report successfully documents the procedures and results of the UIC IRM that was implemented at the site. As a result, the report is deemed complete and approved.

At this time, you are instructed to place a copy of the approved report in the project's document repository. Should you have any questions, please feel free to contact me at (631)-444-0246 or via email at [jcsheeha@gw.dec.state.ny.us](mailto:jcsheeha@gw.dec.state.ny.us). Thank you for your cooperation regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "John C. Sheehan". The signature is fluid and cursive, with the first name "John" being more prominent.

John C. Sheehan  
Project Manager

cc: C. Vasudevan, NYSDEC  
W. Parish, NYSDEC  
G. Bobersky, NYSDEC  
R. Ockerby, NYSDOH  
R. Seyfarth, SCDHS  
A. Juchatz, SCDEE  
Z. Youngman, P.W. Grosser



## **APPENDIX D**

# Daily Air Monitoring Record Form

## Former Bellport Service Station

Site safety officer: Chris Amato Date: 3/30/2011 Weather Condition Cloudy 40°

Instrument make & model: MiniRAE 2000, PDR 1000

Calibration date / background readings: 3/30/2011 PID: 0.0 ppm PDR: 0.015 mg/m<sup>3</sup>

Description of Locations: Site Perimeter

### Air monitoring locations

Time	Wind	N		S		E		W	
		PID	Dust	PID	Dust	PID	Dust	PID	Dust
7:30	E	0.0	0.018	0.0	0.017	0.0	0.022	0.0	0.033
8:30	ESE	0.0	0.023	0.0	0.024	0.0	0.033	0.0	0.035
9:30	ESE	0.0	0.022	0.0	0.022	0.0	0.023	0.0	0.054
10:30	ESE	0.0	0.018	0.0	0.025	0.0	0.022	0.0	0.018
11:30	E	0.0	0.015	0.0	0.016	0.0	0.032	0.0	0.019
12:30	E	0.0	0.022	0.0	0.020	0.0	0.017	0.0	0.026
13:30	E	0.0	0.023	0.0	0.022	0.0	0.025	0.0	0.025

Dust suppressant necessary: Yes or ☐ No

Dust Suppression technique used:  
No dust suppression necessary.

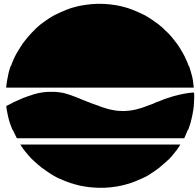
Monitoring results and comments:  
No action levels exceeded.

### Notes:

PID values listed as ppm

Dust values listed as mg/m<sup>3</sup>

## **APPENDIX E**



New York State Department of Environmental Conservation

## **Environmental Restoration Program**

### **Citizen Participation Plan for Former Bellport Gas Station Site**

1401 Montauk Highway  
East Patchogue, NY 11772  
Suffolk County, New York

December 2008

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\* \* \* \* \*

**Note:** The information presented in this Public Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Public Participation Plan may be revised during the brownfield site's remedial process.

Applicant: **Suffolk County**  
Site Name: **Former Bellport Gas Station Site**  
Site Address: **1401 Montauk Highway, East Patchogue, NY**  
Site County: **Suffolk**  
Site Number: **E 152194**

## **1. What is New York's Environmental Restoration Program?**

New York's Environmental Restoration Program (ERP) is designed to encourage municipalities to investigate, remediate (clean up) and redevelop brownfield sites. Through the ERP the State provides grants to municipalities to reimburse up to 90% of eligible on-site investigation and remediation costs. The program also offers liability limitations for the municipality and all successors in title.

A brownfield is any real property where redevelopment or reuse may be complicated by the presence or potential presence of a contaminant. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal and financial burdens on a community. If the brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The ERP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants that conduct brownfield site remedial activities.<sup>1</sup> An Applicant is a person whose request to participate in the ERP has been accepted by NYSDEC. The ERP contains investigation and remediation (cleanup) requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the ERP, go online at:  
<http://www.dec.ny.gov/chemical/8444.html>.

## **2. Citizen Participation Plan Overview**

This Citizen Participation (CP) Plan provides members of the affected and interested public with information about how NYSDEC will inform and involve them during the investigation

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<sup>1</sup> "Remedial activities", "remedial action", and "remediation" are defined as all activities or actions undertaken to eliminate, remove, treat, abate, control, manage, or monitor contaminants at or coming from a brownfield site.

and remediation of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Appendix A contains a map identifying the location of the site.

### ***Project Contacts***

Appendix B identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's remedial program. The public's suggestions about this Plan and the NYSDEC public participation program are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

### ***Document Repositories***

The locations of the site's document repositories also are identified in Appendix B. The document repositories provide convenient access to important project documents for public review and comment.

### ***Site Contact List***

Appendix C contains the brownfield site contact list (BSCL). This list has been developed to keep the community informed about, and involved in, the site's investigation and remediation process. The brownfield site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming remedial activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The brownfield site contact list includes, at a minimum:

- chief executive officer and official(s) principally involved with relevant zoning and planning matters of each county, city, town and village in which the site is located;
- residents, owners, and occupants of the site and properties adjacent to the site;
- the public water supplier which services the area in which the site is located;
- any person who has requested to be placed on the site contact list;
- the administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- document repositories.

Where the site or adjacent real property contains multiple dwelling units, the Applicant will work with NYSDEC to develop an alternative method for providing such notice in lieu of mailing to each individual. For example, the owner of such a property that contains multiple dwellings may be requested to prominently display fact sheets and notices required to be developed during the site's remedial process. This procedure would substitute for the mailing of such notices and fact sheets, especially at locations where

renters, tenants and other residents may number in the hundreds or thousands, making the mailing of such notices impractical.

The brownfield site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix B. Other additions to the brownfield site contact list may be made on a site-specific basis at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

### ***CP Activities***

Appendix D identifies the CP activities, at a minimum, that have been and will be conducted during the site's remedial program. The flowchart in Appendix E shows how these CP activities integrate with the site remedial process. The public is informed about these CP activities through fact sheets and notices developed at significant points in the site's remedial process.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a brownfield site, and the nature and progress of efforts to investigate and remediate a brownfield site.
- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a brownfield site's investigation and remediation.

The public is encouraged to contact project staff at any time during the site's remedial process with questions, comments, or requests for information about the remedial program.

This CP Plan may be revised due to changes in major issues of public concern identified in Section 6, or in the nature and scope of remedial activities. Modifications may include additions to the brownfield site contact list and changes in planned public participation activities.

## **3. Site Information**

### ***Site Description***

- Location – 1401 Montauk Highway, East Patchogue, NY
- Suffolk County Tax Map # - 200-975.8-4-20
- Site size – approximately 0.3 acres
- Adjacent properties – Residential to the north, commercial to the east, west and south

The former Bellport Gas Station Site is located at 1401 Montauk Highway in East Patchogue,



New York (see Appendix A - Figure 1) and is currently owned by Suffolk County. The property is located on the north side of Montauk Highway and is bounded on the east by Lenox Avenue, on the north by residential properties, and on the west and south by commercial properties.

The property is approximately 0.3 acres in size and is currently unoccupied. Figure 2 shows the generalized site plan. There is one building present on the site.

### ***Site History***

This property has been occupied by many different independent retail gasoline service stations, such as Eastern Petroleum (1983), Major Fuel (1986), National (1987), Independent (1991) and Ocean/Coastal (1991-1998).

Suffolk County acquired the property in 1999 for failure to pay property taxes.

### ***Environmental History***

On February 16, 1984 the NYSDEC completed an inspection of this site when Gary's Auto and Truck Repair occupied the facility. This inspection revealed that there was an indoor floor drain which discharged waste liquid to a storm water drywell.

The NYSDEC opened a spill number (8703461) after a UST failed a tank test. Three gasoline/diesel underground storage tanks (USTs) and one waste oil UST were removed from the site in 1988. The spill number was closed in 1988.

In May 1998, the Suffolk County Department of Health Services (SCDHS), received laboratory results from an environmental audit completed by Tyree Bros. Environmental Services. This report documented contamination in the floor drain and two outdoor storm water drywells. The floor drain contained elevated levels of volatile organic compounds (VOCs) and metals. .

In 2006 O'Brien and Gere prepared a Site Characterization Report which detailed the following:

- The groundwater at the site was found to contain elevated concentrations of metals, VOC's, and semi-volatile organic compounds (SVOC's). All contamination was detected in sampling locations located downgradient of the former UST excavation.
- Surface and subsurface soils were found to have elevated concentrations of VOC's. Areas of contamination were located along the western property boundary, approximately 30 feet south of the building and in the southwest corner of the property, and within the former UST excavation collected 20-24 feet below ground surface (bgs).

- Aqueous and sludge samples collected from the floor drain at the site exhibited elevated concentrations of VOC's, SVOC's, PCB's, and metals. The sample collected from dry well DW-1 contained elevated concentrations of metals.
- Exterior soil gas samples and interior sub-slab soil gas samples were found to contain elevated concentrations of VOC's.
- The building was inspected for the presence of lead based paint (LBP) and asbestos containing materials (ACM). The survey found LBP in interior and exterior walls, door components, and exterior components of the building. The roof was identified as ACM.

#### **4. Remedial Process**

**Note:** See Appendix E for a flowchart of the Environmental Restoration Program remedial process.

##### ***Application***

The Applicant has applied for and been accepted into New York's Environmental Restoration Program. The Applicant, who is considered a volunteer, was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Owner must fully characterize the nature and extent of contamination onsite, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures to people and wildlife from contaminants on the site and to contamination that has migrated from the site. The Applicant in its Application proposes that the site will be used for commercial purposes.

