BROWNFIELD CLEANUP PROGRAM APPLICATION AND SUPPORTING DOCUMENTS

Town of Southampton

116 Hampton Road

Southampton, NY 11968

(Revised August 8, 2019)

Contact Info:

Francis Zappone

Deputy Supervisor

631 283 6055 x 1865

fzappone@southamptontownny.gov

BCP APPLICATION

AND SUPPLEMENTAL ATTACHEMENTS.

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

BROWNFIELD CLEANUP PROGRAM (BCP) APPLICATION FORM

DEC requires an application to request major changes to the description of the property set forth in a Brownfield Cleanup Agreement, or "*BCA*" (e.g., adding a significant amount of new property, or adding property that could affect an eligibility determination due to contamination levels or intended land use). Such application must be submitted and processed in the same manner as the original application, including the required public comment period. **Is this an application to amend an existing BCA?**

☐ **Yes** ☑ **No** **If yes, provide existing site number:**

PART A (note: application is separated into Parts A and B for DEC review purposes) ***BCP App Rev 10***

Section I. Requestor Information - See Instructions for Further Guidance DEC USE ONLY BCP SITE #:

NAME Town of Southampton

ADDRESS 116 Hampton Road

CITY/TOWN Southampton ZIP CODE 11968

PHONE 631 283 6055 | FAX 631 287 5708 | E-MAIL fzappone@southamptontownny.gov

Is the requestor authorized to conduct business in New York State (NYS)? ☑ Yes ☐ No

- If the requestor is a Corporation, LLC, LLP or other entity requiring authorization from the NYS Department of State to conduct business in NYS, the requestor's name must appear, exactly as given above, in the NYS Department of State's Corporation & Business Entity Database. A print-out of entity information from the database must be submitted to the New York State Department of Environmental Conservation (DEC) with the application to document that the requestor is authorized to do business in NYS. **Please note:** If the requestor is an LLC, the members/owners names need to be provided on a separate attachment.

Do all individuals that will be certifying documents meet the requirements detailed below? ☑ Yes ☐ No

- Individuals that will be certifying BCP documents, as well as their employers, meet the requirements of Section 1.5 of *DER-10: Technical Guidance for Site Investigation and Remediation* and Article 145 of New York State Education Law. **Documents that are not properly certified will be not approved under the BCP.**

Section II. Project Description

1. What stage is the project starting at? ☑ Investigation ☐ Remediation

   NOTE: If the project is proposed to start at the remediation stage, a Remedial Investigation Report (RIR) at a minimum is required to be attached, resulting in a 30-day public comment period. If an Alternatives Analysis and Remedial Work Plan are also attached (see DER-10 / Technical Guidance for Site Investigation and Remediation for further guidance) then a 45-day public comment period is required.

2. If a final RIR is included, please verify it meets the requirements of Environmental Conservation Law (ECL) Article 27-1415(2): ☐ Yes ☐ No

3. Please attach a short description of the overall development project, including:
   - the date that the remedial program is to start; and
   - the date the Certificate of Completion is anticipated.

Section III. Property's Environmental History

All applications **must include** an Investigation Report (per ECL 27-1407(1)). The report must be sufficient to establish contamination of environmental media on the site above applicable Standards, Criteria and Guidance (SCGs) based on the reasonably anticipated use of the property.

To the extent that existing information/studies/reports are available to the requestor, please attach the following (***please submit the information requested in this section in electronic format only***):

1. **Reports:** an example of an Investigation Report is a Phase II Environmental Site Assessment report prepared in accordance with the latest American Society for Testing and Materials standard (ASTM E1903). **Please submit a separate electronic copy of each report in Portable Document Format (PDF).**

2. SAMPLING DATA: INDICATE KNOWN CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN TO HAVE BEEN AFFECTED. LABORATORY REPORTS SHOULD BE REFERENCED AND COPIES INCLUDED.

Contaminant Category	Soil	Groundwater	Soil Gas
Petroleum			
Chlorinated Solvents			
Other VOCs			
SVOCs			
Metals			
Pesticides			
PCBs			
Other*		X	

***Please describe:** Per and Polyfluoroalkyl Substances (PFAS)

3. FOR EACH IMPACTED MEDIUM INDICATED ABOVE, INCLUDE A SITE DRAWING INDICATING:

- **SAMPLE LOCATION**
- **DATE OF SAMPLING EVENT**
- **KEY CONTAMINANTS AND CONCENTRATION DETECTED**
- **FOR SOIL, HIGHLIGHT IF ABOVE REASONABLY ANTICIPATED USE**
- **FOR GROUNDWATER, HIGHLIGHT EXCEEDANCES OF 6NYCRR PART 703.5**
- **FOR SOIL GAS/ SOIL VAPOR/ INDOOR AIR, HIGHLIGHT IF ABOVE MITIGATE LEVELS ON THE NEW YORK STATE DEPARTMENT OF HEALTH MATRIX**

THESE DRAWINGS ARE TO BE REPRESENTATIVE OF ALL DATA BEING RELIED UPON TO MAKE THE CASE THAT THE SITE IS IN NEED OF REMEDIATION UNDER THE BCP. DRAWINGS SHOULD NOT BE BIGGER THAN 11" X 17". THESE DRAWINGS SHOULD BE PREPARED IN ACCORDANCE WITH ANY GUIDANCE PROVIDED.

ARE THE REQUIRED MAPS INCLUDED WITH THE APPLICATION?* ☑ **Yes** ☐ **No**
(*answering No will result in an incomplete application)

4. INDICATE PAST LAND USES (CHECK ALL THAT APPLY):

☐ Coal Gas Manufacturing	☐ Manufacturing	☐ Agricultural Co-op	☐ Dry Cleaner
☐ Salvage Yard	☐ Bulk Plant	☐ Pipeline	☐ Service Station
☑ Landfill	☐ Tannery	☐ Electroplating	☐ Unknown

Other: See included document sesrch

Section IV. Property Information - See Instructions for Further Guidance

PROPOSED SITE NAME Damascus Road Landfill

ADDRESS/LOCATION 146 Damascus Road

CITY/TOWN East Quogue ZIP CODE 11942

MUNICIPALITY(IF MORE THAN ONE, LIST ALL):
Southampton

COUNTY Suffolk SITE SIZE (ACRES) 10.2

LATITUDE (degrees/minutes/seconds) 40 ° 50 ' 52N "

LONGITUDE (degrees/minutes/seconds) 72 ° 35 ' 53W "

Complete tax map information for all tax parcels included within the proposed site boundary. If a portion of any lot is proposed , please indicate as such by inserting "P/O" in front of the lot number in the appropriate box below, and only include the acreage for that portion of the tax parcel in the corresponding far right column.ATTACH REQUIRED MAPS PER THE APPLICATION INSTRUCTIONS.

Parcel Address	Section No.	Block No.	Lot No.	Acreage
146 Damascus Rd. East Quogue, NY	288	1	35	10.2
See attached for additional information	341	2	4.16	1.3

1. Do the proposed site boundaries correspond to tax map metes and bounds? ☑ Yes ☐ No
   If no, please attach an accurate map of the propsed site.

2. Is the required property map attached to the application? ☑ Yes ☐ No
   (application will not be processed without map)

3. Is the property within a designated Environmental Zone (En-zone) pursuant to Tax Law 21(b)(6)?
   (See DEC's website for more information) Yes ☐ No ☑

   If yes, identify census tract : _____

   Percentage of property in En-zone (check one): ☐ 0-49% ☐ 50-99% ☐ 100%

4. Is this application one of multiple applications for a large development project, where the development project spans more than 25 acres (see additional criteria in BCP application instructions)? ☐ Yes ☑ No

   If yes, identify name of properties (and site numbers if available) in related BCP applications:_____

5. Is the contamination from groundwater or soil vapor solely emanating from property other than the site subject to the present application? ☐ Yes ☑ No

6. Has the property previously been remediated pursuant to Titles 9, 13, or 14 of ECL Article 27, Title 5 of ECL Article 56, or Article 12 of Navigation Law? ☐ Yes ☑ No
   If yes, attach relevant supporting documentation.

7. Are there any lands under water? ☐ Yes ☑ No
   If yes, these lands should be clearly delineated on the site map.

Section IV. Property Information (continued)

8. Are there any easements or existing rights of way that would preclude remediation in these areas? ☐ Yes ☑ No
   If yes, identify here and attach appropriate information.

Easement/Right-of-way Holder	Description

9. List of Permits issued by the DEC or USEPA Relating to the Proposed Site (type here or attach information)

Type	Issuing Agency	Description

10. Property Description and Environmental Assessment – **please refer to application instructions for the proper format of <u>each</u> narrative requested.**

    Are the Property Description and Environmental Assessment narratives included in the **prescribed format**? ☑ Yes ☐ No

Note: Questions 11 through 13 only pertain to sites located within the five counties comprising New York City

11. Is the requestor seeking a determination that the site is eligible for tangible property tax credits? ☐ Yes ☑ No
    If yes, requestor must answer questions on the supplement at the end of this form.

12. Is the Requestor now, or will the Requestor in the future, seek a determination that the property is Upside Down? ☐ Yes ☑ No

13. If you have answered *Yes* to Question 12, above, is an independent appraisal of the value of the property, as of the date of application, prepared under the hypothetical condition that the property is not contaminated, included with the application? ☐ Yes ☑ No

NOTE: If a tangible property tax credit determination is not being requested in the application to participate in the BCP, the applicant may seek this determination at any time before issuance of a certificate of completion by using the BCP Amendment Application, <u>except</u> for sites seeking eligibility under the underutilized category.

If any changes to Section IV are required prior to application approval, a new page, initialed by each requestor, must be submitted.

Initials of each Requestor: J.J. _____ _____ _____ _____ _____

BCP application - PART B (note: application is separated into Parts A and B for DEC review purposes)

Section V. Additional Requestor Information See Instructions for Further Guidance	DEC USE ONLY BCP SITE NAME: _____ BCP SITE #: _____	
NAME OF REQUESTOR'S AUTHORIZED REPRESENTATIVE Francis Zappone		
ADDRESS 116 Hampton Road		
CITY/TOWN Southampton, New York		ZIP CODE 11968
PHONE 631 283 6055	FAX 631 287 5708	E-MAIL fzappone@southamptontownny.gov
NAME OF REQUESTOR'S CONSULTANT Amec E&E, PC (Eric Weinstock)		
ADDRESS 214-25 42nd Avenue, Suite 3R		
CITY/TOWN Bayside		ZIP CODE 11361
PHONE 347-836-4343	FAX	E-MAIL eric.weinstock@amecfw.com
NAME OF REQUESTOR'S ATTORNEY James Burke		
ADDRESS 116 Hampton Road		
CITY/TOWN Southampton		ZIP CODE 11968
PHONE 631 287 3965	FAX 631 287 3662	E-MAIL jburke@southamptontownny.gov
Section VI. Current Property Owner/Operator Information – if not a Requestor		
CURRENT OWNER'S NAME		OWNERSHIP START DATE:
ADDRESS		
CITY/TOWN		ZIP CODE
PHONE	FAX	E-MAIL
CURRENT OPERATOR'S NAME		
ADDRESS		
CITY/TOWN		ZIP CODE
PHONE	FAX	E-MAIL

PROVIDE A LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS AS AN ATTACHMENT. DESCRIBE REQUESTOR'S RELATIONSHIP, TO EACH PREVIOUS OWNER AND OPERATOR, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND PREVIOUS OWNER AND OPERATOR. IF NO RELATIONSHIP, PUT "NONE".

IF REQUESTOR IS NOT THE CURRENT OWNER, DESCRIBE REQUESTOR'S RELATIONSHIP TO THE CURRENT OWNER, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND THE CURRENT OWNER.

Section VII. Requestor Eligibility Information (Please refer to ECL § 27-1407)

If answering "yes" to any of the following questions, please provide an explanation as an attachment.

1. Are any enforcement actions pending against the requestor regarding this site? ☐ Yes ☑ No
2. Is the requestor subject to an existing order for the investigation, removal or remediation of contamination at the site? ☐ Yes ☑ No
3. Is the requestor subject to an outstanding claim by the Spill Fund for this site? Any questions regarding whether a party is subject to a spill claim should be discussed with the Spill Fund Administrator. ☐ Yes ☑ No

Section VII. Requestor Eligibility Information (continued)

4. Has the requestor been determined in an administrative, civil or criminal proceeding to be in violation of i) any provision of the ECL Article 27; ii) any order or determination; iii) any regulation implementing Title 14; or iv) any similar statute, regulation of the state or federal government? If so, provide an explanation on a separate attachment. ☐ Yes ☑ No
5. Has the requestor previously been denied entry to the BCP? If so, include information relative to the application, such as name, address, DEC assigned site number, the reason for denial, and other relevant information. ☐ Yes ☑ No
6. Has the requestor been found in a civil proceeding to have committed a negligent or intentionally tortious act involving the handling, storing, treating, disposing or transporting of contaminants? ☐ Yes ☑ No
7. Has the requestor been convicted of a criminal offense i) involving the handling, storing, treating, disposing or transporting of contaminants; or ii) that involves a violent felony, fraud, bribery, perjury, theft, or offense against public administration (as that term is used in Article 195 of the Penal Law) under federal law or the laws of any state? ☐ Yes ☑ No
8. Has the requestor knowingly falsified statements or concealed material facts in any matter within the jurisdiction of DEC, or submitted a false statement or made use of or made a false statement in connection with any document or application submitted to DEC? ☐ Yes ☑ No
9. Is the requestor an individual or entity of the type set forth in ECL 27-1407.9 (f) that committed an act or failed to act, and such act or failure to act could be the basis for denial of a BCP application? ☐ Yes ☑ No
10. Was the requestor's participation in any remedial program under DEC's oversight terminated by DEC or by a court for failure to substantially comply with an agreement or order? ☐ Yes ☑ No
11. Are there any unregistered bulk storage tanks on-site which require registration? ☐ Yes ☑ No

THE REQUESTOR MUST CERTIFY THAT HE/SHE IS EITHER A PARTICIPANT OR VOLUNTEER IN ACCORDANCE WITH ECL 27-1405 (1) BY CHECKING ONE OF THE BOXES BELOW:

☐ PARTICIPANT

A requestor who either 1) was the owner of the site at the time of the disposal of hazardous waste or discharge of petroleum or 2) is otherwise a person responsible for the contamination, unless the liability arises solely as a result of ownership, operation of, or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

☑ VOLUNTEER

A requestor other than a participant, including a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

NOTE: By checking this box, a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site certifies that he/she has exercised appropriate care with respect to the hazardous waste found at the facility by taking reasonable steps to: i) stop any continuing discharge; ii) prevent any threatened future release; iii) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous waste.

If a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site, submit a statement describing why you should be considered a volunteer – be specific as to the appropriate care taken.

Section VII. Requestor Eligibility Information (continued)

Requestor Relationship to Property (check one):
☐ Previous Owner ☑ Current Owner ☐ Potential /Future Purchaser ☐ Other_____

If requestor is not the current site owner, **proof of site access sufficient to complete the remediation must be submitted**. Proof must show that the requestor will have access to the property before signing the BCA and throughout the BCP project, including the ability to place an easement on the site Is this proof attached?

☐ Yes ☐ No

Note: a purchase contract does not suffice as proof of access.