To achieve this goal, the Applicant will conduct remedial activities at the site with oversight provided by NYSDEC. The State Assistance Contract (SAC) executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting a remedial program at the site.

##### ***Investigation***

If the Applicant conducts a remedial investigation (RI) of the site, it will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation work plan, which is subject to public comment as noted in Appendix D.

The Applicant will prepare an RI/Alternatives Analysis Report (AAR) after it completes the investigation. This RI/AAR will summarize the results of the investigation and will include the Applicant's recommendation (and alternatives analysis, if warranted) of whether remediation is needed to address site-related contamination. The RI/AAR is subject to review and approval by NYSDEC. Before the report is approved, a fact sheet that describes the RI/AAR will be sent to the site's contact list.

The NYSDEC will prepare a Proposed Remedial Action Plan (PRAP) describing the selected remedial alternative(s), if required. This will be followed by a 45-day public comment period. A public meeting may be held by NYSDEC about the PRAP if requested by the affected community and if significant substantive issues are raised about the plan. Please note that, in order to request a public meeting, the health, economic well-being or enjoyment of the environment of those requesting the public meeting must be threatened or potentially threatened by the site. In addition, the request for the public meeting should be made within the first 30 days of the 45-day public comment period for the PRAP. A public meeting also may be held at the discretion of the NYSDEC project manager in consultation with other NYSDEC staff as appropriate.

After completion of the public comment period the NYSDEC will prepare a Record of Decision (ROD) finalizing the selected remedy with the input received during the public comment period.

NYSDEC will determine if the site poses a significant threat to public health and/or the environment. If NYSDEC determines that the site is a "significant threat," a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying community group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interest of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the eligible site.

For more information about the TAG Program and the availability of TAGs, go online at: <http://www.dec.ny.gov/environmentdec/19063.html>.

### ***Remedy Selection and Construction***

After NYSDEC completes the ROD, if warranted, the Applicant will request participation in the ERP Remedial Program. The Applicant will then be able to develop a Remedial Design. The Remedial Design and associated contract documents detail how the Applicant would address the contamination related to the site.

Approval of the Remedial Design by NYSDEC will allow the Applicant to begin remedy construction at the site. The site contact list will receive notification before the start of site remediation. When the Applicant completes remedial activities, it will prepare a final Completion Report that certifies that remediation requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the remediation is protective of public health and the environment for the intended use of the site. The site contact list will receive a fact sheet that announces the completion of remedial activities and the review of the final Completion Report.

### ***Completion Report and State Assistance Contract Closeout***

A Completion Report will be prepared for NYSDEC approval. An Operation, Maintenance, and Monitoring Plan, if applicable, will also be included as an appendix to the report. If the Applicant uses institutional controls or engineering controls to achieve remedial objectives, the site contact list will receive a fact sheet that discusses such controls.

An institutional control is a non-physical restriction on use of the brownfield site, such as a deed restriction that would prevent or restrict certain uses of the remediated property. An institutional control may be used when the remedial action leaves some contamination that makes the site suitable for some, but not all uses.

An engineering control is a physical barrier or method to manage contamination, such as a cap or vapor barrier.

After completion of the remedy and submission of the Completion Report the NYSDEC will closeout the SAC. The NYSDEC will issue a Satisfactory Completion of Project letter. The SAC will terminate upon issuance of the letter.

### **5. Citizen Participation Activities**

CP activities that have already occurred and are planned during the investigation and remediation of the site under the ERP are identified in Appendix D: Identification of Citizen Participation Activities. These activities also are identified in the flowchart of the ERP process in Appendix E. NYSDEC will ensure that these PP activities are conducted, with appropriate assistance from the Applicant.

All CP activities are conducted to provide the public with significant information about site findings and planned remedial activities, and some activities announce comment periods and request public input about important draft documents such as the Remedial Work Plan.

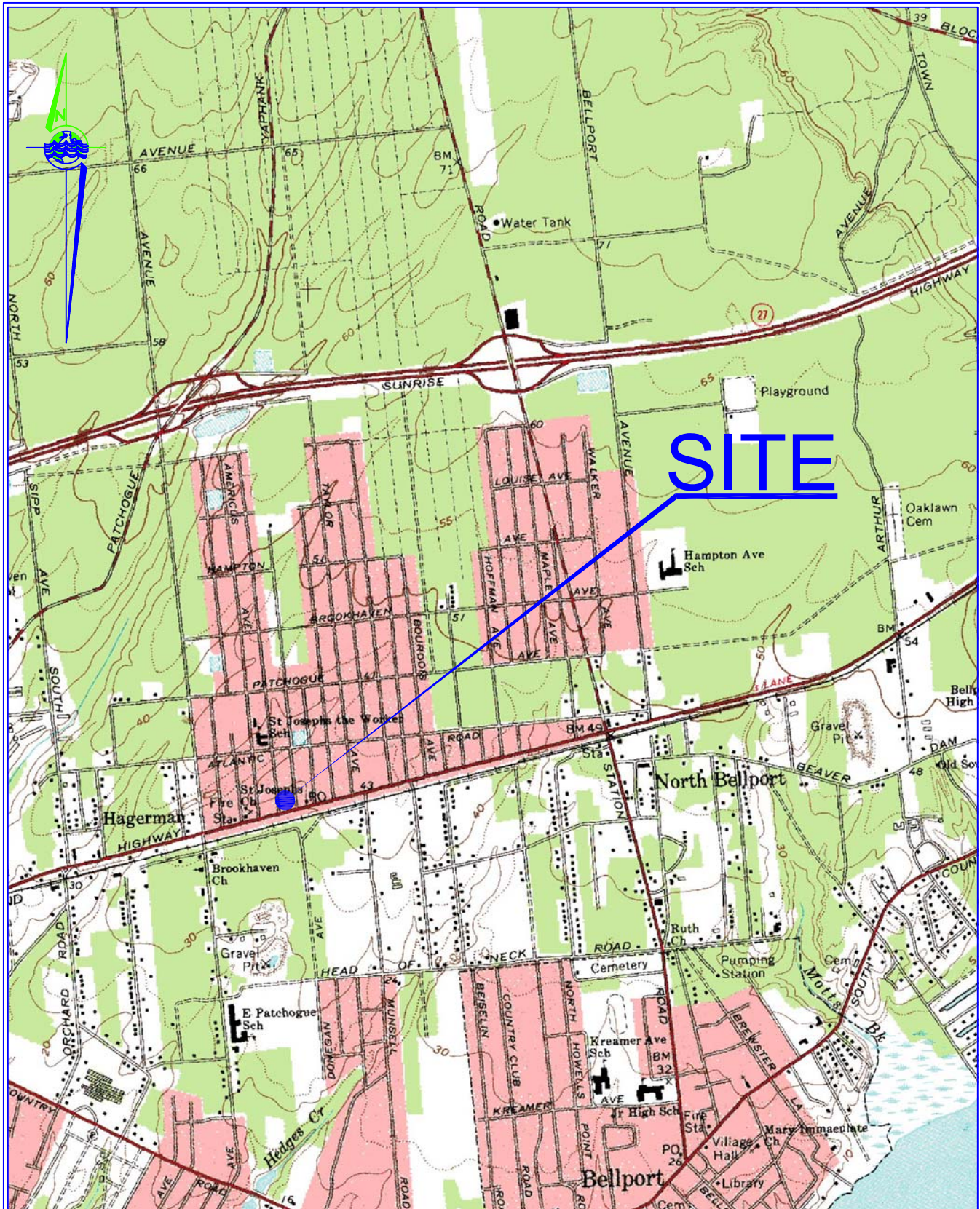
All written materials developed for the public will be reviewed and approved by NYSDEC for clarity and accuracy before they are distributed. Notices and fact sheets can be combined at the discretion, and with the approval of, NYSDEC.

### **6. Major Issues of Public Concern**

Site soils and groundwater with elevated levels of SVOC's, VOC's (related to gasoline), and metals. VOC's were also identified in elevated concentrations in soil vapor.

## Appendix A – Figures



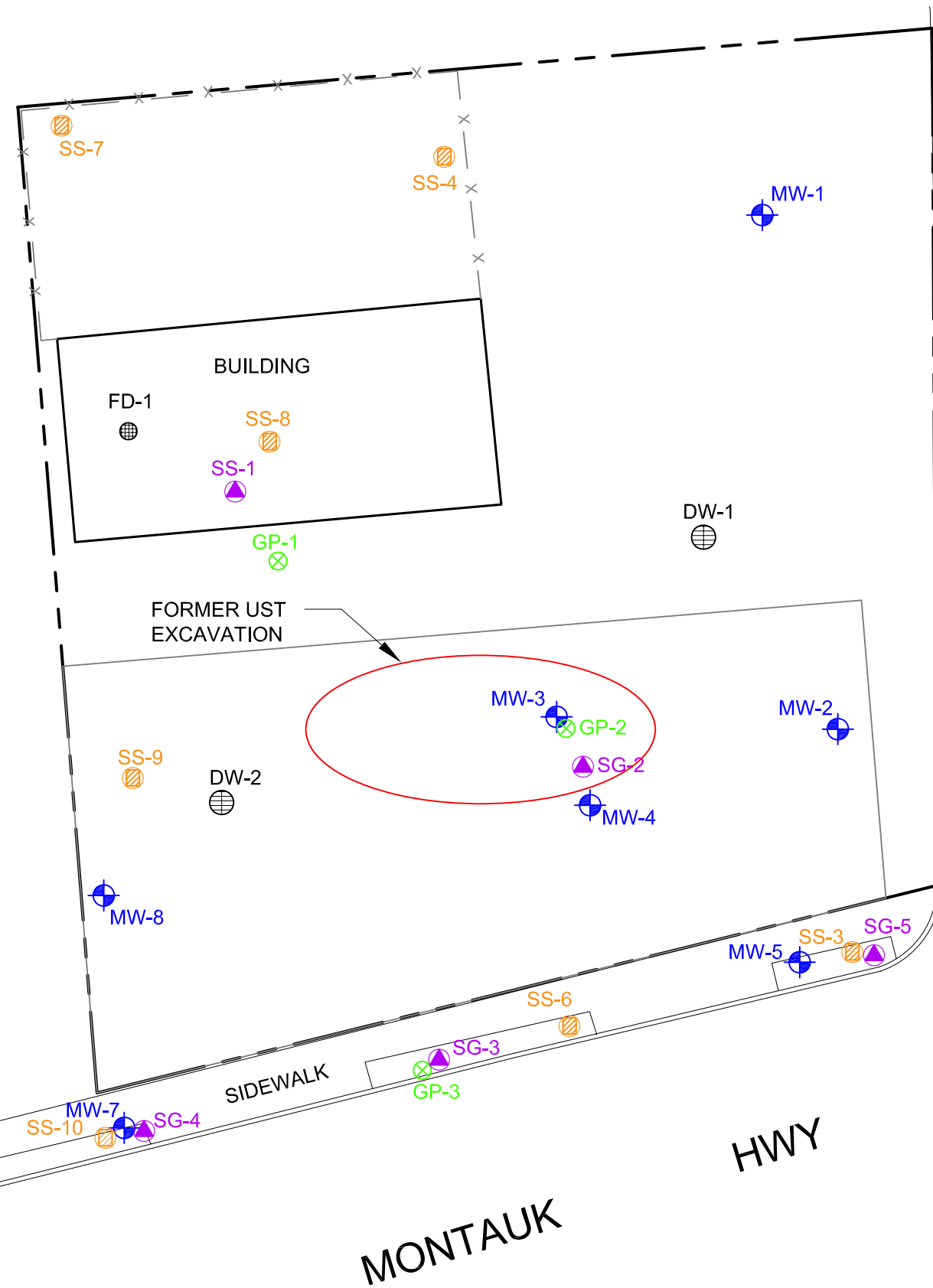
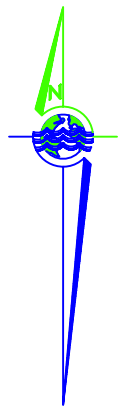


Mapped, edited, and published by the Geological Survey  
 Revised in cooperation with New York  
 Department of Transportation  
 Control by USGS, USC&GS, and New Jersey Geodetic Survey

## VICINITY MAP

SCALE: 1:24,000

U:\Projects S-Z\SHD\0801 - Bellport\CPPI\CAD\Vicinity Map.dwg



LEGEND

- DW-2  
 DRYWELL
- FD-1  
 FLOOR DRAIN
- SS-8  
 SURFACE SOIL SAMPLE  
PERFORMED BY: O'BRIEN & GERE
- SG-5  
 SOIL GAS SAMPLE  
PERFORMED BY: O'BRIEN & GERE
- MW-5  
 MONITORING WELL  
PERFORMED BY: O'BRIEN & GERE
- GP-1  
 GEO PROBE  
PERFORMED BY: O'BRIEN & GERE

NOTE:  
SS-1 IS A SUB SLAB AIR SAMPLE

CONSULTANTS

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING  
AND RELATED DOCUMENTS IS A VIOLATION OF  
SEC. 7209 OF THE N.Y.S. EDUCATION LAW

DRAWINGS PREPARED FOR


REVISION	DATE	INITIAL	COMMENTS
DRAWING INFORMATION			
PROJECT:	SHD0801	APPROVED BY:	PWG
DESIGNED BY:	AL	DATE:	8/29/08
DRAWN BY:	LLG	SCALE:	AS SHOWN

SHEET TITLE

SITE PLAN  
1401 MONTAUK HWY  
E. PATCHOGUE, NY

FIGURE NO  
2

SHEET  
- OF -

L:\Project SZ\SHD0801 - Ballport\CPP\CAD\Site Plan.dwg

BASEMAP & INFORMATION  
PROVIDED BY:  
O'BRIEN & GERE  
ENGINEERS INC.

SITE PLAN  
SCALE: 1" = 20'

0 20 40  
SCALE: 1" = 20'



## **Appendix B – Project Contacts and Document Repositories**

### **Project Contacts**

For information about the site’s remedial program, the public may contact any of the following project staff:

#### **New York State Department of Environmental Conservation (NYSDEC):**

John Sheehan  
Project Manager  
Remediation Bureau A  
Division of Environmental Remediation  
NYSDEC Region One  
SUNY at Stony Brook  
50 Circle Road  
Stony Brook, NY 11790-3409  
(631)-444-0240

William Fonda  
Citizen Participation Specialists  
NYSDEC Region One  
SUNY at Stony Brook  
50 Circle Road  
Stony Brook, NY 11790-3409  
(631)-444-0350

#### **New York State Department of Health (NYSDOH):**

Mr. Steven Karpinsky  
NYSDOH-Bureau of Environmental Exposure Investigation  
Flanagan Square, Room 300  
547 River Street  
Troy, NY 12180-2216  
Phone: (518)-402-7880  
Fax: (518)-402-7859

### **Document Repositories**

The document repositories identified below have been established to provide the public with convenient access to important project documents:

Patchogue Medford Library  
54-60 East Main Street  
Patchogue, NY 11772  
Director: Judith R. Gibbara  
Assistant Director: Dina McNeece Chrils  
Phone: (631) 654-4700  
Hours: Monday- Friday 9:30 a.m.-9:00 p.m.  
Sat. 9:30 a.m.-5:30 p.m., Sun. 1:00 p.m.-5:00 p.m.

NYSDEC Region One  
SUNY at Stony Brook  
50 Circle Road  
Stony Brook, NY 11790-3409  
Attn: William Fonda  
Phone: (631)-444-0350  
Hours: Monday-Friday 8:30-4:45 p.m.



## **Appendix C – Brownfield Site Contact List**

### **Brownfield Site Contact List (BSCL)**

#### **Government Officials**

- Town of Brookhaven Board of Zoning Appeals, Paul M. DeChance- Chairman, (631) 451-6477, One Independence Hill, Farmingville, NY 11738
- Town of Brookhaven Supervisor: Brian X. Foley, (631) 451-6955, One Independence Hill, Farmingville, NY 11738
- Town of Brookhaven Planning, Vincent E. Pascale – Chairman, (631) 451-6403, One Independence Hill, Farmingville, NY 11738
- Town of Brookhaven Clerk, Pam Bethel, (631) 451-9101, One Independence Hill, Farmingville, NY 11738
- Suffolk County Executive, Steve Levy, (631) 853-4000, H. Lee Dennison Building 100 Veterans Memorial Highway, P.O. Box 6100, Hauppauge, NY 11788-0099
- Suffolk County Director of Planning, Thomas A. Isles, (631) 853-5191, H. Lee Dennison Building 100 Veterans Memorial Highway, P.O. Box 6100, Hauppauge, NY 11788-0099
- Suffolk County Clerk, Judith A. Pascale, (631) 852-2000, 310 Center Drive, Riverhead, NY 11901-3392

#### **Local Media**

- News 12 Long Island, 1 Media Crossways, Woodbury, NY 11797
- The Suffolk County News, 23 Candee Avenue, Sayville, NY 11782
- Long Island Business News 2150 Smithtown Avenue, Suite 7, Ronkonkoma, NY 11779
- Long Island Desk, Newsday, 235 Pinelawn Road, Melville, NY 11747
- PennySaver, 2950 Veterans Highway, Bohemia, NY 11716
- The Long Island Advance, 20 Medford Ave, Patchogue, NY 11772

#### **Public Water Supplier**

- Suffolk County Water Authority, 2045 Route 112, Suite 5, Coram, NY, 11727, (631) 698-9500 (customer service)

#### **Environmental Groups and Other Interested Parties**

- Greater Patchogue Chamber of Commerce, 15 North Ocean Ave, Patchogue, NY 11772
- Patchogue-Medford Library, 54-60 East Main Street , Patchogue, NY 11772