Section VIII. Property Eligibility Information - See Instructions for Further Guidance

1. Is / was the property, or any portion of the property, listed on the National Priorities List?
   If yes, please provide relevant information as an attachment. ☐ Yes ☑ No
2. Is / was the property, or any portion of the property, listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites pursuant to ECL 27-1305? ☐ Yes ☑ No
   If yes, please provide: Site #_____ Class # _____
3. Is / was the property subject to a permit under ECL Article 27, Title 9, other than an Interim Status facility? ☐ Yes ☑ No
   If yes, please provide: Permit type:_____ EPA ID Number:_____
   Date permit issued:_____ Permit expiration date:_____
4. If the answer to question 2 or 3 above is yes, is the site owned by a volunteer as defined under ECL 27-1405(1)(b), or under contract to be transferred to a volunteer? Attach any information available to the requestor related to previous owners or operators of the facility or property and their financial viability, including any bankruptcy filing and corporate dissolution documentation. ☐ Yes ☑ No
5. Is the property subject to a cleanup order under Navigation Law Article 12 or ECL Article 17 Title 10?
   If yes, please provide: Order #_____ ☐ Yes ☑ No
6. Is the property subject to a state or federal enforcement action related to hazardous waste or petroleum?
   If yes, please provide explanation as an attachment. ☐ Yes ☑ No

Section IX. Contact List Information

To be considered complete, the application must include the Brownfield Site Contact List in accordance with *DER-23 / Citizen Participation Handbook for Remedial Programs*. Please attach, at a minimum, the names and addresses of the following:

1. The chief executive officer and planning board chairperson of each county, city, town and village in which the property is located.
2. Residents, owners, and occupants of the property and properties adjacent to the property.
3. Local news media from which the community typically obtains information.
4. The public water supplier which services the area in which the property is located.
5. Any person who has requested to be placed on the contact list.
6. The administrator of any school or day care facility located on or near the property.
7. The location of a document repository for the project (e.g., local library). **If the site is located in a city with a population of one million or more, add the appropriate community board as an additional document repository**. In addition, attach a copy of an acknowledgement from each repository indicating that it agrees to act as the document repository for the site.

Section X. Land Use Factors

1. What is the current municipal zoning designation for the site? CR 80

   What uses are allowed by the current zoning? (Check boxes, below)

   ☑ Residential ☑ Commercial ☐ Industrial

   If zoning change is imminent, please provide documentation from the appropriate zoning authority.

2. Current Use: ☐ Residential ☐ Commercial ☐ Industrial ☑ Vacant ☐ Recreational (check all that apply)
   Attach a summary of current business operations or uses, with an emphasis on identifying possible contaminant source areas. If operations or uses have ceased, provide the date.

3. Reasonably anticipated use Post Remediation: ☐ Residential ☑ Commercial ☑ Industrial (check all that apply) **Attach a statement detailing the specific proposed use.**

   If residential, does it qualify as single family housing? ☐ Yes ☐ No

4. Do current historical and/or recent development patterns support the proposed use?	☑ Yes ☐ No
5. Is the proposed use consistent with applicable zoning laws/maps? Briefly explain below, or attach additional information and documentation if necessary.	☑ Yes ☐ No
6. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, or other adopted land use plans? Briefly explain below, or attach additional information and documentation if necessary.	☑ Yes ☐ No

XI. Statement of Certification and Signatures

(By requestor who is an individual)

If this application is approved, I hererby acknowledge and agree: (1) to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date of DEC's approval letter; (2) to the general terms and conditions set forth in the *DER-32, Brownfield Cleanup Program Applications and Agreements*; and (3) that in the event of a conflict between the general terms and conditions of participation and the terms contained in a site-specific BCA, the terms in the site-specific BCA shall control. Further, I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Date: _____ Signature: _____

Print Name: _____

(By a requestor other than an individual)

I hereby affirm that I am _____(title) of _____(entity); that I am authorized by that entity to make this application and execute the Brownfield Cleanup Agreement (BCA) and all subsequent amendments; that this application was prepared by me or under my supervision and direction. If this application is approved, I acknowledge and agree: (1) to execute a BCA within 60 days of the date of DEC's approval letter; (2) to the general terms and conditions set forth in the *DER-32, Brownfield Cleanup Program Applications and Agreements*; and (3) that in the event of a conflict between the general terms and conditions of participation and the terms contained in a site-specific BCA, the terms in the site-specific BCA shall control. Further, I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date: 7/31/19 Signature: _____

Print Name: Jay Schneiderman, Supervisor

SUBMITTAL INFORMATION:

- **Two (2)** copies, one paper copy with original signatures and one electronic copy in Portable Document Format (PDF), must be sent to:
  - Chief, Site Control Section
  - New York State Department of Environmental Conservation
  - Division of Environmental Remediation
  - 625 Broadway
  - Albany, NY 12233-7020

FOR DEC USE ONLY
BCP SITE T&A CODE:_____ **LEAD OFFICE:**_____

Supplemental Questions for Sites Seeking Tangible Property Credits in New York City ONLY. Sufficient information to demonstrate that the site meets one or more of the criteria identified in ECL 27 1407(1-a) must be submitted if requestor is seeking this determination.

BCP App Rev 10

Property is in Bronx, Kings, New York, Queens, or Richmond counties.	☐ Yes ☐ No
Requestor seeks a determination that the site is eligible for the tangible property credit component of the brownfield redevelopment tax credit.	☐ Yes ☐ No
Please answer questions below and provide documentation necessary to support answers.	
1. Is at least 50% of the site area located within an environmental zone pursuant to NYS Tax Law 21(b)(6)? Please see DEC's website for more information.	☐ Yes ☐ No
2. Is the property upside down or underutilized as defined below?	Upside Down? ☐ Yes ☐ No Underutilized? ☐ Yes ☐ No

From ECL 27-1405(31):

"Upside down" shall mean a property where the projected and incurred cost of the investigation and remediation which is protective for the anticipated use of the property equals or exceeds seventy-five percent of its independent appraised value, as of the date of submission of the application for participation in the brownfield cleanup program, developed under the hypothetical condition that the property is not contaminated.

From 6 NYCRR 375-3.2(l) as of August 12, 2016: (Please note: Eligibility determination for the underutilized category can only be made at the time of application)

375-3.2:

(l) "Underutilized" means, as of the date of application, real property on which no more than fifty percent of the permissible floor area of the building or buildings is certified by the applicant to have been used under the applicable base zoning for at least three years prior to the application, which zoning has been in effect for at least three years; and

(1) the proposed use is at least 75 percent for industrial uses; or

(2) at which:

(i) the proposed use is at least 75 percent for commercial or commercial and industrial uses;

(ii) the proposed development could not take place without substantial government assistance, as certified by the municipality in which the site is located; and

(iii) one or more of the following conditions exists, as certified by the applicant:

(a) property tax payments have been in arrears for at least five years immediately prior to the application;

(b) a building is presently condemned, or presently exhibits documented structural deficiencies, as certified by a professional engineer, which present a public health or safety hazard; or

(c) there are no structures.

"Substantial government assistance" shall mean a substantial loan, grant, land purchase subsidy, land purchase cost exemption or waiver, or tax credit, or some combination thereof, from a governmental entity.

Supplemental Questions for Sites Seeking Tangible Property Credits in New York City (continued)

3.

☐ Project is an Affordable Housing Project - Regulatory Agreement Attached;

☐ Project is Planned as Affordable Housing, But Agreement is Not Yet Available* (*Checking this box will result in a "pending" status. The Regulatory Agreement will need to be provided to the Department and the Brownfield Cleanup Agreement will need to be amended prior to issuance of the CoC in order for a positive determination to be made.);

☐ This is Not an Affordable Housing Project.

From 6 NYCRR 375- 3.2(a) as of August 12, 2016:

(a) "Affordable housing project" means, for purposes of this part, title fourteen of article twenty seven of the environmental conservation law and section twenty-one of the tax law only, a project that is developed for residential use or mixed residential use that must include affordable residential rental units and/or affordable home ownership units.

(1) Affordable residential rental projects under this subdivision must be subject to a federal, state, or local government housing agency's affordable housing program, or a local government's regulatory agreement or legally binding restriction, which defines (i) a percentage of the residential rental units in the affordable housing project to be dedicated to (ii) tenants at a defined maximum percentage of the area median income based on the occupants' households annual gross income.

(2) Affordable home ownership projects under this subdivision must be subject to a federal, state, or local government housing agency's affordable housing program, or a local government's regulatory agreement or legally binding restriction, which sets affordable units aside for home owners at a defined maximum percentage of the area median income.

(3) "Area median income" means, for purposes of this subdivision, the area median income for the primary metropolitan statistical area, or for the county if located outside a metropolitan statistical area, as determined by the United States department of housing and urban development, or its successor, for a family of four, as adjusted for family size.

BCP Application Summary (for DEC use only)

Site Name: Damascus Road Landfill **Site Address:** 146 Damascus Road
City: East Quogue **County:** Suffolk **Zip:** 11942

Tax Block & Lot
Section (if applicable): 288 **Block:** 1 **Lot:** 35

Requestor Name: Town of Southampton **Requestor Address:** 116 Hampton Road
City: Southampton **Zip:** 11968 **Email:** fzappone@southamptontownny.gov

Requestor's Representative (for billing purposes)
Name: Francis Zappone **Address:** 116 Hampton Road
City: Southampton, New York **Zip:** 11968 **Email:** fzappone@southamptontownny.gov

Requestor's Attorney
Name: James Burke **Address:** 116 Hampton Road
City: Southampton **Zip:** 11968 **Email:** jburke@southamptontownny.gov

Requestor's Consultant
Name: Amec E&E, PC (Eric Weinstock) **Address:** 214-25 42nd Avenue, Suite 3R
City: Bayside **Zip:** 11361 **Email:** eric.weinstock@amecfw.com

Percentage claimed within an En-Zone: ☑ 0% ☐ <50% ☐ 50-99% ☐ 100%

DER Determination: ☐ Agree ☐ Disagree

Requestor's Requested Status: ☑ Volunteer ☐ Participant

DER/OGC Determination: ☐ Agree ☐ Disagree
Notes:

For NYC Sites, is the Requestor Seeking Tangible Property Credits: ☐ Yes ☐ No

Does Requestor Claim Property is Upside Down: ☐ Yes ☐ No

DER/OGC Determination: ☐ Agree ☐ Disagree ☐ Undetermined

Notes:

Does Requestor Claim Property is Underutilized: ☐ Yes ☐ No

DER/OGC Determination: ☐ Agree ☐ Disagree ☐ Undetermined

Notes:

Does Requestor Claim Affordable Housing Status: ☐ Yes ☐ No ☐ Planned, No Contract

DER/OGC Determination: ☐ Agree ☐ Disagree ☐ Undetermined

Notes:

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BROWNFIELD CLEANUP PROGRAM (BCP)
INSTRUCTIONS FOR COMPLETING A BCP APPLICATION

The New York State Department of Environmental Conservation (DEC) strongly encourages all applicants to schedule a pre-application meeting with DEC staff to review the benefits, requirements, and procedures for completing a project in the BCP. Contact your Regional office to schedule a meeting. To add a party to an existing BCP Agreement and/or Application, use the BCP Agreement Amendment Application. **See guidance at the end of these instructions regarding the determination of a complete application.**

SECTION I REQUESTOR INFORMATION

Requestor Name

Provide the name of the person(s)/entity requesting participation in the BCP. (If more than one, attach additional sheets with requested information. If an LLC, the members/owners names need to be provided on a separate attachment). The requestor is the person or entity seeking DEC review and approval of the remedial program.

If the requestor is a Corporation, LLC, LLP or other entity requiring authorization from the NYS Department of State to conduct business in NYS, the requestor's name must appear exactly as given in the NYS Department of State's Corporation & Business Entity Database. A print-out of entity information from the database must be submitted to DEC with the application, to document that the requestor is authorized to do business in NYS.

Address, etc.

Provide the requestor's mailing address, telephone number; fax number and e-mail address.

Document Certification

All documents, which are prepared in final form for submission to DEC for approval, are to be prepared and certified in accordance with Section 1.5 of DER-10. Persons preparing and certifying the various work plans and reports identified in Section 1.5 include:

- New York State licensed professional engineers (PEs), as defined at 6 NYCRR 375-1.2(aj) and paragraph 1.3(b)47. Engineering documents must be certified by a PE with current license and registration for work that was done by them or those under their direct supervision. The firm by which the PE is employed must also be authorized to practice engineering in New York State;
- qualified environmental professionals as defined at 6 NYCRR 375-1.2(ak) and DER-10 paragraph 1.3(b)49;
- remedial parties, as defined at 6 NYCRR 375-1.2(ao) and DER-10 paragraph 1.3(b)60; or
- site owners, which are the owners of the property comprising the site at the time of the certification.

SECTION II PROJECT DESCRIPTION

As a separate attachment, provide complete and detailed information about the project, including the purpose of the project, the date the remedial program is to start, and the date the Certificate of Completion is anticipated..

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SECTION III PROPERTY'S ENVIRONMENTAL HISTORY

Please follow instructions on application form.

SECTION IV PROPERTY INFORMATION

Proposed Site Name

Provide a name for the proposed site. The name could be an owner's name, current or historical operations (i.e. ABC Furniture) or the general location of the property. Consider whether the property is known by DEC by a particular name, and if so, use that name.

Site Address

Provide a street address, city/town, zip code, and each municipality and county in which the site is located. .

Site Size

Provide the approximate acreage of the site.

GIS Information

Provide the latitude and longitude for the approximate center of the property. Show the latitude and longitude in degrees, minutes and seconds.

Tax Parcel Information

Provide the tax parcel address/section/block/lot information and map. Tax map information may be obtained from the tax assessor's office for all tax parcels that are included in the property boundaries. Attach a county tax map with identifier numbers, along with any figures needed to show the location and boundaries of the property. Include a USGS 7.5 minute quad map on which the property appears and clearly indicate the proposed site's location.

1. Tax Map Boundaries

State whether the boundaries of the site correspond to the tax map boundaries. If no, a metes and bounds description of the property must be attached. The site boundary can occupy less than a tax lot or encompass portions of one or more tax lots and may be larger or smaller than the overall redevelopment/ reuse project area. A site survey with metes and bounds will be required to establish the site boundaries before the Certificate of Completion can be issued.

2. Map

Provide a property base map(s) of sufficient detail, clarity and accuracy to show the following: i) map scale, north arrow orientation, date, and location of the property with respect to adjacent streets and roadways; and ii) proposed brownfield property boundary lines, with adjacent property owners clearly identified.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SECTION IV (continued)

3. En-zone

Is any part of the property in an En-zone? If so, what percentage? For information on En-zones, please see DEC's website.

4. Multiple applications

Generally, only one application can be submitted, and one BCA executed, for a development project. In limited circumstances, the DEC may consider multiple applications/BCAs for a development project where 1) the development project spans more than 25 acres; 2) the approach does not negatively impact the remedial program, including timing, ability to appropriately address areas of concern, and management of off-site concerns; and 3) the approach is not advanced to increase the value of future tax credits (i.e., circumvent the tax credit caps provided under New York State Tax Law Section 21).

10. Property Description Narrative

Provide a property description in the format provided below. Each section should be no more than one paragraph long.

Location

Example: "The XYZ Site is located in an {urban, suburban, rural} area." {Add reference points if address is unspecific; e.g., "The site is approximately 3.5 miles east of the intersection of County Route 55 and Industrial Road."}

Site Features:

Example: "The main site features include several large abandoned buildings surrounded by former parking areas and roadways. About one quarter of the site area is wooded. Little Creek passes through the northwest corner."

Current Zoning and Land Use: (Ensure the current zoning is identified.)

Example: "The site is currently inactive, and is zoned for commercial use. The surrounding parcels are currently used for a combination of commercial, light industrial, and utility right-of-ways. The nearest residential area is 0.3 miles east on Route 55."

Past Use of the Site: include source(s) of contamination and remedial measures (site characterizations, investigations, Interim Remedial Measures, etc.) completed outside of the current remedial program (e.g., work under a petroleum spill incident).

Example: "Until 1992 the site was used for manufacturing wire and wire products (e.g., conduit, insulators) and warehousing. Prior uses that appear to have led to site contamination include metal plating, machining, disposal in a one-acre landfill north of Building 7, and releases of wastewater into a series of dry wells."