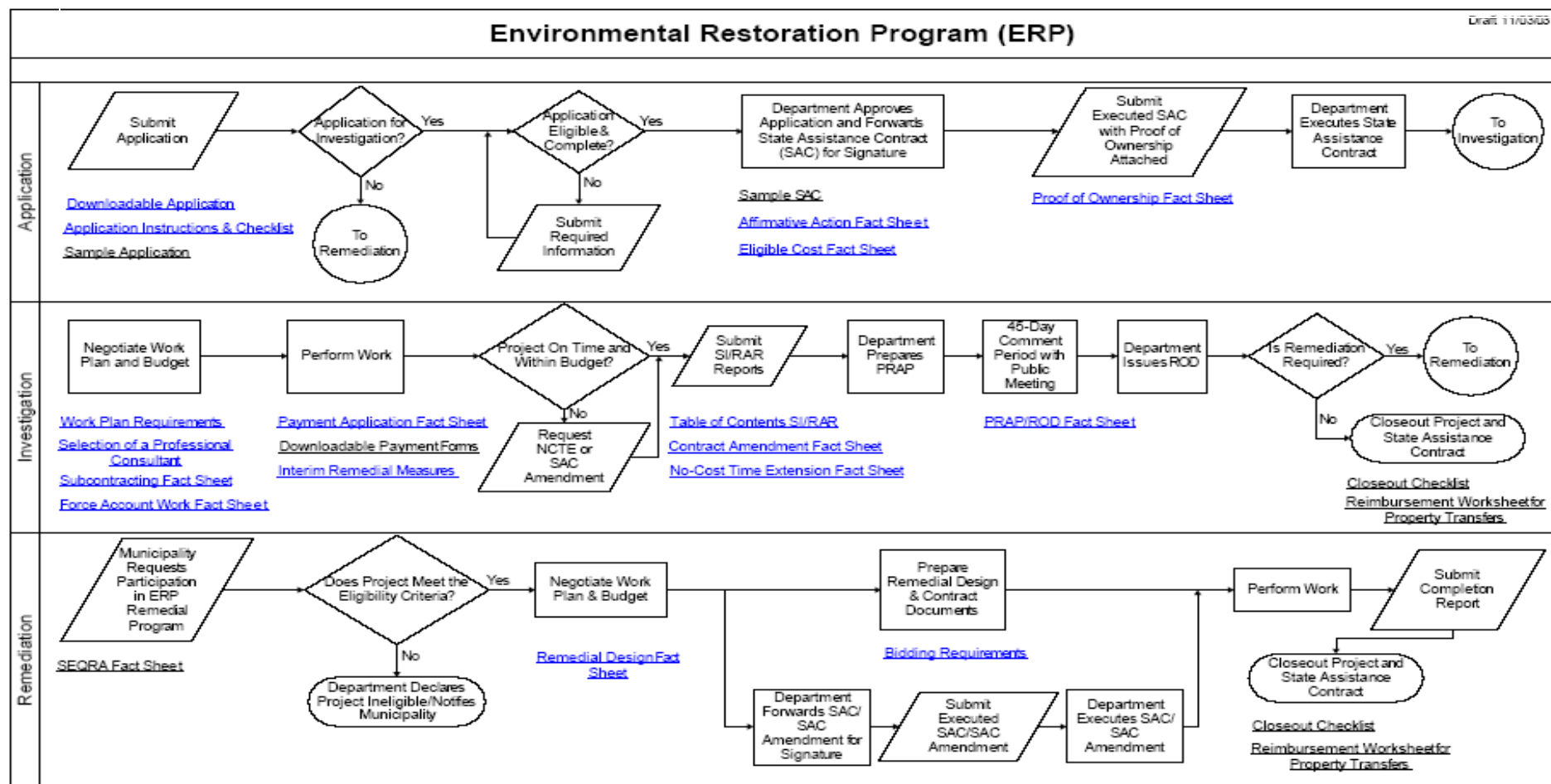
#### **Adjacent Residents, Tenants, or Property Owners**

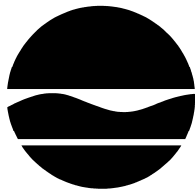
- Car Audio Installations, 1414 Montauk Highway, East Patchogue 11772
- Connies Barber Shop, 1414 Montauk Highway, East Patchogue 11772
- LaNueva Centroamerica Mini Market & Deli, 1414 Montauk Highway, East Patchogue 11772
- Resident, 414 Lenox Avenue, East Patchogue 11772
- Empty Lot 415 Narragansette Ave, East Patchogue 11772
- El Provocon Meat Market, 1387 Montauk Highway, East Patchogue 11772

## Appendix D – Identification of Citizen Participation Activities

Required Citizen Participation (CP) Activities	CP Activity(ies) Occur at this Point
<b>Application Process:</b> <ul style="list-style-type: none"> <li>• Applicant prepares application for submission to the NYSDEC</li> <li>• NYSDEC approves/rejects application prepares State Assistance Contract (SAC)</li> </ul>	<p>At time of preparation of application to participate in ERP.</p>
<b>After Execution of ERP Agreement:</b> <ul style="list-style-type: none"> <li>• Prepare citizen participation (CP) plan</li> <li>• Prepare brownfield site contact list (BSCL)</li> <li>• Establish document repositories</li> </ul>	<p>Draft CP Plan must be approved before the applicant initiates the RI fieldwork. CP Plan must be approved by NYSDEC before distribution.</p>
<b>After Remedial Investigation/Alternatives Analysis (RI/AA) Work Plan Received:</b> <ul style="list-style-type: none"> <li>• Mail fact sheet to BSCL about proposed RI/AA activities</li> </ul>	<p>RI/AA Report will be available for review at the document repositories.</p>
<b>After PRAP Completion:</b> <ul style="list-style-type: none"> <li>• Mail fact sheet to BSCL describing PRAP</li> <li>• Public meeting by NYSDEC about PRAP (if requested by affected community or at discretion of NYSDEC project manager in consultation with other NYSDEC staff as appropriate)</li> </ul>	<p>45-day comment period begins/ends as per dates identified in fact sheet. Public meeting may be held within the 45-day comment period.</p> <p>Prepare responsiveness summary.</p>
<b>After Record of Decision (ROD) Completion:</b> <ul style="list-style-type: none"> <li>• Mail fact sheet to BSCL about ROD</li> </ul>	<p>ROD will be available for review at the document repositories.</p>
<b>After Approval of Remedial Design:</b> <ul style="list-style-type: none"> <li>• Mail fact sheet to BSCL summarizing upcoming remedial construction</li> </ul>	<p>Before the start of remedial construction.</p>
<b>After Remedial Action Completed:</b> <ul style="list-style-type: none"> <li>• Mail fact sheet to BSCL announcing that remedial construction has been completed</li> <li>• Mail fact sheet to BSCL announcing NYSDEC approval of Completion Report and issues a Satisfactory Completion of Project letter</li> </ul>	<p>At the time NYSDEC approves Completion Report. These two fact sheets should be combined when possible if there is not a delay in closeout of the SAC.</p>

## Appendix E - Environmental Restoration Program Process





ENVIRONMENTAL  
CONSERVATION

**Remedial Investigation  
Work Plan**

The project documents may be reviewed at the following document repositories:

**Patchogue Medford Library**  
**54-60 East Main Street**  
**Patchogue, NY 11772**  
**(631) 654-4700**

**Hours:**

Mon. - Fri. 9:30 am to 9 pm  
Sat. 9:30 am to 5:30 pm  
Sun. 1 pm to 5 pm

**New York State Department of  
Environmental Conservation  
Region 1**  
**50 Circle Road**  
**Stony Brook, NY 11790**  
**(631) 444-0350**

Please contact the Project Manager at the phone number listed on the right side of this page to schedule an appointment.

# FACT SHEET

## ENVIRONMENTAL RESTORATION PROGRAM

January 2009

Fact Sheet #1

Former Bellport Gas Station Site  
1401 Montauk Highway  
East Patchogue, New York

Site No: E 152194  
NYSDEC Region 1

## Remedial Investigation for the Former Bellport Gas Station Site

The New York State Department of Environmental Conservation (NYSDEC) working cooperatively with the New York State Department of Health (NYSDOH) is providing this fact sheet to provide the public with a summary of the investigative work planned for the Former Bellport Gas Station Site located at 1401 Montauk Highway in East Patchogue, NY (See attached map for location of Site). The Remedial Investigation Work Plan was prepared by P.W. Grosser Consulting, Inc., contracted with Suffolk County, under New York's Environmental Restoration Program (ERP). NYSDEC previously accepted an application submitted by Suffolk County to participate in the ERP.

The RI Work Plan is available for review at the document repositories identified on the left side of this page.

### Please direct enquiries and questions to:

John Sheehan, Project Manager  
NYSDEC  
Division of Environmental Remediation  
SUNY at Stony Brook  
50 Circle Road  
Stony Brook, NY 11790-3409  
Telephone: (631)444-0240

Steven Karpinski  
NYSDOH  
Room 300  
547 River Street  
Troy, NY 12180-2216  
Telephone: (800)458-1158 ext.27860

### Site Description and Background

The former Bellport Gas Station Site is located at 1401 Montauk Highway in East Patchogue, New York (Figure 1) and is currently owned by Suffolk County. The property is located on the north side of Montauk Highway and is bounded on the east by Lenox Avenue, on the north by residential properties, and on the west and south by commercial properties. The property is approximately 0.3 acres in size and is currently unoccupied. There is one building present on the site.

The property has been occupied by many different independent retail gasoline service stations, such as Eastern Petroleum (1983), Major Fuel (1986), National (1987), Independent (1991) and Ocean/Coastal (1991-1998). Suffolk County acquired the property in 1999 for failure to pay property taxes.

The NYSDEC opened a spill number (8703461) after underground storage tanks (USTs) failed a tank test. Three gasoline/diesel USTs and one waste oil UST were removed from the site in 1988. The spill number was closed in 1988.

In May 1998, the Suffolk County Department of Health Services (SCDHS), received laboratory results from an environmental audit completed by Tyree Bros. Environmental Services. This report documented contamination in the floor drain and two outdoor storm water drywells. The floor drain contained elevated levels of volatile organic compounds (VOCs) and metals.

In 2006 O'Brien and Gere prepared a Site Characterization Report which detailed the following:

- The groundwater at the site was found to contain elevated concentrations of metals, VOC's and semi-volatile organic compounds (SVOC's).
- Surface and subsurface soils were found to have elevated concentrations of VOC's.
- Aqueous and sludge samples collected from the floor drain at the site exhibited elevated concentrations of VOC's, SVOC's, PCB's, and metals. The sample collected from dry well DW-1 contained elevated concentrations of metals.
- Exterior soil gas samples and interior sub-slab soil gas samples were found to contain elevated concentrations of VOC's.

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# ENVIRONMENTAL RESTORATION PROGRAM

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## **Remedial Investigation**

The Planned work includes the following tasks:

- Collect groundwater samples to evaluate groundwater quality at on-site and off-site locations.
- Locate and sample underground injection control (UIC) structures.
- Collect soil gas samples from on-site and off-site locations.
- Collection of soil samples to delineate the extent of soil contamination in the vicinity of the former USTs.
- Delineation of surface soil contamination in the vicinity of two former sampling locations.

Following completion of the field investigation a Remedial Investigation Report will be prepared.

## **Interim Remedial Measure (IRM)**

Suffolk County Department of Health Services (SCDHS) submitted an IRM Work Plan to the NYSDEC requesting sampling and remediation, if necessary, of an on-site drywell which was collapsing and therefore a potential safety hazard to the public. The NYSDEC approved the IRM and the SCDHS completed sampling of the drywell in September 2008. Based on the sampling results sediment from the bottom of the drywell was removed and the structure closed on October 7, 2008.

## **Next Steps**

SCDHS will implement the investigation described in the approved Work Plan and prepare a Remedial Investigation Report. Based on the results presented in the Report, remediation of any identified impacted media will be addressed as part of a proposed remedial action plan.

Contact the NYSDEC or NYSDOH project manager if you have any questions, or if you would like to be added to the project contact list to receive future fact sheets for this Site.

## **Schedule**

Field work for the investigation is anticipated to begin in March 2009.

## **For more information contact:**

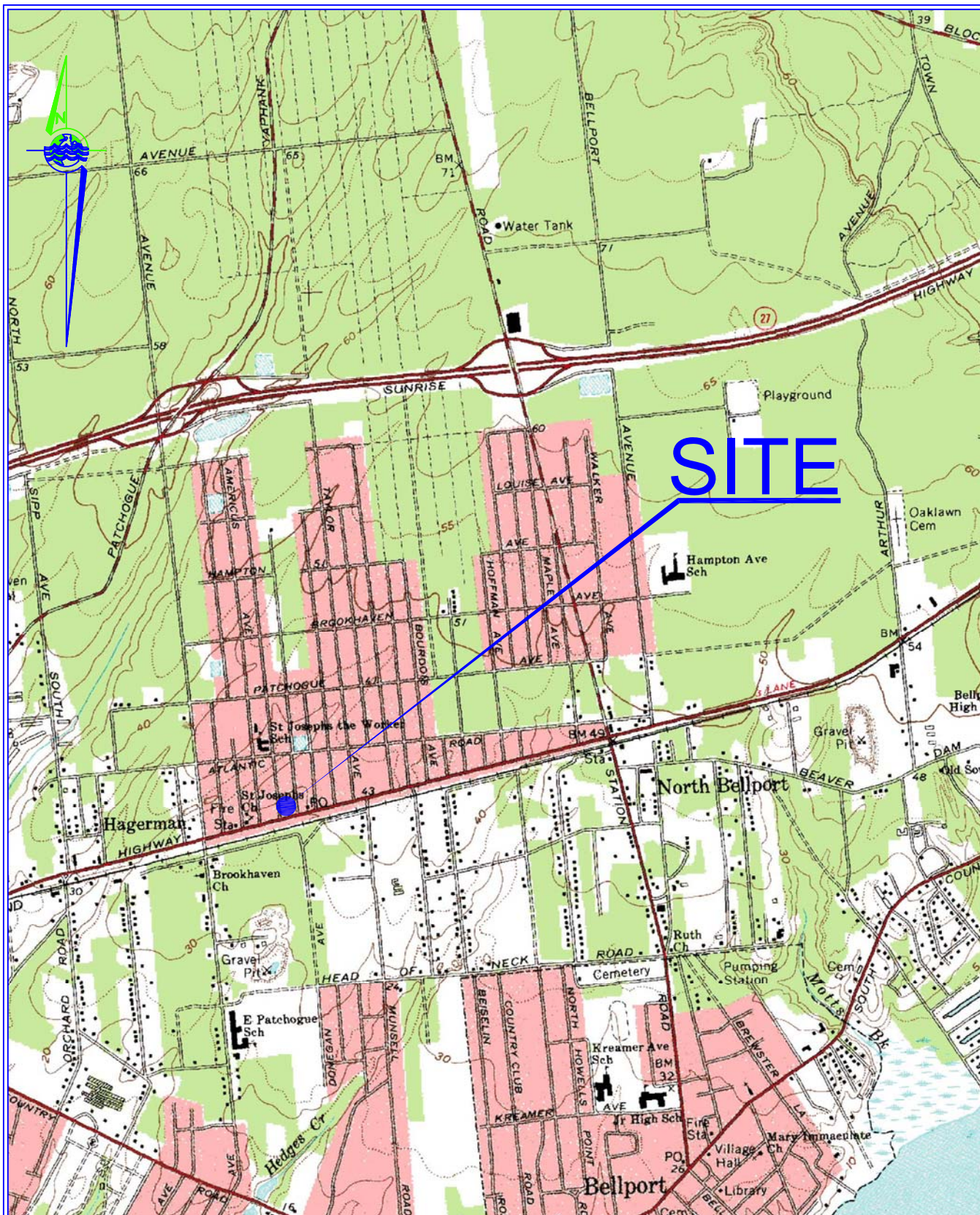
**John Sheehan, Project Manager**  
**New York State Department of Environmental Conservation**  
**50 Circle Road**  
**Stony Brook, NY 11790-3409**  
**(631) 444-0240**

## **For public health-related information contact:**

**Steven Karpinski**  
**New York State Department of Health**  
**547 River Street**  
**Troy, NY 12180-2216**  
**(800) 458-1158 ext.27860**

For more information on the NYSDEC Environmental Restoration Program please visit the NYSDEC website at <http://www.dec.ny.gov/chemical/8444.html>





Mapped, edited, and published by the Geological Survey  
Revised in cooperation with New York  
Department of Transportation  
Control by USGS, USC&GS, and New Jersey Geodetic Survey

## VICINITY MAP

SCALE: 1:24,000

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# FACT SHEET

## ENVIRONMENTAL RESTORATION PROGRAM

September 2010

Fact Sheet #2

Former Bellport Gas Station Site  
1401 Montauk Highway  
East Patchogue, New York

Site No: E 152194  
NYSDEC Region 1

### Public Meeting Announcement Remedial Investigation and Proposed Remedial Action for the Former Bellport Gas Station Site

The New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH), is providing this fact sheet to summarize the cleanup investigation results for the Former Bellport Gas Station Site and seek public comment on the proposed cleanup plan. This fact sheet provides a summary of the Remedial (cleanup) Investigation as well as the Proposed Remedial Action Plan, which has been developed for the site. A public comment period and public meeting will be held regarding this site. **The public meeting will take place at 7 p.m. on Thursday, September 23, 2010 at the South Country Library located at 22 Station Road, Bellport, NY 11713.** This work is being performed under New York's Environmental Restoration Program (ERP). In June 2008, NYSDEC accepted an application submitted by Suffolk County to participate in the ERP.

The Remedial Investigation Report and the Proposed Remedial Action Plan are available for review at the document repositories identified on the left side of this page.

#### Please direct enquiries and questions to:

John Sheehan, Project Manager  
NYSDEC  
Division of Environmental Remediation  
SUNY at Stony Brook  
50 Circle Road  
Stony Brook, NY 11790-3409  
Telephone: (631)444-0240

Renata Ockerby  
NYSDOH  
547 River Street  
Troy, NY 12180-2216  
Telephone: (800)458-1158 ext.27880

#### Site Description and Background

The former Bellport Gas Station Site is located at 1401 Montauk Highway in East Patchogue, New York (Figure 1) and is currently owned by Suffolk County. The property is located on the north side of Montauk Highway and is bounded on the east by Lenox Avenue, on the north by residential properties, and on the west and south by commercial properties. The property is approximately 0.3 acres in size and is currently unoccupied.

The property has been occupied by many different independent retail gasoline service stations, such as Eastern Petroleum (1983), Major Fuel (1986), National (1987), Independent (1991) and Ocean/Coastal (1991-1998). Suffolk County acquired the property in 1999 for failure to pay property taxes.

NYSDEC opened a spill number (8703461) after underground storage tanks (USTs) failed a tank test. Three gasoline/diesel USTs and one waste oil UST were removed from the site in 1988. The spill number was closed in that same year.

In May 1998, the Suffolk County Department of Health Services (SCDHS), received laboratory results from an environmental audit completed by Tyree Bros. Environmental Services. This report documented contamination in the floor drain and two outdoor storm water drywells. The floor drain contained elevated levels of volatile organic compounds (VOCs) and metals.