When describing the investigations/actions performed outside of the remedial program, include the major chronological remedial events that lead to the site entering a remedial program. The history should include the first involvement by government to address hazardous waste/petroleum disposal. Do not cite reports. Only include remedial activities which were implemented PRIOR to the BCA. Do not describe sampling information.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SECTION IV (continued)

Property Description Narrative (continued)

Site Geology and Hydrogeology:

As appropriate, provide a very brief summary of the main hydrogeological features of the site including depth to water, groundwater flow direction, etc.

Environmental Assessment

The goal of this section is to describe the nature and extent of contamination at the site. When describing the nature of contamination, identify just the primary contaminants of concern (i.e., those that will likely drive remedial decisions/ actions). If there are many contaminants present within a group of contaminants (i.e., volatile organic compounds, semivolatile organic compounds, metals), identify the group(s) and one or two representative contaminants within the group. When addressing the extent of contamination, identify the areas of concern at the site, contaminated media (i.e., soil, groundwater, etc.), relative concentration levels, and a broad-brush description of contaminated areas/depths.

The reader should be able to know if contamination is widespread or limited and if concentrations are marginally or greatly above Standards, Criteria and Guidance (SGCs) for the primary contaminants. If the extent is described qualitatively (e.g., low, medium, high), representative concentrations should be given and compared with appropriate SCGs. For soil contamination, the concentrations should be compared with the soil cleanup objectives (SCOs) for the intended use of the site.

A typical Environmental Assessment would look like the following:

Based upon investigations conducted to date, the primary contaminants of concern for the site include cadmium and trichloroethene (TCE).
Soil - Cadmium is found in shallow soil, mostly near a dry well at the northeast end of the property. TCE is found in deeper soil, predominantly at the north end of the site. Concentrations of cadmium found on site (approximately 5 ppm) slightly exceed the soil cleanup objective (SCO) for unrestricted use (2.5 ppm). Concentrations of TCE found on site (5 ppm to 300 ppm) significantly exceed the soil cleanup objectives for the protection of groundwater (0.47 ppm).
Groundwater - TCE and its associated degradation products are also found in groundwater at the north end of the site, moderately exceeding groundwater standards (typically 5 ppb), with a maximum concentration of 1500 ppb. A moderate amount of TCE from the site has migrated 300 feet down-gradient off-site. The primary contaminant of concern for the off-site area is TCE, which is present at a maximum concentration of 500 ppb, at 10 feet below the groundwater table near Avenue A.
Soil Vapor & Indoor Air - TCE was detected in soil vapor at elevated concentrations and was also detected in indoor air at concentrations up to 1,000 micrograms per cubic meter.

If any changes to Section IV are required prior to application approval, a new page, initialed by each requestor, must be submitted.

SECTION V ADDITIONAL REQUESTOR INFORMATION

Representative Name, Address, etc.

Provide information for the requestor's authorized representative. This is the person to whom all correspondence, notices, etc. will be sent, and who will be listed as the contact person in the BCA. Invoices will be sent to the representative of Applications determined to be Participants unless another contact name and address is provided with the application.

Consultant and Attorney Name, Address, etc.

Provide requested information.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SECTION VI CURRENT PROPERTY OWNER/OPERATOR INFORMATION (IF NOT A REQUESTOR)

Owner Name, Address, etc.

Provide requested information of the current owner of the property. List all parties holding an interest in the Property and, if the Requestor is not the current owner, describe the Requestor's relationship to the current owner.

Operator Name, Address, etc.

Provide requested information of the current operator (if different from the requestor or owner).

Provide a list of previous property owners and operators with names, last known addresses, telephone numbers and the Requestor's relationship to each owner and operator as a separate attachment

SECTION VII REQUESTOR ELIGIBILITY INFORMATION

As a separate attachment, provide complete and detailed information in response to any eligibility questions answered in the affirmative. It is permissible to reference specific sections of existing property reports; however, it is requested that such information be summarized. For properties with multiple addresses or tax parcels, please include this information for each address or tax parcel.

SECTION VIII PROPERTY ELIGIBILITY INFORMATION

As a separate attachment, provide complete and detailed information in response to the following eligibility questions answered in the affirmative. It is permissible to reference specific sections of existing property reports; however, it is requested that that information be summarized.

1. CERCLA / NPL Listing

Has any portion of the property ever been listed on the National Priorities List (NPL) established under CERCLA? If so, provide relevant information.

2. Registry Listing

Has any portion of the property ever been listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites established under ECL 27-1305? If so, please provide the site number and classification. See the Division of Environmental Remediation (DER) website for a database of sites with classifications.

3. RCRA Listing

Does the property have a Resource Conservation and Recovery Act (RCRA) TSDF Permit in accordance with the ECL 27-0900 *et seq*? If so, please provide the EPA Identification Number, the date the permit was issued, and its expiration date. Note: for purposes of this application, interim status facilities are not deemed to be subject to a RCRA permit.

4. Registry / RCRA sites owned by volunteers

If the answer to question 2 or 3 above is yes, is the site owned by a volunteer as defined under ECL 27-1405(1)(b), or under contract to be transferred to a volunteer? Attach any information available to the requestor related to previous owners or operators of the facility or property and their financial viability, including any bankruptcy filing and corporate dissolution documentation.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SECTION VIII (continued)

5. Existing Order

Is the property subject to an order for cleanup under Article 12 of the Navigation Law or Article 17 Title 10 of the ECL? If so, please provide information on an attachment. Note: if the property is subject to a stipulation agreement, relevant information should be provided; however, property will not be deemed ineligible solely on the basis of the stipulation agreement.

6. Enforcement Action Pending

Is the property subject to an enforcement action under Article 27, Titles 7 or 9 of the ECL or subject to any other ongoing state or federal enforcement action related to the contamination which is at or emanating from the property? If so, please provide information on an attachment.

SECTION IX CONTACT LIST INFORMATION

Provide the names and addresses of the parties on the Site Contact List (SCL) and a letter from the repository acknowledging agreement to act as the document repository for the proposed BCP project.

SECTION X LAND USE FACTORS

In addition to eligibility information, site history, and environmental data/reports, the application requires information regarding the current, intended and reasonably anticipated future land use.

1. This information consists of responses to the "land use" factors to be considered relative to the "Land Use" section of the BCP application. The information will be used to determine the appropriate land use in conjunction with the investigation data provided, in order to establish eligibility for the site based on the definition of a "brownfield site" pursuant to ECL 27-1405(2).

2. This land use information will be used by DEC, in addition to all other relevant information provided, to determine whether the proposed use is consistent with the currently identified, intended and reasonably anticipated future land use of the site at this stage. Further, this land use finding is subject to information regarding contamination at the site or other information which could result in the need for a change in this determination being borne out during the remedial investigation.

SECTION XI SIGNATURE PAGE

The Requestor must sign the application, or designate a representative who can sign. The requestor's consultant or attorney cannot sign the application. If there are multiple parties applying, then each must sign a signature page. If the requestor is a Corporation, LLC, LLP or other entity requiring authorization from the NYS Department of State to conduct business in NYS, the entity's name must appear exactly as given in the NYS Department of State's Corporation & Business Entity Database.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DETERMINATION OF A COMPLETE APPLICATION

1. The first step in the application review and approval process is an evaluation to determine if the application is complete. To help ensure that the application is determined complete, requestors should review the list of common application deficiencies and carefully read these instructions.

2. DEC will send a notification to the requestor within 30 calendar days of receiving the application, indicating whether such application is complete or incomplete.

3. An application must include the following information relative to the site identified by the application, necessary for making an eligibility determination, or it will be deemed incomplete. (**Please note:** the application *as a whole* requires more than the information outlined below to be determined complete). The application must include:

    a. for all sites, an investigation report sufficient to demonstrate the site requires remediation in order to meet the requirements of the program, and that the site is a brownfield site at which contaminants are present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by DEC that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations. Required data includes site drawings requested in Section III, #3 of the BCP application form.

    b. for those sites described below, documentation relative to the volunteer status of all requestors, as well as information on previous owners or operators that may be considered responsible parties **and** their ability to fund remediation of the site. This documentation is required for:

        i. real property listed in the registry of inactive hazardous waste disposal sites as a class 2 site, which may be eligible provided that DEC has not identified any responsible party for that property having the ability to pay for the investigation or cleanup of the property prior to the site being accepted into the BCP; or

        ii. real property that was a hazardous waste treatment, storage or disposal facility having interim status pursuant to the Resource Conservation and Recovery Act (RCRA) program, which may be eligible provided that DEC has not identified any responsible party for that property having the ability to pay for the investigation or cleanup of the property prior to the site being accepted into the BCP.

    c. for sites located within the five counties comprising New York City, in addition to (a) and if applicable (b) above, if the application is seeking a determination that the site is eligible for tangible property tax credits, sufficient information to demonstrate that the site meets one or more of the criteria identified in ECL 27 1407(1-a). **If this determination is not being requested in the application to participate in the BCP, the applicant may seek this determination at any time before issuance of a certificate of completion, using the BCP Amendment Application, except for sites seeking eligibility under the underutilized category.**

    d. for sites previously remediated pursuant to Titles 9, 13, or 14 of ECL Article 27, Title 5 of ECL Article 56, or Article 12 of Navigation Law, relevant documentation of this remediation.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DETERMINATION OF A COMPLETE APPLICATION (continued)

4. If the application is found to be incomplete:

    a. the requestor will be notified via email or phone call regarding minor deficiencies. The requestor must submit information correcting the deficiency to DEC within the 30-day review time frame; or

    b. the requestor will receive a formal Letter of Incomplete Application (LOI) if an application is substantially deficient, if the information needed to make an eligibility determination identified in #4 above is missing or found to be incomplete, or if a response to a minor deficiency is not received within the 30-day period. The LOI will detail all of the missing information and request submission of the information. If the information is not submitted within 30 days from the date of the LOI, the application will be deemed withdrawn. In this case, the requestor may resubmit the application without prejudice.

5. If the application is determined to be complete, DEC will send a Letter of Complete Application (LOC) that includes the dates of the public comment period. The LOC will:

    a. include an approved public notice to be sent to all parties on the Contact List included with the application;

    b. provide instructions for publishing the public notice in the newspaper on the date specified in the letter, and instructions for mailing the notice to the Contact List;

    c. identify the need for a certification of mailing form to be returned to DEC along with proof of publication documentation; and

    d. specify the deadline for publication of the newspaper notice, which must coincide with, or occur before, the date of publication in the Environmental Notice Bulletin (ENB).

        i. DEC will send a notice of the application to the ENB. As the ENB is only published on Wednesdays, DEC must submit the notice by the Wednesday before it is to appear in the ENB.

        ii. The mailing to parties on the Contact List must be completed no later than the Tuesday prior to ENB publication. If the mailings, newspaper notice and ENB notice are not completed within the time-frames established by the LOC, the public comment period on the application will be extended to insure that there will be the required comment period.

        iii. Marketing literature or brochures are prohibited from being included in mailings to the Contact List.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of
Technical Support 625 Broadway, 11th Floor, Albany,
NY 12233-7020
P: (518) 402-9543 I F: **(518) 402-9547**
www.dec.ny.gov

July 1, 20 19

Town of Southampton
Francis Zappone, Deputy Town Supervisor
116 Hampton Road
Southampton, NY 11968

RE: Brownfield Cleanup Application
Damascus Road Landfill
BCP #C152253

Dear Deputy Supervisor Zappone:

The New York State Department of Environmenta l Conservation (DEC) is in receipt of your application dated March 28, 2019, and subsequent electronic submission received on May 29, 2019, for participation in the Brownfield Cleanup Program pursuant to ECL § 27-1400 et seq. This letter is to advise you that your application has been determined to still be incomplete. Upon review of your application, the following items were found to be missing/incomplete:

Section III: **Property's Environmental History**

- Please provide Addenda F, as it is missing from this submission. Each environmental report should be provided as a separate PDF and should not be submitted hard copy.
- THE FILE UNLOADED CONTAINS THIS ADDENDA

Section IV: Property Information

- Since changes have been made to Section IV of the application, please provide a hard copy of Page 4 with original initials at the bottom of the page where indicated . Additionally, please remove the answers from questions 11-13, as these pertain only to sites located within the five boroughs of New York City.
- RESPONSES TO QUESTIONS 11 – 13 CHANGED AS REQUESTED
- Please see attached comments regarding the Environmental Assessment provided by the Project Manager.
- COMMENT ADDRESSED. INCLUDED DATA COLLECTED BY THE SUFFOLK COUNTY HEALTH DEPARTMENT AS PART OF A REGIONAL WATER QUALITY INVESTIGATION

Section VI: Current Property Owner/Operator Information

- Please provide a statement within the application regarding the Town's acquisition of the property, including approximate date of acquisition.

Section VII: Requestor Eligibility Information

- Please provide a brief statement describing why the requester should be considered a Volunteer .
- STATEMENT ATTACHED

Section IX: Contact List Information

- Please provide the name and address of the document repository to be used for this site. Additionally, it is a requirement to provide proof of acknowledgement from the repository that they agree to act as such.
  DOCUMENT MANAGEMENT IS THE RESPONSIBILITY OF THE OFFICE OF THE TOWN CLERK WHOSE OFFICE IS REPOMSIBLE FOR ALL RECORD'S MANAGEMENT, PUBLIC INFORMATION /NOTICES AND REPSONSES TO THE FREEDON OF INFORMATION ACT REQUESTS. THE OFFICE HAS ESTABLISHED A LINK ON THE TOWN'S WEBSITE THROUGH WHICH THE DOCUMENT IS AVAILABLE TO THE PUBLIC AT http://www.southamptontownny.gov/BCP-Application. THE LINK HAS ALSO BEEN PROVIDED TO THE REFERENCE DESK AT TH ROGERS MEMORIAL PUBLIC LIBRARY IN SOUTHAMPTON

Section XI: Statement of Certification and Signatures

- Please provide a hard copy of this page with original signature.
- INCLUDED

Additional Comments

- Please submit the application as one hard copy and one copy on CD or via file sharing service with (1) the application, (2) environmental report, and (3) work plan each as a separate file. Please do not provide one single large file containing all items. The environmental report and work plan do not need to be resubmitted hard copy and should only be provided electronically.
- SUBMITTED AS REQUESTED.

Please provide the missing/incomplete information to the following address: Site

Control Section
Attn: Lexy Servis
New York State Department of Environmental Conservation Bureau of Technical Support
625 Broadway, 11th Floor
Albany, NY 12233-7020

Should this information not be received within thirty (30) days from the date of this letter, your application will be deemed withdrawn. In that case, you may resubmit the application without prejudice subject to the rules and requirements in place at the time of resubmittal. You will be notified when your application is considered complete. If you have any questions about the comments given above, please call this *office* at 518-402-9553.

Sincerely,

Kelly A. Lewandowski, P.E. Chief
Site Control Section

Enclosure

ec: E. Obrecht, Director, Remedial Bureau A
M. Sweet, Project Manager, Remedial Bureau A
J. Swartwout, Section Chief, Remedial Bureau A - Section C
W. Parish, RHWRE, Region 1
C. Elgut, Regional Attorney, Region 1
K. Jeffrey, Project Attorney
K. Lewandowski
A. Servis
F. Zappone, Town of Southampton - fzappone@southamptontownny .gov
E. Weinstock, Amee E&E, P.C. - eric.weinstock@amecfw.com
J. Burke, Town of Southampton - jburke@southamptontownny.gov

Project Manager Comments
BCP Application - Section III and Environmental Assessment

Site No. C152253

Project Manager Contact Information

Name: Melissa Sweet

Email: melissa.sweet@dec.ny.g ov

Phone: (518) 402-9614

Comments Re: Section III and/or the Environmental Assessment

Section IV - Environmental Assessment: The statement, "... water samples collected form other monitoring wells upgradient of the landfill have also displayed PFAS concentrations as high or higher than the concentrat ions detected at the landfill," does not have any data presented as part of this application to support this statement. Please provide supporting data or remove the statement.