#### Public Meeting: September 23, 2010 7 p.m.

South Country Library  
22 Station Road  
Bellport, NY 11713

#### Public Comment Period: Ends October 15, 2010

#### Remedial Investigation Report/Proposed Remedial Action Plan

The project documents may  
be reviewed at the following  
document repositories:

**Patchogue Medford Library**  
54-60 East Main Street  
Patchogue, NY 11772  
(631) 654-4700

#### Hours:

Mon. - Fri. 9:30 a.m. - 9 p.m.  
Sat. 9:30 a.m. - 5:30 p.m.  
Sun. 1 - 5 p.m.

**New York State  
Department of  
Environmental  
Conservation  
Region 1  
50 Circle Road  
Stony Brook, NY 11790  
(631) 444-0350**



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# ENVIRONMENTAL RESTORATION PROGRAM

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In 1994 the Department opened another spill number (94-04094) after MTBE was detected in an off-site private well, hydraulically down gradient of the subject property. The Department performed a back track investigation from the impacted homes that showed this site was the source of a large plume of petroleum contaminated groundwater. An in depth off-site groundwater investigation was performed which delineated the extent of the off-site petroleum impacts. The Department's spill unit remediated the off-site contaminated groundwater plume by using an Air Sparge/Soil Vapor Extraction System. The system was installed on-site and at off-site locations down gradient of this property and operated until 2003, at which time it was dismantled and removed.

In 2006 O'Brien and Gere, an environmental consultant, working under a USEPA Target Site Assessment grant, prepared a Site Characterization Report which detailed the following:

- The groundwater at the site was found to contain elevated concentrations of metals, VOCs and semi-volatile organic compounds (SVOCs).
- Surface and subsurface soils were found to have elevated concentrations of VOCs.
- Aqueous and sludge samples collected from the floor drain at the site exhibited elevated concentrations of VOCs, SVOCs, PCBs, and metals.
- Exterior soil gas samples and interior sub-slab soil gas samples were found to contain slightly elevated concentrations of VOCs.

## **Interim Remedial Measures**

Suffolk County Department of Health Services (SCDHS) submitted two (2) Interim Remedial Measure (IRM) Work Plans to NYSDEC. The IRMs were necessary to address the contamination that was detected at the site in a timely fashion. One was for the remediation of an on-site drywell (DW-2), which was collapsing due to heavy rains and therefore a potential safety hazard to the public. The IRM work plan was approved and implemented in October 2008. The second IRM work plan was in response to the single story site building exhibiting evidence of structural failure and was slated for demolition. This IRM included the remediation of all the remaining Underground Injection Controls (UICs) on site and the removal of soil that was stockpiled in the building prior to demolition. This IRM was approved and completed in April 2010.

## **Remedial Investigation**

The Remedial Investigation was completed in January 2010. The objective was to confirm and further delineate the impact identified during the site characterization performed by O'Brien and Gere in 2006 and to obtain information in order to develop a remedial strategy. The Remedial Investigation included:

- The collection of groundwater samples to evaluate groundwater quality at on-site and off-site locations
- The location and sampling of underground injection control (UIC) structures.
- The collection of soil gas samples from on-site and off-site locations.
- The collection of soil samples to delineate the extent of soil contamination in the vicinity of the former USTs.
- The delineation of surface soil contamination in the vicinity of two former sampling locations.

Results of the Remedial Investigation identified elevated concentrations of semi-volatile organic compounds and metals in two leaching structures (CP-1 and DW-3). In addition, slightly elevated concentrations of volatile organic compounds were identified in the saturated soils and groundwater in the vicinity of the former underground storage tank area. Indoor air and soil gas sampling indicated that the potential for human exposure to soil vapor intrusion is minimal and surface soil sampling indicated that no surface soil impacts exist in the former sampling locations.

The Remedial Investigation Report recommended that the following remedial actions be performed:

- Removal and proper disposal of sediments from the bottom of CP-1 and DW-3



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# ENVIRONMENTAL RESTORATION PROGRAM

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- Cleanout and closure of the floor drain (FD-1)
- Removal and disposal of sediments which are stored in the building
- The installation of a groundwater monitoring well network with periodic sampling.

The first three recommended remedial actions have been completed as part of the two IRMs outlined above. A complete copy of the Remedial Investigation Report, included a detail description of the IRMs completed at the site, can be reviewed at the Patchogue-Medford Library and at NYSDEC Region One office. Contact information for these two facilities is provided above.

## **Interim Remedial Measure #2**

In April 2010, an inspection of the single story building that existed on the site revealed evidence of structural failure. Due to safety issues regarding the dilapidated building, Suffolk County proceeded with its demolition in accordance with all State and County applicable procedures. Since demolition activities may have damaged the integrity of the remaining on-site UIC structures, the UICs were addressed as an emergency IRM prior to building demolition.

The IRM was implemented on April 21, 2010. The scope of work included the removal of impacted sediments from one leaching drywell (DW-3), one floor drain (FD-1), and one cesspool (CP-1), closure of the on-site structures, and the removal of SVOC impacted sediments from DW-2 that were being stored within the building. Remediation was performed under the supervision of the NYSDEC and the SCDHS

## **Proposed Remedial Action**

NYSDEC has developed a Proposed Remedial Action Plan (PRAP), which details the proposed cleanup measures. The PRAP addresses the recommendation provided in the Remedial Investigation Report for groundwater monitoring.

A complete copy of the PRAP can be reviewed at the Patchogue-Medford Library and at NYSDEC Region One office. Contact information for these two facilities is provided above.

## **Public Meeting**

A public meeting will be held at the South Country Library at 7 p.m. on September 23, 2010. The purpose of this meeting will be to inform the public of the results of the Remedial Investigation and of the Proposed Remedial Action Plan. This meeting is also intended to provide the public the opportunity to comment on the Proposed Remedial Action Plan.

## **45-Day Public Comment Period**

The 45-day public comment period will end on October 15, 2010. During this period the public will have the opportunity to direct comments to Mr. John Sheehan of NYSDEC or Ms. Renata Ockerby of NYSDOH. Contact information is provided above.

## **Next Steps**

Following the completion of the public meeting, the public comment period, and considering the comments received, NYSDEC will issue a Record of Decision and approve the PRAP.

Contact the NYSDEC or NYSDOH project manager if you have any questions, or if you would like to be added to the project contact list to receive future fact sheets for this Site.

## **Schedule**

Monitoring of Site groundwater is anticipated to begin in January 2011.

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# ENVIRONMENTAL RESTORATION PROGRAM

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**For more information contact:**

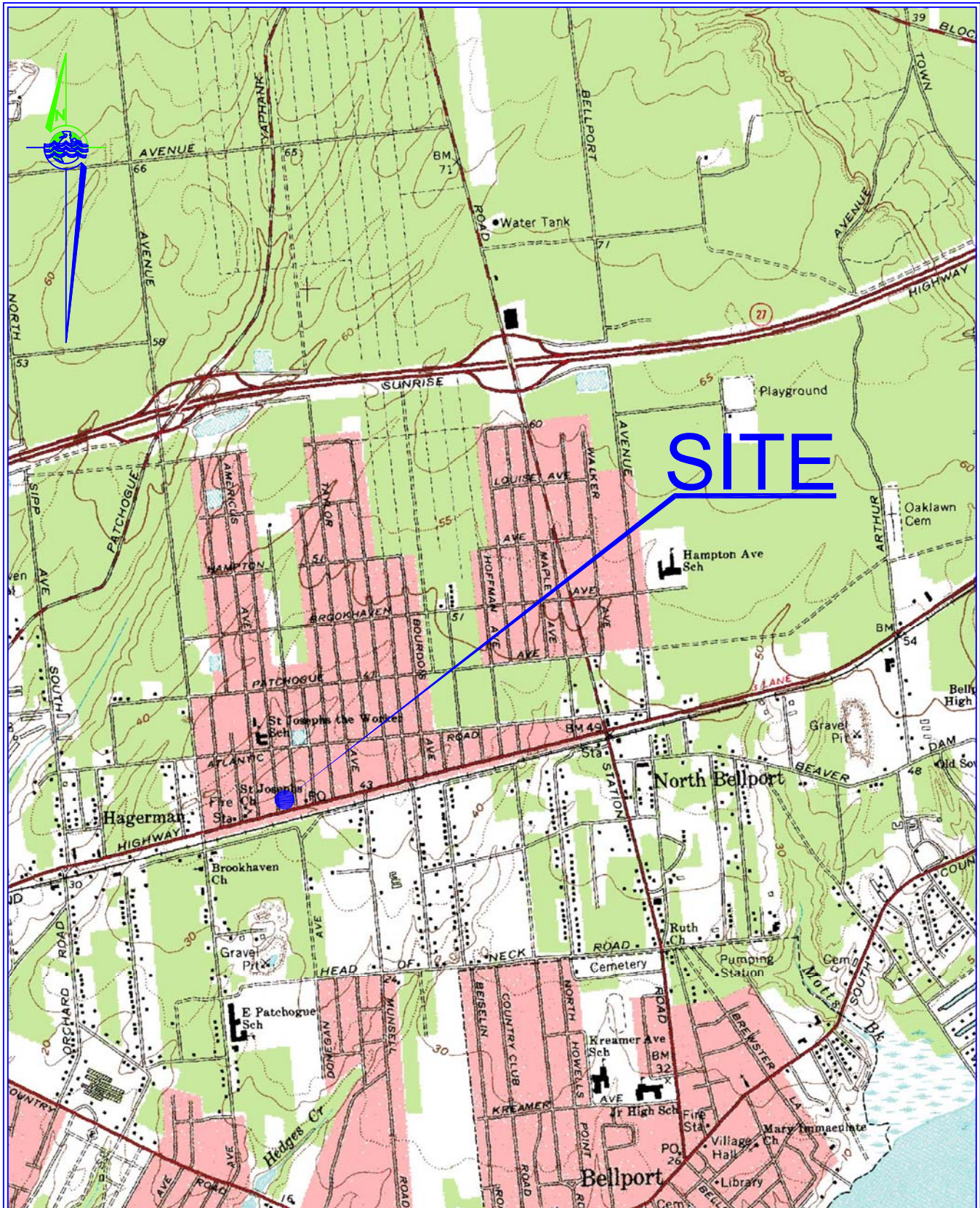
**John Sheehan, Project Manager  
New York State Department of Environmental Conservation  
50 Circle Road  
Stony Brook, NY 11790-3409  
(631) 444-0240**