SEE ATTACHED TESIGN SUMMARY AND TEST WELL LOCATION MAPS P[ROVIDED BY THE SUFFOLK COUNTY DEPARTMENT OF HEALTH

Comments Section III – and/or the environmental assessment.

Upgradient well testing has been ongoing through the Suffolk County Department of Health. Their updates have been included in the Friday calls we have been having for over a year and in which representatives of your office have participated. It is thus testing that is referenced in the comments made by our consultant. I have copied the most recent summary of that testing and include a test well location maps.

Groundwater Work within the vicinity of Gabreski Airport (Eastern Area)

To help assess the potential for groundwater quality impacts from PFAS, the SCDHS Office of Water Resources has installed profile wells east of Gabreski Airport, between Lewis Road to the north and South Country Road to the south. Additional profile wells were installed generally up-gradient of the Gabreski Airport runway and additional wells were installed in the vicinity of where an Air National Guard mobile fire training vehicle was believed to have been used. A total of 23 profile wells were installed. Water table wells were also installed to help refine the direction of groundwater flow in this area.

The remaining PFAS results have been received from the profile wells that were installed as part of the groundwater investigation within the vicinity of the Gabreski Airport (eastern area). PFOS/PFOA was detected in 12 of the 23 well installed, with concentrations ranging up to 775 ppt. These include profile wells Q1, Q3, Q5, Q17, Q41, Q43, Q45, Q23, Q29, Q31, Q33, and Q35. Additionally, perchlorate was detected in 9 of the 17 profile wells that were sampled for this contaminant, with the highest concentration of 49.5 parts per billion (ppb) occurring in well Q35.

All of the PFAS surface water results from Ice Pond and Quantuck Creek have also been received. PFOS/PFOA was detected in 3 of the 10 surface water samples that were collected. These include SW-1 (PFOS of 35.8 ppt & PFOA of 3.44 ppt); SW-8 (PFOA of 1.71 ppt), and SW-9 (PFOA of 1.91 ppt). Refer to the attached final map and spreadsheet of analytical results.

****
*

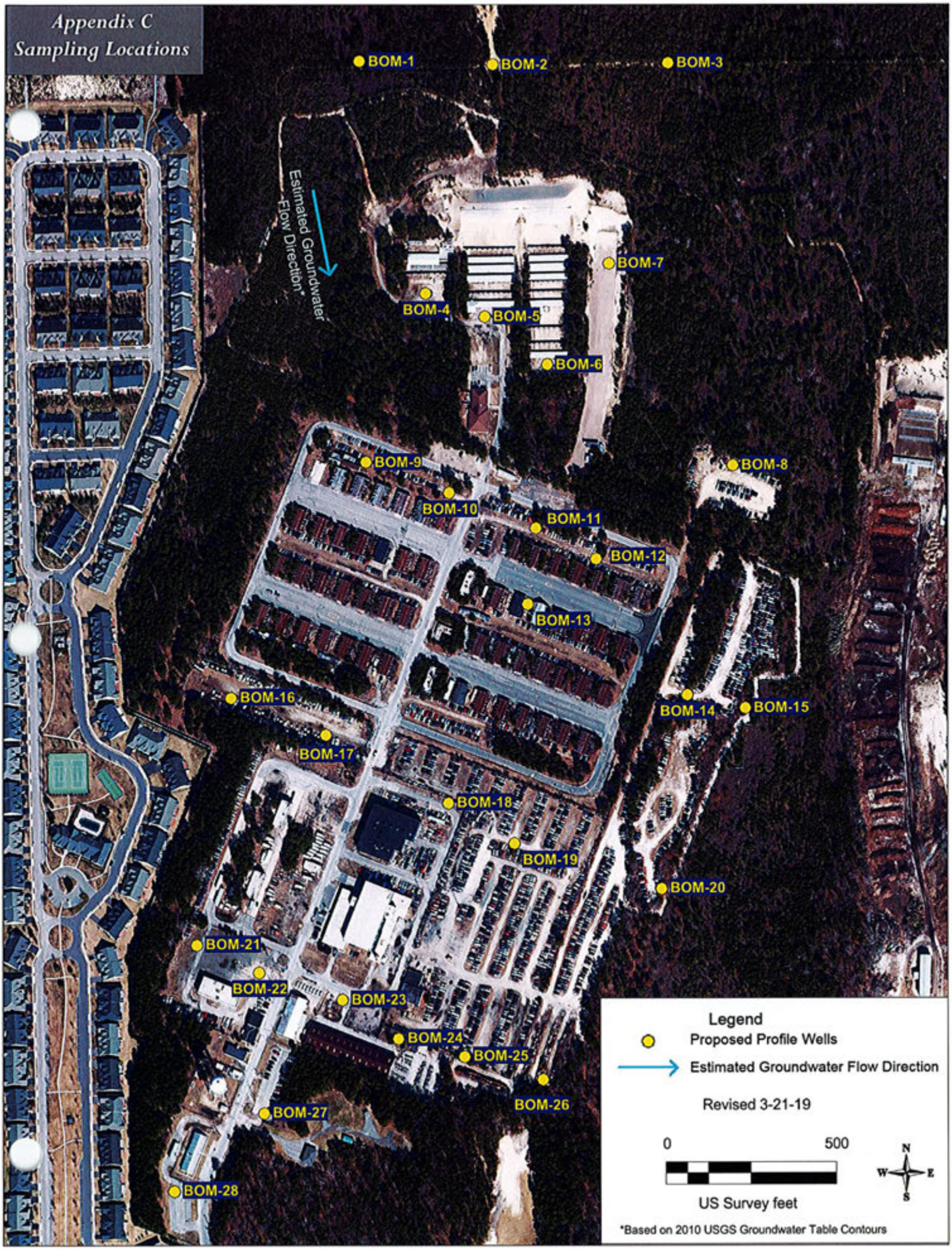
Work Associated with Canine Kennel

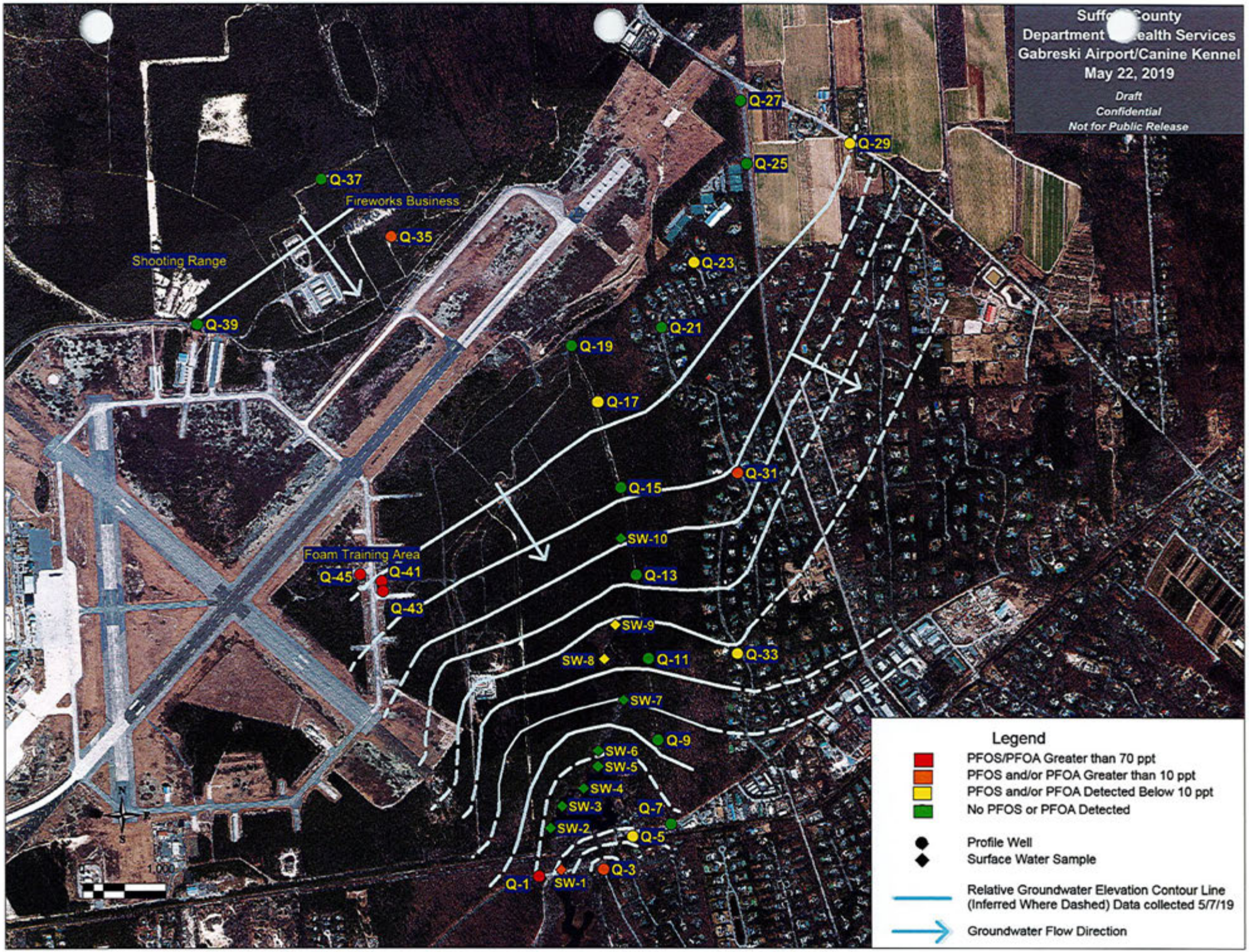
As a follow up to recent findings at the Canine Kennel site, SCDHS has also authorized its consultant to conduct further groundwater sampling in the area of the recent groundwater detections of PFAS, and to a more limited extent PCBs, on the Gabreski Airport property. Six groundwater profile wells were installed and sampled in order to delineate the vertical and horizontal extent of contamination. PCBs were not detected in any samples from this follow up groundwater sampling. PFOS was detected above the HAL in all wells except VP-3. PFOA was detected above the HAL in 4 groundwater intervals from 4 separate wells. PFHxS and PFOS were detected at concentrations above 1,000 ppt. The highest concentrations were detected in VP-1, the upgradient profile well.

Groundwater Sampling – Former BOMARC site, Westhampton Investigation

SCDHS OWR initiated a groundwater investigation at this site in response to a Suffolk County legislative resolution, which directed the Department to conduct soil and groundwater sampling at the BOMARC property to help identify possible impacts to groundwater quality. In conjunction with these efforts, the Department's Office of Pollution Control has also initiated an investigation to assess potential impacts to on-site soils.

To date, SCDHS installed a total of 28 profile wells and collected 160 samples for PFAS analysis. All twenty-eight (28) of the profile wells have been sampled and we have received completed results for at least 10 of the profile wells. We are in the process of reviewing and compiling the results received to date, but based upon the last update two (2) of the wells were above the HAL with combined PFOS/PFOA concentrations of 219 ppt (PFOA of 99 ppt and PFOS of 120 ppt), and 206 ppt (PFOA of 16 ppt and PFOS of 190 ppt), respectively. These include BOM-26 and BOM-21. Eight (8) of the wells had detection of PFOS/PFOA below the HAL with concentrations ranging up to 57.9 ppt. These include BOM-10, BOM-14, BOM-18, BOM-19, BOM-20, BOM-22, BOM-27, and BOM-28. The 219 ppt of PFOS/PFOA was identified in BOM-26 at the top profile level, while BOM-21 had 206 ppt of PFOS/PFOA in the middle/lower profile level. However, PFAS detections were identified throughout the entire profile of BOM-21.


Appendix C
Sampling Locations
BOM-1
BOM-2
BOM-3
Estimated Groundwater Flow Direction*
BOM-4
BOM-5
BOM-6
BOM-7
BOM-8
BOM-9
BOM-10
BOM-11
BOM-12
BOM-13
BOM-14
BOM-15
BOM-16
BOM-17
BOM-18
BOM-19
BOM-20
BOM-21
BOM-22
BOM-23
BOM-24
BOM-25
BOM-26
BOM-27
BOM-28
Legend
Proposed Profile Wells
Estimated Groundwater Flow Direction
Revised 3-21-19
0
500
US Survey feet
N
W
E
S
*Based on 2010 USGS Groundwater Table Contours


Suffolk County
Department of Health Services
Gabreski Airport/Canine Kennel
May 22, 2019
Draft
Confidential
Not for Public Release
Q-27
Q-29
Q-25
Q-37
Fireworks Business
Q-35
Shooting Range
Q-23
Q-39
Q-21
Q-19
Q-17
Q-31
Q-15
SW-10
Foam Training Area
Q-45
Q-41
Q-43
Q-13
SW-9
SW-8
Q-11
Q-33
SW-7
Q-9
SW-6
SW-5
SW-4
SW-3
Q-7
SW-2
Q-5
Q-3
Q-1
SW-1
N
S
1,000
Legend
PFOS/PFOA Greater than 70 ppt
PFOS and/or PFOA Greater than 10 ppt
PFOS and/or PFOA Detected Below 10 ppt
No PFOS or PFOA Detected
Profile Well
Surface Water Sample
Relative Groundwater Elevation Contour Line
(Inferred Where Dashed) Data collected 5/7/19
Groundwater Flow Direction

SECTION VII – REQESTOR ELIGIBILITY INFORMATION.

✓ VOLUNTEER.

There are several reasons why we feel that the Town is entering this program as a volunteer.

1. The Town purchased the site (Tax Map No. 288-1-35.1) from the East Quogue Fire Department in 1948. During the time operation the landfill served the residents of the community. The Town accepted bulk materials and landscaping materials. At no time did the Town allow commercial dumping. The two adjacent parcel (Tax Map Nos.314-2-1.17 and 314-2-3.5) were added subsequent to the purchase of this parcel as part of a subdivision approval and never included in any of the Town operations conducted on the site. At one point during the operation of the landfill, the site (Parcel 288-1-35.1) served as a location for the offices of animal control. There is no record of any hazardous substances being used as part of this operation.
2. In the 2006, the Town considered developing the site as a recreation facility. In 2007 and 2009, the Town commissioned two report on the site. The 2007 report included a geophysical survey, a surface soil sampling and subsurface soil sampling. In 2009, the Town , at the request of the DEC, conducted additional analysis of the site which included subsurface sampling at 15 locations on the site. The map of those locations is included in a Addenda E which concludes a copy of the report completed by Dvirka and Bartolucci. In this last report, D&B recommended that the test results indicated that "neither remediation nor additional soil samplings at the site are warranted."
3. In a memo from the NYSDEC Division of Materials Management states that "fire training" had occurred at the landfill in the past. Firemen have practiced using "jaws of life" hydraulic rescue tools on old cars located on the landfill. Other than that the Town has no knowledge of any fire training being performed at the landfill. In addition, upon completing a thorough search of their records, no files or

SECTION VII – REQESTOR ELIGIBILITY INFORMATION.

✓ VOLUNTEER.

There are several reasons why we feel that the Town is entering this program as a volunteer.