**For site related health information contact:**

**Renata Ockerby  
New York State Department of Health  
547 River Street  
Troy, NY 12180-2216  
(800) 458-1158 ext.27880**

For more information on the NYSDEC Environmental Restoration Program please visit NYSDEC website at  
<http://www.dec.ny.gov/chemical/8444.html>

For further health information, please see the New York State Department of Health Fact Sheet -What is Exposure -  
<http://www.health.state.ny.us/environmental/about/exposure.htm>



Mapped, edited, and published by the Geological Survey  
Revised in cooperation with New York  
Department of Transportation  
Control by USGS, USC&GS, and New Jersey Geodetic Survey

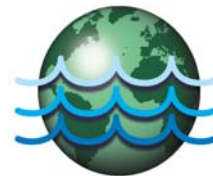
## VICINITY MAP

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## **APPENDIX F**





July 1, 2009

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of June 2009. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of June 30, 2009 are as follows:**

- Laboratory data sent to Stone Environmental for data validation.

**Tasks that are expected to be initiated and or completed in July 2009 are as follows:**

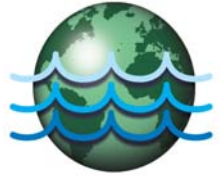
- Preparation of Draft Remedial Investigation Report.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH



September 1, 2009

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of July and August 2009. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of August 31, 2009 are as follows:**

- Data validation received and added to RI Report.
- Draft report sent to SCDHS for review.

**Tasks that are expected to be initiated and or completed in September 2009 are as follows:**

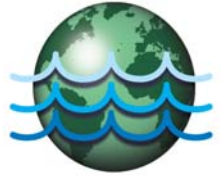
- Review comments from SCDHS and revise report accordingly.
- Submit Draft RI Report to NYSDEC for review.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH



December 1, 2009

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of September through November 2009. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of November 30, 2009 are as follows:**

- Draft RI Report sent to NYSDEC with SCDHS comments.

**Tasks that are expected to be initiated and or completed in December 2009 are as follows:**

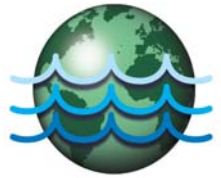
- Review comments from NYSDEC and revise RI Report accordingly.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH



March 1, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the months of January through February 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of February 28, 2010 are as follows:**

- NYSDEC provided comments to the Draft RI Report.
- Comments were addressed and a Final RI Report was submitted to NYSDEC.
- Copies of the Final RI Report were placed in the document repositories.

**Tasks that are expected to be initiated and or completed in March 2010 are as follows:**

- Prepare a Draft IRM Work Plan to address the impacts to leaching structures on the site.

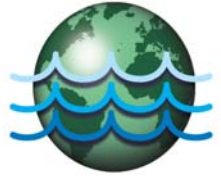
Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH





May 1, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the months of March and April 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of May 1, 2010 are as follows:**

- IRM Work Plan to address the impacts to leaching structures on the site has been approved by the NYSDEC.
- Field work in coordination with the IRM Work Plan was completed on April 21, 2010.
- A site walkthrough was performed by PWGC, SCDHS, and NYSDEC to discuss the locations of additional monitoring well locations as part of the MNA plan.

**Tasks that are expected to be initiated and or completed in May 2010 are as follows:**

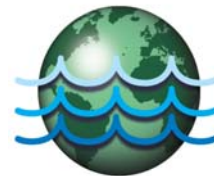
- Upon receipt of analytical data, PWGC will send data for Data Validation and begin working on IRM Report.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH



June 2, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of May 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of June 1, 2010 are as follows:**

- The Interim Remedial Measure has been completed.
- A Draft IRM Report has been submitted to the NYSDEC for review.

**Tasks that are expected to be initiated and or completed in June 2010 are as follows:**

- Upon receipt of NYSDEC comments, a Final IRM Report will be completed.

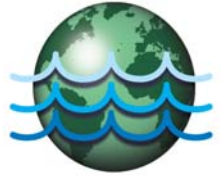
Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH

# P.W. GROSSER CONSULTING



July 5, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of June 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of July 1, 2010 are as follows:**

- The Final IRM Report has been submitted to NYSDEC.

**Tasks that are expected to be initiated and or completed in July 2010 are as follows:**

- A public meeting is tentatively scheduled for July 22, 2010.
- PWGC will mail notifications to surrounding property owners following the completion of the Proposed Remedial Action Plan (PRAP).

Should you have any questions, or require further information, please do not hesitate to contact me.

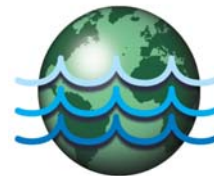
Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH



# P.W. GROSSER CONSULTING



August 2, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of July 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of August 1, 2010 are as follows:**

- The Final IRM Report was approved by NYSDEC.
- The public meeting was postponed.

**Tasks that are expected to be initiated and or completed in August 2010 are as follows:**

- The Proposed Remedial Action Plan (PRAP) will be finalized.
- A facts sheet announcing the rescheduled public meeting will be distributed.

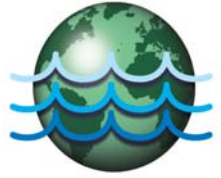
Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: R. Seyfarth, SCDHS  
J. Meyers, SCDHS  
R. Ockerby, NYSDOH





September 9, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the month of August 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of September 1, 2010 are as follows:**

- The Proposed Remedial Action Plan (PRAP) was finalized.

**Tasks that are expected to be initiated and or completed in August 2010 are as follows:**

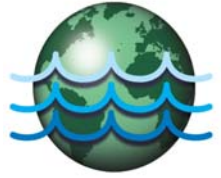
- A facts sheet announcing the rescheduled public meeting will be distributed.
- A public meeting will be held on September 23, 2010.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: J. Meyers, SCDHS  
R. Ockerby, NYSDOH



November 4, 2010

Mr. John Sheehan  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
Stony Brook University  
50 Circle Road  
Stony Brook, NY 11790-3409

**Re: Progress Report (Site No. E-152194) Remedial Investigation  
Former Bellport Gas Station Site, East Patchogue, New York**

Dear Mr. Sheehan:

P.W. Grosser Consulting Inc. (PWGC) has prepared this progress report to document the progress of the above referenced project for the months of September and October 2010. Subsequent reports will be submitted on a monthly basis until the Remedial Investigation is completed.

**Tasks that were initiated and/or completed as of November 1, 2010 are as follows:**

- A public meeting was held on September 23, 2010.

**Tasks that are expected to be initiated and or completed in November 2010 are as follows:**

- The NYSDEC will prepare the ROD for the site.

Should you have any questions, or require further information, please do not hesitate to contact me.

Very truly yours,  
**P.W. Grosser Consulting, Inc.**

Zeb Youngman  
Senior Project Manager

Cc: J. Meyers, SCDHS  
R. Ockerby, NYSDOH

## **APPENDIX G**



**SUFFOLK COUNTY CLERK  
RECORDS OFFICE  
RECORDING PAGE**

Type of Instrument: EASEMENT  
Number of Pages: 10  
Receipt Number : 13-0117959  
TRANSFER TAX NUMBER: 13-04659

Recorded: 09/17/2013  
At: 04:35:21 PM  
LIBER: D00012744  
PAGE: 734

District: 0200      Section: 975.80      Block: 04.00      Lot: 020.000

**EXAMINED AND CHARGED AS FOLLOWS**

Deed Amount: \$0.00

**Received the Following Fees For Above Instrument**

		Exempt			Exempt
Page/Filing	\$50.00	NO	Handling	\$20.00	NO
COE	\$5.00	NO	NYS SRCHG	\$15.00	NO
TP-584	\$5.00	NO	Notation	\$0.00	NO
Cert.Copies	\$0.00	NO	RPT	\$60.00	NO
Transfer tax	\$0.00	NO			
			Fees Paid	\$155.00	

TRANSFER TAX NUMBER: 13-04659

**THIS PAGE IS A PART OF THE INSTRUMENT  
THIS IS NOT A BILL**

**JUDITH A. PASCALE  
County Clerk, Suffolk County**



1 2

Number of pages

10

This document will be public record. Please remove all Social Security Numbers prior to recording.

RECORDED  
2013 Sep 17 04:35:21 PM  
JUDITH A. PASCALE  
CLERK OF  
SUFFOLK COUNTY  
L 000012744  
P 734  
DT# 13-04659

Deed / Mortgage Instrument	Deed / Mortgage Tax Stamp	Recording / Filing Stamps
----------------------------	---------------------------	---------------------------

3

## FEES

Page / Filing Fee 50-  
Handling 20.00  
TP-S84 5-  
Notation \_\_\_\_\_  
EA-5217 (County) \_\_\_\_\_  
EA-5217 (State) 60  
R.P.T.S.A. \_\_\_\_\_  
Comm. of Ed. 5.00  
Affidavit \_\_\_\_\_  
Certified Copy \_\_\_\_\_  
NYS Surcharge 15.00  
Other \_\_\_\_\_

Sub Total 75Sub Total 80-Grand Total 155

Mortgage Amt. \_\_\_\_\_  
1. Basic Tax \_\_\_\_\_  
2. Additional Tax \_\_\_\_\_  
Sub Total \_\_\_\_\_  
Spec./Assit. \_\_\_\_\_  
or \_\_\_\_\_  
Spec./Add. \_\_\_\_\_  
TOT. MTG. TAX \_\_\_\_\_  
Dual Town \_\_\_\_\_ Dual County \_\_\_\_\_  
Held for Appointment \_\_\_\_\_  
Transfer Tax \_\_\_\_\_  
Mansion Tax \_\_\_\_\_  
The property covered by this mortgage is or will be improved by a one or two family dwelling only.  
YES \_\_\_\_\_ or NO \_\_\_\_\_  
If NO, see appropriate tax clause on page # \_\_\_\_\_ of this instrument.

8-21-13

4 Dist. 0:

2571732

0200 97580 0400 020000

Real Property  
Tax Service  
Agency  
Verification



0

5 Community Preservation Fund

Consideration Amount \$ \_\_\_\_\_

CPF Tax Due \$ \_\_\_\_\_

6

Satisfactions/Discharges/Releases List Property Owners Mailing Address  
RECORD & RETURN TO:

Jennifer B. Kohn, Assistant County Attorney  
County of Suffolk  
H. Lee Dennison Bldg.  
100 Veterans Memorial Highway

Improved \_\_\_\_\_  
Vacant Land \_\_\_\_\_  
TD \_\_\_\_\_  
TD \_\_\_\_\_  
TD \_\_\_\_\_

Mail to: Judith A. Pascale, Suffolk County Clerk  
310 Center Drive, Riverhead, NY 11901  
www.suffolkcountyny.gov/clerk

7 Title Company Information

Co. Name Advantage Title Agency

Title # 10CS42798

8

## Suffolk County Recording &amp; Endorsement Page

This page forms part of the attached Environmental Easement made  
by: \_\_\_\_\_  
(SPECIFY TYPE OF INSTRUMENT)

County of Suffolk

The premises herein is situated in  
SUFFOLK COUNTY, NEW YORK

TO

In the TOWN of Brookhaven

New York State Department of Environmental

In the VILLAGE

Conservation

or HAMLET of \_\_\_\_\_

BOXES 6 THRU 8 MUST BE TYPED OR PRINTED IN BLACK INK ONLY PRIOR TO RECORDING OR FILING.

(over)

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

**THIS INDENTURE** made this 21<sup>st</sup> day of August, 2013 between Owner(s) County of Suffolk, having an office at 100 Veteran's Memorial Highway, Hauppauge, County of Suffolk, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

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

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

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

**WHEREAS**, Grantor, is the owner of real property located at the address of 1401 Montauk Highway, East Patchogue in the Town of Brookhaven, County of Suffolk and State of New York, known and designated on the tax map of the County Clerk of Suffolk as tax map parcel numbers: District 0200 Section 975.80 Block 04.00 Lot 020.000, being the same as that property conveyed to Grantor by deed dated September 27, 1999 and recorded in the Suffolk County Clerk's Office in Liber 11995 at Page 605. The property subject to this Environmental Easement is a portion of a larger parcel (the "Controlled Property"), comprising approximately 0.284 +/- acres, and is hereinafter more fully described in the Land Title Survey dated December 10, 2007 with the most recent revision being May 01, 2013, prepared by Daniel P. Jedlicka, P.L.S. of L.K. McLean Associates, P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

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

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of State Assistance Contract Number: C304320, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

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

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

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

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

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

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

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

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

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

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

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

[6/11]

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

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

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

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

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

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

**This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.**

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

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

[6/11]

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

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

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

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

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

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

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

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

(7) the information presented is accurate and complete.

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

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

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

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

5. Enforcement

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

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

[6/11]

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

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

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

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

Parties shall address correspondence to:      Site Number: E152194  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:      Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

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

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

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

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

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

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

Grantor: County of Suffolk

By: 

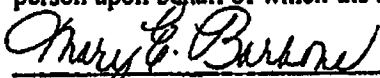
Print Name: Dennis M. Cohen

Title: Chief Deputy County Executive Date: 8/6/13

Grantor's Acknowledgment

STATE OF NEW YORK )  
COUNTY OF Suffolk ) ss:

On the 6 day of August in the year 2013, before me, the undersigned, personally appeared Dennis M. Cohen, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
Notary Public - State of New York

MARY E. BARBONE  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 018A6127940  
Qualified in Suffolk County  
My Commission Expires May 31, 2017

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

By: 

Robert W. Schick, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

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

On the 21<sup>st</sup> day of August, in the year 2013, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public - State of New York

**David J. Chiusano**  
Notary Public, State of New York  
No. 01CH5092146  
Qualified in Schenectady County  
Commission Expires August 22, 2014



**SCHEDULE "A" PROPERTY DESCRIPTION**

Description of Environment Easement to the People of the State of New York  
From County of Suffolk, reputed owner

Deed: Liber 11995 Page 605

Part of Tax Map No: 0200-975.80-04.00-020.000

Amended July 15, 2013

**DESCRIPTION OF ENVIRONMENTAL EASEMENT AREA**

ALL that certain plot, piece or parcel of land known as Lots 35 and 36 inclusive and part of Lots 34 and 37 of Block 785 on "Map No. 10, Map of Property of The New York and Brooklyn Suburban Investment Company of New York", filed August 5, 1890 in the Suffolk County Clerk's Office as File Map No. 102, situate, lying and being at Bellport, Town of Brookhaven, County of Suffolk, State of New York and shown on a survey prepared by L.K. McLean Associates, P.C. dated December 10, 2007. Said parcel being more particularly bounded and described as follows:

**BEGINNING** at a point formed by the intersection of the westerly boundary line of Lenox Avenue and the northerly boundary line of Montauk Highway (Robinson Blvd.);

**THENCE** from said point of beginning, South 87 degrees 18 minutes 20 seconds West, along said northerly boundary line of Montauk Highway (Robinson Blvd.), a distance of 101.07 feet to a point of intersection with the division line between the subject parcel on the east and land now or formerly of Montauk Highway Realty Corp. on the west;

**THENCE** North 05 degrees 38 minutes 00 seconds East, along said division line, a distance of 131.15 feet to a point;

**THENCE** South 84 degrees 22 minutes 00 seconds East, through said subject property, a distance of 100.00 feet to a point on the first mentioned westerly boundary line of Lenox Avenue;

**THENCE** South 05 degrees 38 minutes 00 seconds West, along said westerly boundary line of Lenox Avenue, a distance of 116.51 feet to the point or place of **BEGINNING**.

Survey No. 07024929

MAP OF PROPERTY  
OF  
COUNTY OF SUFFOLK  
FORMER BELLPORT GAS STATION  
ERP SITE NO. E 15218

AS SHOWN ON  
MAP NO. 10, MAP OF PROPERTY OF  
THE NEW YORK AND BROOKLYN SUBURBAN  
INVESTMENT COMPANY OF NEW YORK  
FILED: AUGUST 4, 1930 AS FILE MAP NO. 102  
LOTS 35 THRU 37 INCLUSIVE AND PART OF LOT 34

AREA OF PARCEL - 52,700 SQ. FT. OR 0.1923 ACRES  
AREA OF ENVIRONMENTAL ZONING - 11,381 SQ. FT. OR 0.2587 ACRES

## DIMENSIONS TO MONITORING WELLS FROM SET PROPERTY CORNERS

**Cover System**-The cover system is comprised of 5 feet of clean soils. Disturbance of soil below 15' below grade is restricted without notification of the NYSDOT. Procedures for the inspection and maintenance of this cover system are referred to in the Excavation Work Plan in Appendix B of the SWP.

cover system - the cover system is comprised of 5 feet of clean soils. Disturbance of soil below 15' below grade is restricted without notification of the NYSDEC. Procedures for the inspection and maintenance of this cover system are referred to in the Excavation Work Plan in Appendix B of the SMP.

Monitoring Wells-On-site monitoring wells shown on this survey shall be monitored, maintained and replaced as required in the SMP.

Groundwater Use Prohibition - the use of groundwater from beneath the property as a source of potable or process water, without necessary water quality treatment as determined by the NYSDEC, NYSDOH or SCDHS is prohibited.

Vegetable gardens and farming on the property are restricted as set forth in 6 NYCRR Section 375-1.6(a)(2).

Land Use - The use and development of the site is limited to "restricted residential," "commercial" and "industrial uses" (as defined by § NYCRR Section 375-1.6(g)(2)(ii)(iii) and (iv)) and no other.

Only use these codes and the listing of subjects shown on the Classification of Subjects for the subject groups from Group 1 in any of Section 2 of the Classification of Subjects.

**SECRET**