1. The Town purchased the site (Tax Map No. 288-1-35.1) from the East Quogue Fire Department in 1948. During the time, the site operated as a landfill serving the residents of the community. The Town accepted bulk materials and landscaping materials. At no time did the Town allow commercial dumping. The two adjacent parcels (Tax Map Nos.314-2-1.17 and 314-2-3.5) were added subsequent to the purchase of the larger parcel as part of a subdivision approval and never included in any of the Town operations conducted on the site. At one point during the operation of the landfill, the site (Parcel 288-1-35.1) served as a location for the offices of animal control. There is no record of any hazardous substances being used as part of this operation. The operations of the animal central offices were relocated to another town site sometime in 1999.
2. In the 2006, the Town considered developing the site as a recreation facility. In 2007 and 2009, the Town commissioned two report on the site. The 2007 report included a geophysical survey, a surface soil sampling and subsurface soil sampling. In 2009, the Town , at the request of the DEC, conducted additional analysis of the site which included subsurface sampling at 15 locations on the site. The map of those locations is included in a Addenda E which concludes a copy of the report completed by Dvirka and Bartolucci. In this last report, D&B recommended that the test results indicated that "neither remediation nor additional soil samplings at the site are warranted."
3. In a memo from the NYSDEC Division of Materials Management states that "fire training" had occurred at the landfill in the past. Firemen have practiced using "jaws of life" hydraulic rescue tools on old cars located on the landfill. Other than

that the Town has no knowledge of any fire training being performed at the landfill. In addition, upon completing a thorough search of their records, no files or documents indicating that the Town of Southampton ever authorized or allowed fire training to be performed at the landfill were found. Numerous members of the Fire Marshal Office for the Town of Southampton and the East Quogue Fire Department were interviewed by Town officials. None of these individuals had any knowledge of any authorized or unauthorized fire training involving fire extinguishing methodologies or the use of fire suppressants having been performed at the property.

4. Prior to 1948, the year the Town took ownership of the property, the property was owned by the East Quogue Fire Department, no records are available to ascertain how the site was used during the time of the Fire Department's ownership.

These factors considered, the Town's liability arises solely as a result of ownership

ADDENDA A

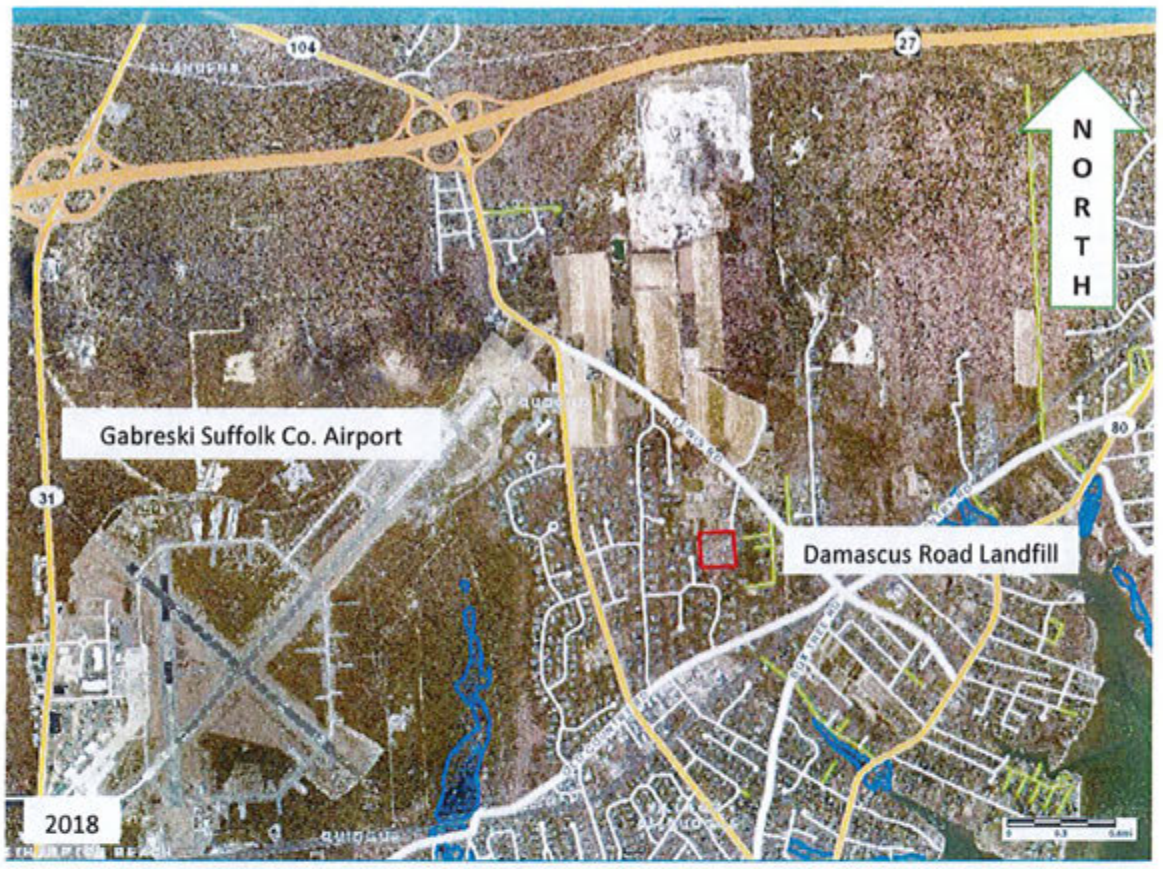
Details, Section IV, Question 10

SECTION IV

10. Property Description Narrative

Location:

The Damascus Road (former) Landfill site is located in a suburban / rural area at the south end of Damascus Road, approximately 1,000 feet south of Lewis Road, East Quogue, Town of Southampton, County of Suffolk, NY. (parcel outlined in read)



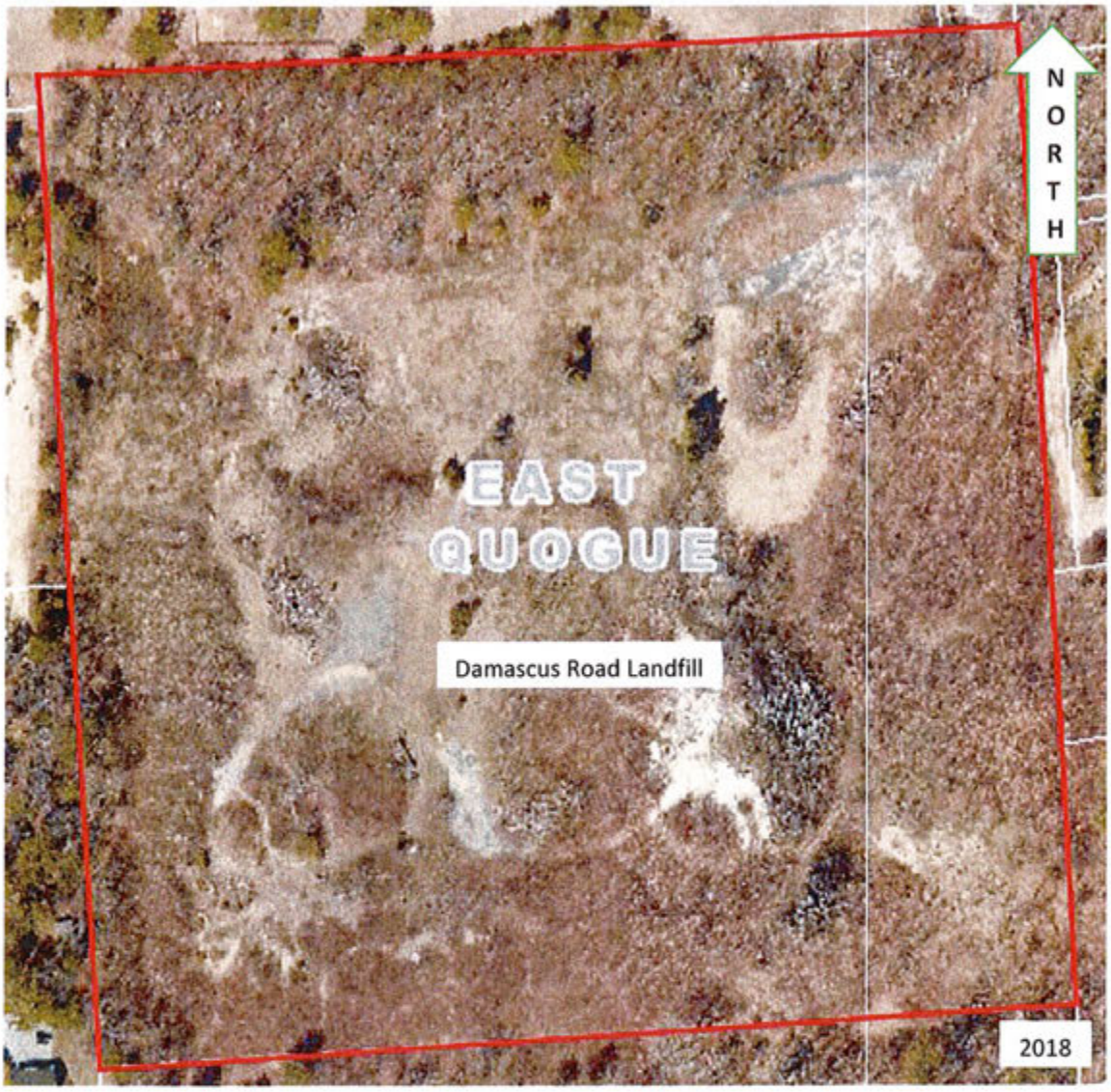
The site is located approximately 1.7 miles south of Sunrise Hwy. (NYS-27), 0.9 miles northwest of Montauk Hwy. (NYS-27A) and downtown East Quogue, 0.4 miles east of Quogue – Riverhead Road (CR-104) and 1.0 miles east of Gabreski Suffolk County Airport.

Current Zoning:

The site is currently zoned CR-80 (residential minimum 80,000 square foot lots) but is vacant and inactive. The immediate properties and surrounding areas to the west, south and east are also zoned for residential uses and are currently developed as such. The properties to the north are zoned for residential uses but are restricted to agricultural and horse farm uses, for which they are currently used.

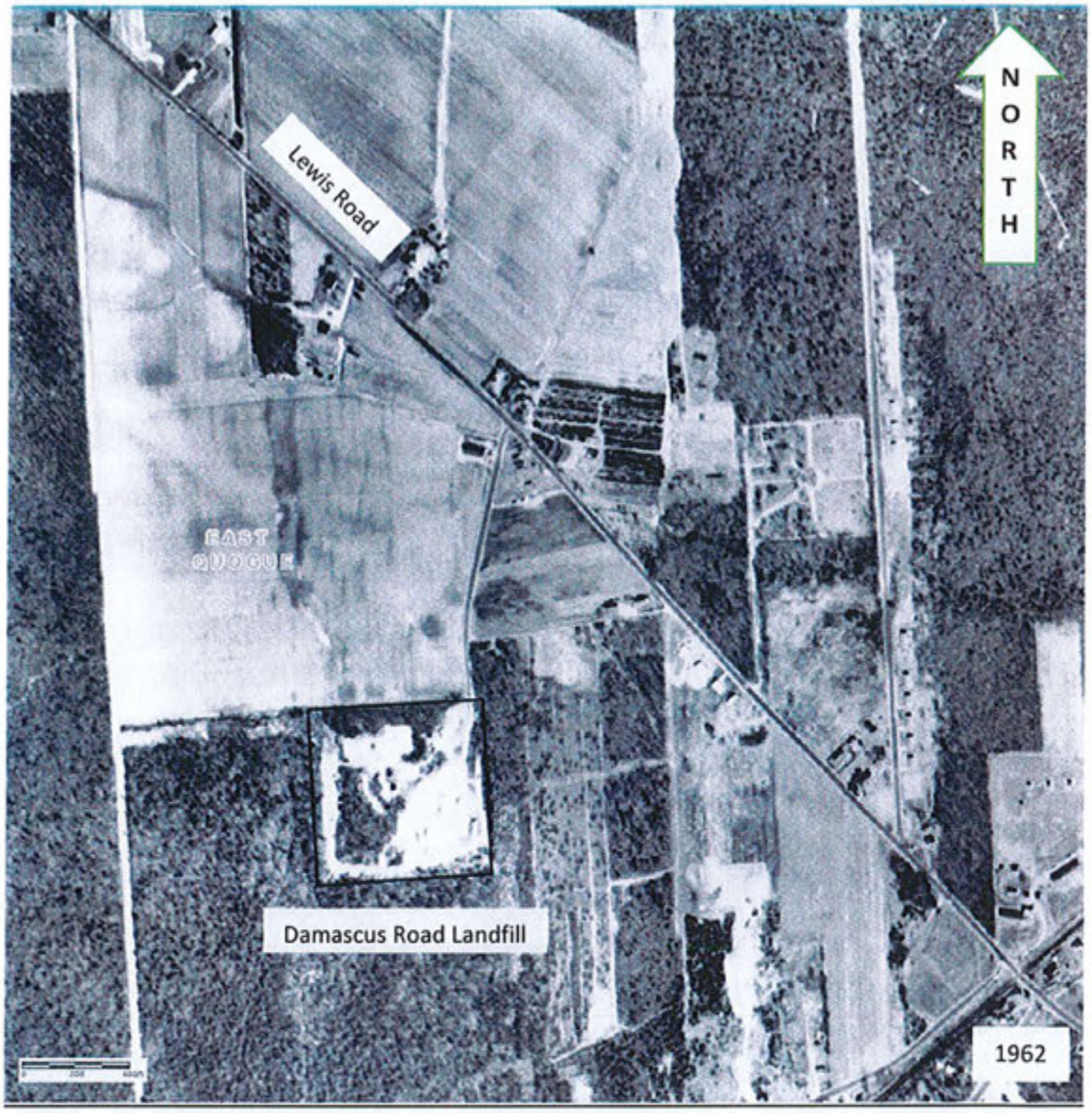
Site Features:

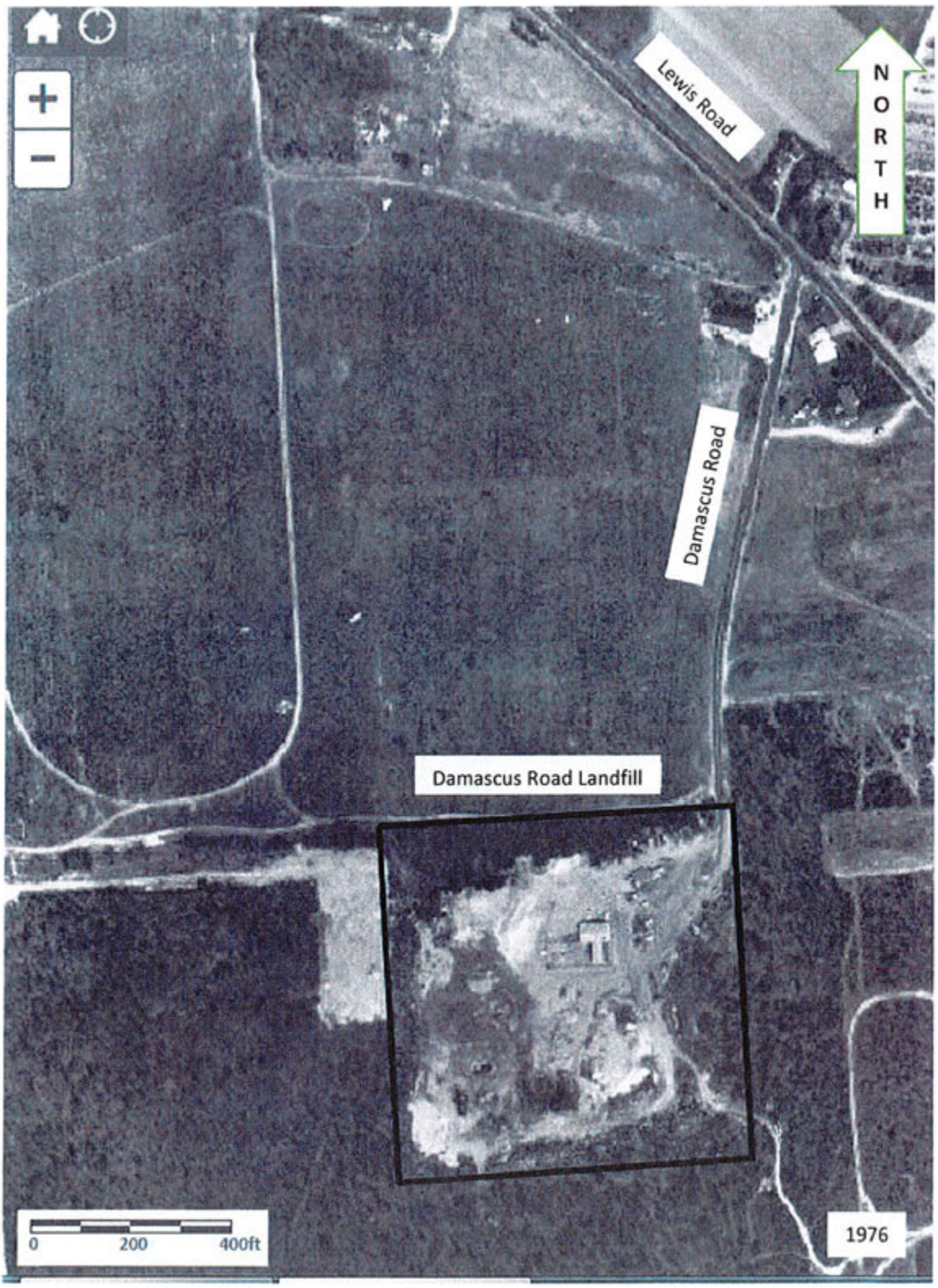
The Site currently consists of a 10.2-acre property comprising vacant land with debris consisting of car parts, tires, and household waste scattered throughout. The northern and. central portions of the property are clear of trees. The southern, eastern and western sides of the property are vegetated with trees and brush. The neighborhood surrounding the property is a suburban and rural area of Suffolk County and adjacent land use consists primarily of residential properties. Due to past excavations at the site, the elevations are irregular and range from 46 feet to 54 feet ASL. The former animal shelter building, located in the northeast quadrant of the property, was demolished at some point between 2004 and 2008.



Past Uses of the Site:

The site was used as a municipal land fill from approximately 1930 to 1973, primarily accepting municipal waste from local businesses and residents. The Town has no knowledge of and has never authorized the disposal of hazardous materials at this former landfill. From aerial photos it appears that the landfill use was discontinued at some point between 1984 and 1994. Between 1962 and 1976 a small building was constructed that was reported used as the Town Dog Pound and Animal Shelter. The dog pound and animal shelter were discontinued between 2004 and 2008 when the building was demolished.


Lewis Road
NORTH
EAST
QUOGUE
Damascus Road Landfill
1962


Lewis Road
NORTH
Damascus Road
Damascus Road Landfill
0
200
400ft
1976

Past Investigations (Actions):

A Phase II Investigation and a Supplemental Phase II Investigation were performed.

Soil samples were collected from six locations in 2007 by D&B during a Phase II Site Investigation. No ground water samples were included in this investigation. A geophysical survey was also performed which determined that underground heating oil tank serving the animal shelter was removed. VOCs, SVOCs, pesticides and PCBs were not detected in the surface soil samples above the unrestricted use SCOs. Of the metals tested, only zinc was detected above the unrestricted use SCO. None of the subsurface soil samples exceed the unrestricted SCOs for the five analytical parameter groups mentioned above. Analysis for PFAS compounds was not included. A copy of this report is attached as ~~Appendix~~ _____. ADDENDA D

An additional 15 subsurface soil samples were collect across the site in 2009 by D&B during a supplemental site investigation. None of the samples contained VOCs or SVOCs at concentrations in excess of the unrestricted use SCOs. The pesticides DDT, DDE and DDD were detected at concentrations in excess of the residential SCOs. The PCB Arochlor 1254 was detected in excess of the unrestricted use SCO. The metal zinc was also detected at concentrations in excess of the residential use SCO. Analysis for PFAS compounds was not included. A copy of this report is attached as ~~Appendix~~ _____. ADDENDA E

NYSDEC Division of Materials Management Sampling Event

In February 2018, the NYSDEC arranged for sampling of three water table monitoring wells that were installed at the landfill. Groundwater samples were analyzed for VOCs, SVOCs, Metals, PFAS, anions, alkalinity, COD, hardness, TDS, and TOC. The laboratory analytical data showed that the water samples collected from the monitoring wells did not exceed the current NYS TOGS ground water standards. Per- and Polyfluoroalkyl Substances (PFAS) levels (which are not included in the NYS TOGS) were detected at concentrations exceeding the EPA final Health Advisory (HA) of 70 ng/L (nanograms per liter or parts per trillion) for the combined values of Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) in one of the three wells. The concentrations measured in the groundwater sample from MW-2 contained PFOS at 11,200 ng/L and PFOA at 424 ng/L. The concentrations for the groundwater sample collected from MW-3, the other down gradient well, was 5.8 ng/L for PFOS and non-detect PFOA. The concentration for the water sample collected from well MW-I, the up gradient well, was nondetect for PFOS and 3.6 ng/L for PFOA. The results suggest that the detections measured in well MW-2 may be from a localized source. A copy of this report is attached as ~~Appendix~~ _____.

ADDENDA C

AMEC E&E, PC, re-sampling of landfill wells

AMEC re-sampled the three landfill wells in August 2018. The laboratory analytical data collected confirmed that the groundwater in MW-2 contains elevated PFOS and PFOA at concentrations in excess of the EPA HA of 70 ng/l, but were present at slightly lower concentrations that those measured in February 2018. PFOS was detected in the water sample from well MW-2 at 4,050 ng/l and PFOA was detected at 96.6 ng/l. There were no exceedances of the EPA HAS in the groundwater samples collected from MW-I and MW-3. A copy of this report is attached as ~~Appendix~~ ADDENDA F.

Site Geology and Hydrology:

The site is underlain by sands and gravels of the Upper Glacial formation to a depth of approximately 200 feet. This is followed, in turn, by the Magothy formation, the Raritan Clay, the Lloyd Sand and crystalline bedrock. The Gardiners Clay and the Jameco Gravel also exist down gradient of the site in the in the 200 to 400-foot depth range. Precipitation seep into the ground surface and recharges the Upper Glacial formation. The groundwater flows in a southeasterly direction towards the Quantuck Bay.

Environmental Assessment:

Based on previous investigations, the contaminants of concern are PFAS, more specifically PFOS and PFOA, in the groundwater below and down gradient of the landfill. Water samples collected from the down gradient monitoring well at the site contained PFOS at 11,200 ng/L and PFOA at 424 ng/L which is in excess of the EPA HA of 70 ng/l. The water samples from the up gradient monitoring wells at the landfill did not exceed the HA, however, water samples collected from other monitoring wells up gradient of the landfill have also displayed PFAS concentrations as high or higher than the concentrations detected at the landfill.

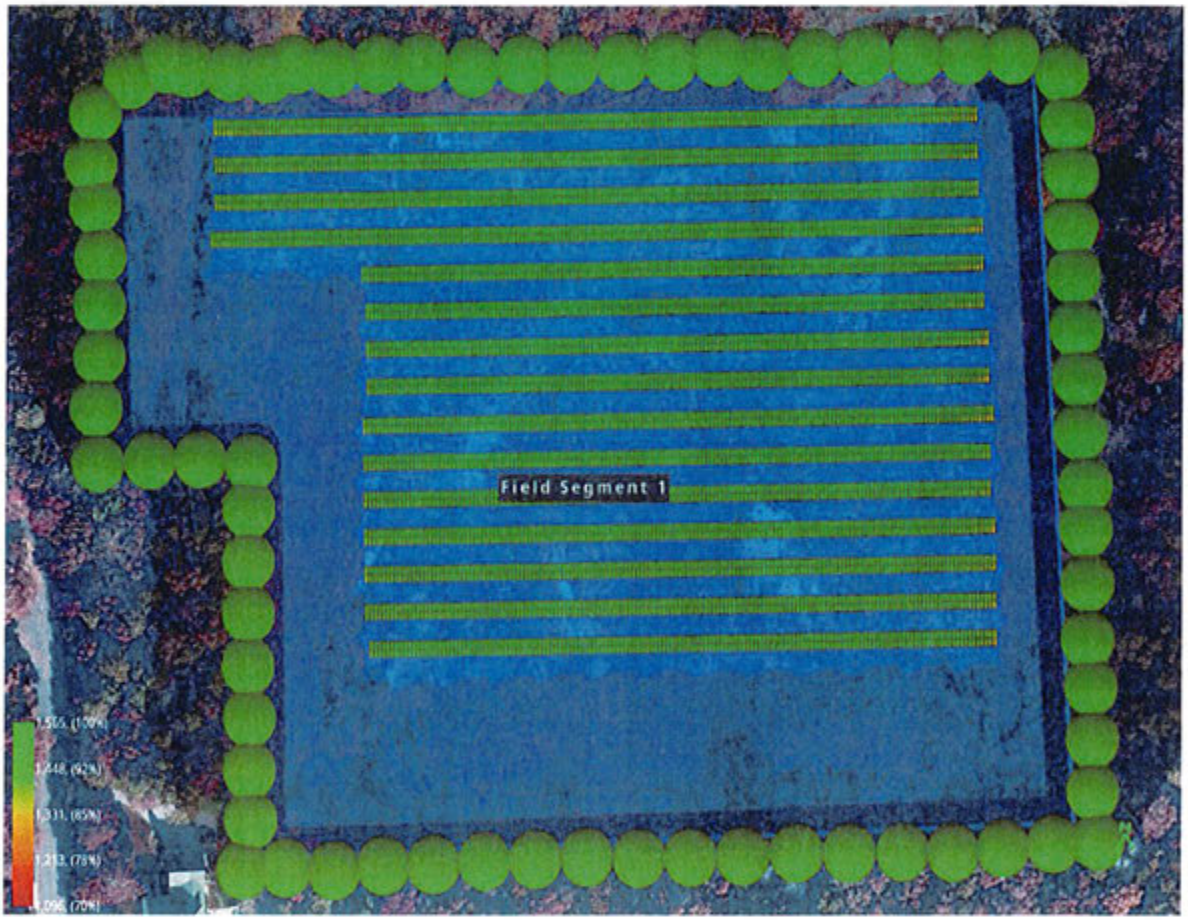
ADDENDA B

Details, Section 10, Question 3

Section 10, Question 3.

Description. *The project proposed for the site is a community solar distributed energy project. The project is consistent with the Town plan to source all electric energy needs for the Town through renewable energy sources by the year 2015. The proposed PV system at Damascus is 1.74 MW and consists of 4,766 solar modules. Within the first year of operation, this system should produce 2,237,960 kWh. The proposed mounting system is the Unirac 30-Degree Ground Fixed Tilt systemWith regards to the degree of surface penetration, we cannot supply specifics without conducting a geological and/or SEQRA study. We would need an engineer to review the results of a core sample analysis to determine the install specifications.*

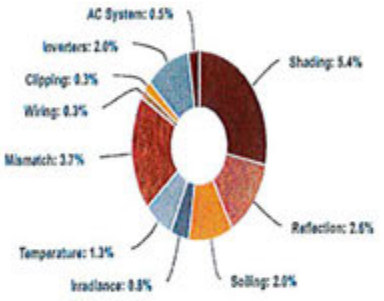
Proposed Potential Panel Configuration



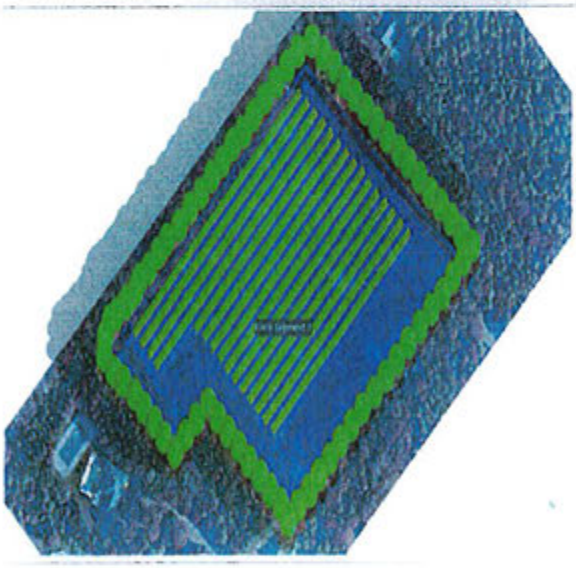
Preliminary Analysis of Production Potential

Monthly Production

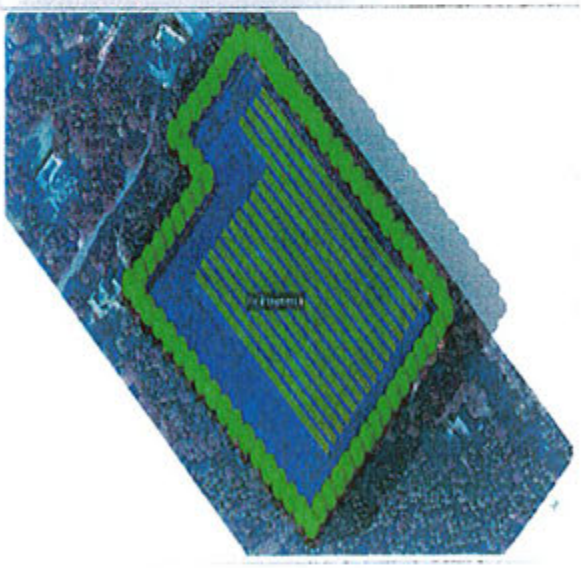
Sources of System Loss



Southwestern Angle



Southeastern Angle



ADDENDA C

Landfill Site Summary

NYSDEC Division of Materials Management

Inactive Landfill Initiative

Landfill Site Summary

Quogue Landfill

Regulatory Status / Location

SWID: 52S28
Inactive Registry Number: 152050
Location: 40.848246, -72.598190

Site History/ Background

The landfill is located at the dead end of Damascus Rd, in East Quogue, Suffolk County, NY. The site is bounded by residential properties on all four sides. The capped area of the landfill is about 2 acres, and the site is not fenced. The landfill primarily received municipal waste from the 1930s until 1973 and was later used for material storage, occasional dumping of leaves and brush, and an animal shelter. The site currently consists of vacant land. Storage of used cars, disposal of sewage by means of a leaching field, operation of a transfer station and fire training were all done on site without department oversight. Waste received at the landfill was almost entirely from businesses and residences within the Village of Quogue. No evidence of disposal of hazardous wastes has been found at the site (NYSDEC DER).

The Town of Southampton was considering redeveloping the site into athletic fields and related facilities, resulting in the conducting of a Phase II Environmental Assessment in 2007 and a supplemental Phase II in 2009 that consisted of surface soil testing. Samples exceeding unrestricted use RSCOs but below restricted residential RSCOs were detected for zinc, PCBs, and pesticides. Only zinc was detected above unrestricted use RSCOs during the initial Phase II investigation (Dvirka and Bartilucci Consulting Engineers, 2007 and 2009).

The site is generally flat, but based on topographic maps of the area, the general topographic gradient is toward the south. Various mounds ranging in height from 3 to 8-feet high are scattered throughout the site. These appear to consist of mostly soil and debris. The shallow geology of the site generally consists of sand and gravel. There are no large bodies of water in close proximity to the site. Based on discussions with NYSDEC, groundwater flow is presumed to be in a southeasterly direction.

Inactive Landfill Initiative Work

Work performed for the Inactive Landfill Initiative has included a pre-drill site inspection, the installation of 3 wells, and groundwater sampling. The pre-drill site inspection was conducted on October 11, 2017, by Parsons and NYSDEC personnel. Scattered debris, including car parts, tires, and household waste were visible at the site. What appeared to be a small production well was found near the center of the site.

Three wells were installed at the site on January 11-15, 2018 in accordance with the NYSDEC-approved Hydrogeologic Investigation work plan for the site (Parsons, December 2017). One upgradient well (MW-1) was installed in the northeast corner of the site. Two downgradient wells (MW-

02 and MW-3) were installed along the south and southwest boundaries of the site respectively. Well details are summarized below:

Well ID	Northing	Easting	Total Depth (ft)	Screened Interval (Ft)
MW-1	251604.494	1372326.341	50.0	39.5-49.5
MW-2	250976.677	1372070.065	50.0	39.5-49.5
MW-3	251135.393	1371769.172	50.0	39.5-49.5

The three wells were sampled on February 7, 2018. Samples were analyzed for PFAS, metals, anions, alkalinity, ammonia, COD, hardness, TDS, TOC, and various organics including VOCs and SVOCs. No Class GA groundwater standards were exceeded; however, the EPA Drinking Water Advisory Levels were exceeded for PFAS parameters at MW-2. Laboratory Level 2 reports are provided in Attachment A.

Monitoring Well PFAS Highest Sampling Results

	MW-2
PFOS (ng/L)	11,200
PFOA (ng/L)	424

Residential Sampling

A focus list (residents/wells recommended for sampling) was submitted to NYSDOH on April 4, 2018. This list conservatively encompasses downgradient homes on private wells, and upgradient homes in very close proximity to the landfill boundary, where micro variations in gradient could lead to localized impacted groundwater conditions (Attachment B).

Attachment A – Laboratory Level 2 Reports

SGS

Dayton, NJ

Reissue #2
04/12/18

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Parsons Engineering Science for ILI

PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY

450619.02000

SGS Job Number: JC60421

Sampling Date: 02/07/18

Report to:

Parsons Engineering Science

Lorraine.Weber@parsons.com

ATTN: Lorraine Weber

Total number of pages in report: 46

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

SGS

April 5, 2018

Ms. Sara Weishaupt
Parsons
301 Plainfield Road, Suite 350
Syracuse, NY 13212

Re: SGS North America – Dayton, NJ Jobs # JC60421 – Reissue

Dear Ms. Weishaupt,

The final report for SGS job number JC60421 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the metals reporting list was changed, and the reporting units for metals were changed to mg/L per the project requirements. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Kristin B. DeGraw
Project Manager

SGS North America Inc

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

April 6, 2018

Ms. Sara Weishaupt
Parsons
301 Plainfield Road, Suite 350
Syracuse, NY 13212

Re: SGS North America – Dayton, NJ Job # JC60421 - Reissue #2

Dear Ms. Weishaupt,

The final report for SGS job number JC60421 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the Antimony from samples JC60421-2, -4, and -5 has been omitted and Boron was retrieved as per the project requirements.

Please contact me if I can be of further assistance in this matter.

Sincerely,

Kristin B. DeGraw
Project Manager

SGS North America Inc

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

Sections: 1 2 3 4 5

Table of Contents

Sample Summary

Parsons Engineering Science for ILI

Job No: JC60421

PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY
Project No: 450619.02000

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC60421-1	02/07/18	08:15 SW/CL	02/07/18	AQ	Field Blank Water	1-SUF-010-001-01
JC60421-2	02/07/18	08:40 SW/CL	02/07/18	AQ	Ground Water	1-SUF-010-001-02
JC60421-3	02/07/18	10:30 SW/CL	02/07/18	AQ	Equipment Blank	1-SUF-010-001-03
JC60421-4	02/07/18	12:15 SW/CL	02/07/18	AQ	Ground Water	1-SUF-010-001-04
JC60421-5	02/07/18	14:15 SW/CL	02/07/18	AQ	Ground Water	1-SUF-010-001-05

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Parsons Engineering Science for ILI	**Job No**	JC60421
Site:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY	**Report Date**	4/6/2018 3:12:09 PM

On 02/07/2018, 4 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 4.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC60421 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2E6143

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60393-1MS, JC60421-2DUP were used as the QC samples indicated.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ **Batch ID:** F:OP68767

- The data for EPA 537M BY ID meets quality control requirements.
- The following samples were run outside of holding time for method EPA 537M BY ID: JC60421-3
- JC60421-2: Analysis performed at SGS Orlando, FL.
- JC60421-3: Analysis performed at SGS Orlando, FL.
- JC60421-3: Analysis performed at SGS Orlando, FL.
- JC60421-2 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.

Matrix: AQ **Batch ID:** F:OP68958

- The data for EPA 537M BY ID meets quality control requirements.
- JC60421-5: Analysis performed at SGS Orlando, FL.
- JC60421-1: Analysis performed at SGS Orlando, FL.
- JC60421-4: Analysis performed at SGS Orlando, FL.
- JC60421-4: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270D BY SIM

Matrix: AQ	Batch ID: OP9895A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC60421-2 for Phenanthrene: Associated CCV outside of control limits low.
- JC60421-5 for Fluorene: Associated CCV outside of control limits low.
- JC60421-5 for 1,4-Dioxane: Associated CCV outside of control limits low.
- JC60421-4 for Phenanthrene: Associated CCV outside of control limits low.
- JC60421-4 for Fluorene: Associated CCV outside of control limits low.
- JC60421-4 for 1,4-Dioxane: Associated CCV outside of control limits low.
- JC60421-2 for Fluorene: Associated CCV outside of control limits low.
- JC60421-5 for Phenanthrene: Associated CCV outside of control limits low.
- JC60421-2 for 1,4-Dioxane: Associated CCV outside of control limits low.

Metals Analysis By Method SW846 6010C

Matrix: AQ	Batch ID: MP5662

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60394-4MS, JC60394-4MSD, JC60394-4SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Boron, Chromium, Copper, Nickel, Zinc are outside control limits for sample MP5662-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method SW846 7470A

Matrix: AQ	Batch ID: MP5663

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60369-1MS, JC60369-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ	Batch ID: GP11174

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60369-1MS, JC60624-1DUP, JC60369-1MS were used as the QC samples for Chloride, Sulfate, Chloride, Bromide.

General Chemistry By Method SM2320 B-11

Matrix: AQ	Batch ID: GN76125

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60369-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.
- JC60421-2 for Alkalinity, Total as CaCO3: Sample was titrated to a final pH of 4.2.
- JC60421-5 for Alkalinity, Total as CaCO3: Sample was titrated to a final pH of 4.2.
- JC60421-4 for Alkalinity, Total as CaCO3: Sample was titrated to a final pH of 4.5.

General Chemistry By Method SM2340 C-11

Matrix: AQ	Batch ID: GN76051

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60369-1DUP, JC60369-1MS were used as the QC samples for Hardness, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ	Batch ID: GN76031

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60369-1DUP were used as the QC samples for Solids, Total Dissolved.

General Chemistry By Method SM4500NH3 H-11LACHAT

Matrix: AQ	Batch ID: GP11015

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60421-4DUP, JC60421-4MS, JC60421-4MSD were used as the QC samples for Nitrogen, Ammonia.

General Chemistry By Method SM5220 C-11,HACH8000

Matrix: AQ	Batch ID: GP11117

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60323-13DUP, JC60323-13MS were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SW846 9060A

Matrix: AQ	Batch ID: GP11207

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC60421-2MS, JC60421-2MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ **Job No:** JC60421

Site: ILINY: PESNYL: ILI - Region 1, Old Quogue Landfill, East **Report Date:** 3/5/2018 2:01:23 PM

4 Sample(s) and 1 Field Blank(s) were collected on 02/07/2018 and were received at SGS North America Inc - Orlando on 02/09/2018 properly preserved, at 2.6 Deg. C and intact. These Samples received an SGS Orlando job number of JC60421. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ **Batch ID:** OP68767

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC60421-2MS, JC60499-3DUP were used as the QC samples indicated.

Sample(s) JC60421-3 have compounds reported from the diluted analysis.

RPD(s) for Duplicate for Perfluorodecanoic acid are outside control limits for sample OP68767-DUP. Probable cause is due to sample non-homogeneity.

Sample(s) JC60421-2, OP68767-BS, OP68767-DUP have surrogates outside control limits.

JC60421-2 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.

JC60421-2 for 13C8-FOSA: Outside control limits.

Matrix: AQ **Batch ID:** OP68958

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC60421-4 have compounds reported from the diluted analysis.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: JC60421
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY
Collected: 02/07/18

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC60421-1	**1-SUF-010-001-01**					
Perfluoropentanoic acid [a]		0.00129 J	0.0040	0.0010	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.00122 J	0.0040	0.0010	ug/l	EPA 537M BY ID
Perfluorotetradecanoic acid [a]		0.00155 J	0.0040	0.0010	ug/l	EPA 537M BY ID
PFOSA [a]		0.00113 J	0.0040	0.0010	ug/l	EPA 537M BY ID
JC60421-2	**1-SUF-010-001-02**					
Perfluoropentanoic acid [a]		0.00140 J	0.0036	0.00089	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.00146 J	0.0036	0.00089	ug/l	EPA 537M BY ID
Perfluorotetradecanoic acid [a]		0.00167 J	0.0036	0.00089	ug/l	EPA 537M BY ID
Barium		0.0195 J	0.20	0.0013	mg/l	SW846 6010C
Iron		0.0785 J	0.10	0.032	mg/l	SW846 6010C
Manganese		0.0289	0.015	0.00042	mg/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]		1.5 J	5.0	1.1	mg/l	SM2320 B-11
Chloride		4.7	2.0	0.070	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3		16.0	4.0	2.5	mg/l	SM2340 C-11
Solids, Total Dissolved		20.0	10	1.8	mg/l	SM2540 C-11
Sulfate		8.3	2.0	0.53	mg/l	EPA 300/SW846 9056A
JC60421-3	**1-SUF-010-001-03**					
Perfluoropentanoic acid [a]		0.00131 J	0.0036	0.00089	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.00138 J	0.0036	0.00089	ug/l	EPA 537M BY ID
Perfluorotetradecanoic acid [a]		0.0317 J	0.071	0.018	ug/l	EPA 537M BY ID
JC60421-4	**1-SUF-010-001-04**					
Perfluorobutanoic acid [a]		0.0804	0.080	0.020	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]		0.177	0.040	0.010	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]		1.01	0.040	0.010	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]		0.181	0.040	0.010	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.424	0.040	0.010	ug/l	EPA 537M BY ID
Perfluorotetradecanoic acid [a]		0.0796 J	0.20	0.050	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]		0.241	0.040	0.010	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]		3.70	0.20	0.050	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid [a]		0.621	0.040	0.010	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]		11.2	0.40	0.10	ug/l	EPA 537M BY ID
Barium		0.0317 J	0.20	0.0013	mg/l	SW846 6010C
Boron		0.157	0.10	0.013	mg/l	SW846 6010C
Chromium		0.00090 J	0.010	0.00085	mg/l	SW846 6010C
Iron		0.187	0.10	0.032	mg/l	SW846 6010C
Manganese		0.0140 J	0.015	0.00042	mg/l	SW846 6010C
Zinc		0.0778	0.020	0.0040	mg/l	SW846 6010C

Summary of Hits

Job Number: JC60421
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY
Collected: 02/07/18

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Alkalinity, Total as CaCO3 [c]	118	5.0	1.1	mg/l	SM2320 B-11
Chemical Oxygen Demand	7.7 J	20	6.3	mg/l	SM5220 C-11,HACH8000
Chloride	6.4	2.0	0.070	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3	160	4.0	2.5	mg/l	SM2340 C-11
Solids, Total Dissolved	160	10	1.8	mg/l	SM2540 C-11
Sulfate	29.1	4.0	1.1	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	1.9	1.0	0.60	mg/l	SW846 9060A
JC60421-5 1-SUF-010-001-05					
Chloroform	0.36 J	1.0	0.29	ug/l	SW846 8260C
Perfluorobutanoic acid [a]	0.00609 J	0.0077	0.0019	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]	0.0158	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]	0.0102	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]	0.00471	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluorotetradecanoic acid [a]	0.00148 J	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]	0.00235 J	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]	0.00151 J	0.0038	0.00096	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]	0.00580 J	0.0077	0.0019	ug/l	EPA 537M BY ID
Barium	0.0487 J	0.20	0.0013	mg/l	SW846 6010C
Boron	0.0208 J	0.10	0.013	mg/l	SW846 6010C
Iron	0.0714 J	0.10	0.032	mg/l	SW846 6010C
Manganese	0.136	0.015	0.00042	mg/l	SW846 6010C
Zinc	0.0044 J	0.020	0.0040	mg/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]	4.0 J	5.0	1.1	mg/l	SM2320 B-11
Chemical Oxygen Demand	7.7 J	20	6.3	mg/l	SM5220 C-11,HACH8000
Chloride	17.7	2.0	0.070	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3	36.0	4.0	2.5	mg/l	SM2340 C-11
Solids, Total Dissolved	60.0	10	1.8	mg/l	SM2540 C-11
Sulfate	22.4	4.0	1.1	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.83 J	1.0	0.60	mg/l	SW846 9060A

(a) Analysis performed at SGS Orlando, FL.
(b) Sample was titrated to a final pH of 4.2.
(c) Sample was titrated to a final pH of 4.5.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1-SUF-010-001-01		
Lab Sample ID:	JC60421-1	**Date Sampled:**	02/07/18
Matrix:	AQ - Field Blank Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2Q11971.D	1	03/01/18 21:27	AFL	03/01/18 08:00	F:OP68958	F:S2Q217
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	0.00129	0.0040	0.0010	ug/l	J
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	0.00122	0.0040	0.0010	ug/l	J
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.00155	0.0040	0.0010	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0080	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0010	ug/l	
754-91-6	PFOSA	0.00113	0.0040	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.020	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.020	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	84%		50-150%
	13C5-PFPeA	84%		50-150%
	13C5-PFHxA	85%		50-150%
	13C4-PFHpA	86%		50-150%
	13C8-PFOA	89%		50-150%
	13C9-PFNA	89%		50-150%
	13C6-PFDA	89%		50-150%
	13C7-PFUnDA	87%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-01		
Lab Sample ID:	JC60421-1	**Date Sampled:**	02/07/18
Matrix:	AQ - Field Blank Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	83%		50-150%
	13C2-PFTeDA	77%		50-150%
	13C3-PFBS	92%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	93%		50-150%
	13C8-FOSA	51%		50-150%
	d3-MeFOSAA	92%		50-150%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	97%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E140762.D	1	02/09/18 21:59	JP	n/a	n/a	V2E6143
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
110-57-6	trans-1,4-Dichloro-2-Butene	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
74-88-4	Iodomethane	ND	2.0	0.27	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-95-3	Methylene bromide	ND	1.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.19	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.47	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.2	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P25740.D	1	02/15/18 05:44	CS	02/09/18 02:30	OP9895A	E4P1435
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.025	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.021	ug/l	
120-12-7	Anthracene	ND	0.10	0.020	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.050	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.043	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.033	ug/l	
218-01-9	Chrysene	ND	0.10	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.022	ug/l	
86-73-7	Fluorene [a]	ND	0.10	0.025	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.038	ug/l	
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
85-01-8	Phenanthrene [a]	ND	0.10	0.023	ug/l	
129-00-0	Pyrene	ND	0.10	0.019	ug/l	
123-91-1	1,4-Dioxane [a]	ND	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%		29-124%
321-60-8	2-Fluorobiphenyl	42%		23-122%
1718-51-0	Terphenyl-d14	64%		22-130%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2Q11748.D	1	02/23/18 19:15	AFL	02/14/18 09:00	F:OP68767	F:S2Q215
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0071	0.0018	ug/l	
2706-90-3	Perfluoropentanoic acid	0.00140	0.0036	0.00089	ug/l	J
307-24-4	Perfluorohexanoic acid	ND	0.0036	0.00089	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0036	0.00089	ug/l	
335-67-1	Perfluorooctanoic acid	0.00146	0.0036	0.00089	ug/l	J
375-95-1	Perfluorononanoic acid	ND	0.0036	0.00089	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0036	0.00089	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0036	0.00089	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0036	0.00089	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0036	0.00089	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.00167	0.0036	0.00089	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	ND	0.0036	0.00089	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0036	0.00089	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0036	0.00089	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0071	0.0018	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0036	0.00089	ug/l	
754-91-6	PFOSA [b]	ND	0.0036	0.00089	ug/l	
2355-31-9	MeFOSAA	ND	0.018	0.0036	ug/l	
2991-50-6	EtFOSAA	ND	0.018	0.0036	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0071	0.0018	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0071	0.0018	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		50-150%
	13C5-PFPeA	90%		50-150%
	13C5-PFHxA	92%		50-150%
	13C4-PFHpA	91%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	92%		50-150%
	13C6-PFDA	88%		50-150%
	13C7-PFUnDA	81%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	78%		50-150%
	13C2-PFTeDA	82%		50-150%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	90%		50-150%
	13C8-FOSA	39% [c]		50-150%
	d3-MeFOSAA	86%		50-150%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	94%		50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	ND	0.0030	0.0027	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Barium	0.0195 J	0.20	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Beryllium	ND	0.0010	0.00040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Boron	ND	0.10	0.013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Chromium	ND	0.010	0.00085	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Copper	ND	0.010	0.0032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Iron	0.0785 J	0.10	0.032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Lead	ND	0.0030	0.0026	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Manganese	0.0289	0.015	0.00042	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Mercury	ND	0.00020	0.000083	mg/l	1	02/08/18	02/08/18	JA	SW846 7470A [1]	SW846 7470A [4]
Nickel	ND	0.010	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Selenium	ND	0.010	0.0066	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Thallium	ND	0.0020	0.0016	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Zinc	ND	0.020	0.0040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA43734
(2) Instrument QC Batch: MA43750
(3) Prep QC Batch: MP5662
(4) Prep QC Batch: MP5663

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	1-SUF-010-001-02		
Lab Sample ID:	JC60421-2	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 [a]	1.5 J	5.0	1.1	mg/l	1	02/12/18 19:20	LS	SM2320 B-11
Bromide	ND	0.50	0.060	mg/l	1	02/18/18 15:15	JN	EPA 300/SW846 9056A
Chemical Oxygen Demand	ND	20	6.3	mg/l	1	02/14/18 13:03	MP	SM5220 C-11,HACH8000
Chloride	4.7	2.0	0.070	mg/l	1	02/18/18 15:15	JN	EPA 300/SW846 9056A
Hardness, Total as CaCO3	16.0	4.0	2.5	mg/l	1	02/09/18 16:56	MP	SM2340 C-11
Nitrogen, Ammonia	ND	0.20	0.14	mg/l	1	02/08/18 12:01	BM	SM4500NH3 H-11LACHAT
Solids, Total Dissolved	20.0	10	1.8	mg/l	1	02/09/18 12:58	MW	SM2540 C-11
Sulfate	8.3	2.0	0.53	mg/l	1	02/18/18 15:15	JN	EPA 300/SW846 9056A
Total Organic Carbon	ND	1.0	0.60	mg/l	1	02/20/18 02:21	CD	SW846 9060A

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	1-SUF-010-001-03		
Lab Sample ID:	JC60421-3	**Date Sampled:**	02/07/18
Matrix:	AQ - Equipment Blank	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2Q11762.D	1	02/24/18 00:13	AFL	02/14/18 09:00	F:OP68767	F:S2Q215
Run #2 [a]	2Q12010.D	20	03/02/18 11:49	AFL	02/14/18 09:00	F:OP68767	F:S2Q217

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0071	0.0018	ug/l	
2706-90-3	Perfluoropentanoic acid	0.00131	0.0036	0.00089	ug/l	J
307-24-4	Perfluorohexanoic acid	ND	0.0036	0.00089	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0036	0.00089	ug/l	
335-67-1	Perfluorooctanoic acid	0.00138	0.0036	0.00089	ug/l	J
375-95-1	Perfluorononanoic acid	ND	0.0036	0.00089	ug/l	
335-76-2	Perfluorodecanoic acid	ND [b]	0.071	0.018	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND [b]	0.071	0.018	ug/l	
307-55-1	Perfluorododecanoic acid	ND [b]	0.071	0.018	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0036	0.00089	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0317 [b]	0.071	0.018	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	ND	0.0036	0.00089	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0036	0.00089	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0036	0.00089	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0071	0.0018	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0036	0.00089	ug/l	
754-91-6	PFOSA	ND	0.0036	0.00089	ug/l	
2355-31-9	MeFOSAA	ND	0.018	0.0036	ug/l	
2991-50-6	EtFOSAA	ND	0.018	0.0036	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0071	0.0018	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]	0.14	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	83%		50-150%
	13C5-PFPeA	82%		50-150%
	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA		127%	50-150%
	13C7-PFUnDA		122%	50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-03		
Lab Sample ID:	JC60421-3	**Date Sampled:**	02/07/18
Matrix:	AQ - Equipment Blank	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA		108%	50-150%
	13C2-PFTeDA		130%	50-150%
	13C3-PFBS	90%		50-150%
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	86%		50-150%
	13C8-FOSA	86%		50-150%
	d3-MeFOSAA	97%		50-150%
	13C2-6:2FTS	87%		50-150%
	13C2-8:2FTS		131%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E140763.D	1	02/09/18 22:27	JP	n/a	n/a	V2E6143
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
110-57-6	trans-1,4-Dichloro-2-Butene	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
74-88-4	Iodomethane	ND	2.0	0.27	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-95-3	Methylene bromide	ND	1.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.19	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.47	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.2	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		80-120%
17060-07-0	1,2-Dichloroethane-D4	90%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P25741.D	1	02/15/18 06:15	CS	02/09/18 02:30	OP9895A	E4P1435
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.025	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.021	ug/l	
120-12-7	Anthracene	ND	0.10	0.020	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.050	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.043	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.033	ug/l	
218-01-9	Chrysene	ND	0.10	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.022	ug/l	
86-73-7	Fluorene [a]	ND	0.10	0.025	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.038	ug/l	
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
85-01-8	Phenanthrene [a]	ND	0.10	0.023	ug/l	
129-00-0	Pyrene	ND	0.10	0.019	ug/l	
123-91-1	1,4-Dioxane [a]	ND	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		29-124%
321-60-8	2-Fluorobiphenyl	49%		23-122%
1718-51-0	Terphenyl-d14	53%		22-130%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2Q11973.D	10	03/01/18 22:09	AFL	03/01/18 08:00	F:OP68958	F:S2Q217
Run #2 [a]	2Q12011.D	50	03/02/18 12:11	AFL	03/01/18 08:00	F:OP68958	F:S2Q217

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.0804	0.080	0.020	ug/l	
2706-90-3	Perfluoropentanoic acid	0.177	0.040	0.010	ug/l	
307-24-4	Perfluorohexanoic acid	1.01	0.040	0.010	ug/l	
375-85-9	Perfluoroheptanoic acid	0.181	0.040	0.010	ug/l	
335-67-1	Perfluorooctanoic acid	0.424	0.040	0.010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.040	0.010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.040	0.010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.040	0.010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.040	0.010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.040	0.010	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0796 [b]	0.20	0.050	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	0.241	0.040	0.010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	3.70 [b]	0.20	0.050	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.621	0.040	0.010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	11.2 [b]	0.40	0.10	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.040	0.010	ug/l	
754-91-6	PFOSA	ND	0.040	0.010	ug/l	
2355-31-9	MeFOSAA	ND	0.20	0.040	ug/l	
2991-50-6	EtFOSAA	ND	0.20	0.040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.080	0.020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.080	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%	93%	50-150%
	13C5-PFPeA	73%	92%	50-150%
	13C5-PFHxA	73%	95%	50-150%
	13C4-PFHpA	73%	97%	50-150%
	13C8-PFOA	81%	102%	50-150%
	13C9-PFNA	86%	100%	50-150%
	13C6-PFDA	80%	104%	50-150%
	13C7-PFUnDA	75%	107%	50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	73%	105%	50-150%
	13C2-PFTeDA	61%	101%	50-150%
	13C3-PFBS	75%	97%	50-150%
	13C3-PFHxS	72%	98%	50-150%
	13C8-PFOS	77%	97%	50-150%
	13C8-FOSA	70%	112%	50-150%
	d3-MeFOSAA	90%	110%	50-150%
	13C2-6:2FTS	83%	98%	50-150%
	13C2-8:2FTS	76%	111%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	ND	0.0030	0.0027	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Barium	0.0317 J	0.20	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Beryllium	ND	0.0010	0.00040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Boron	0.157	0.10	0.013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Chromium	0.00090 J	0.010	0.00085	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Copper	ND	0.010	0.0032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Iron	0.187	0.10	0.032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Lead	ND	0.0030	0.0026	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Manganese	0.0140 J	0.015	0.00042	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Mercury	ND	0.00020	0.000083	mg/l	1	02/08/18	02/08/18	JA	SW846 7470A [1]	SW846 7470A [4]
Nickel	ND	0.010	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Selenium	ND	0.010	0.0066	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Thallium	ND	0.0020	0.0016	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Zinc	0.0778	0.020	0.0040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA43734
(2) Instrument QC Batch: MA43750
(3) Prep QC Batch: MP5662
(4) Prep QC Batch: MP5663

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	1-SUF-010-001-04		
Lab Sample ID:	JC60421-4	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 [a]	118	5.0	1.1	mg/l	1	02/12/18 19:20	LS	SM2320 B-11
Bromide	ND	0.50	0.060	mg/l	1	02/18/18 16:51	JN	EPA 300/SW846 9056A
Chemical Oxygen Demand	7.7 J	20	6.3	mg/l	1	02/14/18 13:03	MP	SM5220 C-11,HACH8000
Chloride	6.4	2.0	0.070	mg/l	1	02/18/18 16:51	JN	EPA 300/SW846 9056A
Hardness, Total as CaCO3	160	4.0	2.5	mg/l	1	02/09/18 16:56	MP	SM2340 C-11
Nitrogen, Ammonia	ND	0.20	0.14	mg/l	1	02/08/18 12:03	BM	SM4500NH3 H-11LACHAT
Solids, Total Dissolved	160	10	1.8	mg/l	1	02/09/18 12:58	MW	SM2540 C-11
Sulfate	29.1	4.0	1.1	mg/l	2	02/19/18 21:12	JN	EPA 300/SW846 9056A
Total Organic Carbon	1.9	1.0	0.60	mg/l	1	02/20/18 03:40	CD	SW846 9060A

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PFSNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E140764.D	1	02/09/18 22:55	JP	n/a	n/a	V2E6143
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	0.36	1.0	0.29	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
110-57-6	trans-1,4-Dichloro-2-Butene	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
74-88-4	Iodomethane	ND	2.0	0.27	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-95-3	Methylene bromide	ND	1.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.19	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.47	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.2	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P25742.D	1	02/15/18 06:46	CS	02/09/18 02:30	OP9895A	F4P1435
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.027	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.023	ug/l	
120-12-7	Anthracene	ND	0.11	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	0.025	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.054	0.036	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.047	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.039	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.036	ug/l	
218-01-9	Chrysene	ND	0.11	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.039	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.024	ug/l	
86-73-7	Fluorene [a]	ND	0.11	0.027	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.041	ug/l	
91-20-3	Naphthalene	ND	0.11	0.032	ug/l	
85-01-8	Phenanthrene [a]	ND	0.11	0.025	ug/l	
129-00-0	Pyrene	ND	0.11	0.021	ug/l	
123-91-1	1,4-Dioxane [a]	ND	0.11	0.053	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		29-124%
321-60-8	2-Fluorobiphenyl	68%		23-122%
1718-51-0	Terphenyl-d14	82%		22-130%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2Q11975.D	1	03/01/18 22:52	AFL	03/01/18 08:00	F:OP68958	F:S2Q217
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.00609	0.0077	0.0019	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0158	0.0038	0.00096	ug/l	
307-24-4	Perfluorohexanoic acid	0.0102	0.0038	0.00096	ug/l	
375-85-9	Perfluoroheptanoic acid	0.00471	0.0038	0.00096	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0038	0.00096	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0038	0.00096	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0038	0.00096	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0038	0.00096	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0038	0.00096	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0038	0.00096	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.00148	0.0038	0.00096	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	0.00235	0.0038	0.00096	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.00151	0.0038	0.00096	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0038	0.00096	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00580	0.0077	0.0019	ug/l	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.0038	0.00096	ug/l	
754-91-6	PFOSA	ND	0.0038	0.00096	ug/l	
2355-31-9	MeFOSAA	ND	0.019	0.0038	ug/l	
2991-50-6	EtFOSAA	ND	0.019	0.0038	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.0019	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		50-150%
	13C5-PFPeA	91%		50-150%
	13C5-PFHxA	96%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	104%		50-150%
	13C9-PFNA	105%		50-150%
	13C6-PFDA	98%		50-150%
	13C7-PFUnDA	90%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	PESNYL: ILI - Region I, Quogue Landfill, East Quogue, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	88%		50-150%
	13C2-PFTeDA	87%		50-150%
	13C3-PFBS	95%		50-150%
	13C3-PFHxS	101%		50-150%
	13C8-PFOS	105%		50-150%
	13C8-FOSA	92%		50-150%
	d3-MeFOSAA	92%		50-150%
	13C2-6:2FTS	102%		50-150%
	13C2-8:2FTS	103%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	ND	0.0030	0.0027	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Barium	0.0487 J	0.20	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Beryllium	ND	0.0010	0.00040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Boron	0.0208 J	0.10	0.013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Chromium	ND	0.010	0.00085	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Copper	ND	0.010	0.0032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Iron	0.0714 J	0.10	0.032	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Lead	ND	0.0030	0.0026	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Manganese	0.136	0.015	0.00042	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Mercury	ND	0.00020	0.000083	mg/l	1	02/08/18	02/08/18	JA	SW846 7470A [1]	SW846 7470A [4]
Nickel	ND	0.010	0.0013	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Selenium	ND	0.010	0.0066	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Thallium	ND	0.0020	0.0016	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]
Zinc	0.0044 J	0.020	0.0040	mg/l	1	02/08/18	02/09/18	RP	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA43734
(2) Instrument QC Batch: MA43750
(3) Prep QC Batch: MP5662
(4) Prep QC Batch: MP5663

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	1-SUF-010-001-05		
Lab Sample ID:	JC60421-5	**Date Sampled:**	02/07/18
Matrix:	AQ - Ground Water	**Date Received:**	02/07/18
		Percent Solids:	n/a
Project:	PESNYL: ILI - Region 1, Quogue Landfill, East Quogue, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 [a]	4.0 J	5.0	1.1	mg/l	1	02/12/18 19:20	LS	SM2320 B-11
Bromide	ND	0.50	0.060	mg/l	1	02/18/18 17:19	JN	EPA 300/SW846 9056A
Chemical Oxygen Demand	7.7 J	20	6.3	mg/l	1	02/14/18 13:03	MP	SM5220 C-11,HACH8000
Chloride	17.7	2.0	0.070	mg/l	1	02/18/18 17:19	JN	EPA 300/SW846 9056A
Hardness, Total as CaCO3	36.0	4.0	2.5	mg/l	1	02/09/18 16:56	MP	SM2340 C-11
Nitrogen, Ammonia	ND	0.20	0.14	mg/l	1	02/08/18 12:04	BM	SM4500NH3 H-11LACHAT
Solids, Total Dissolved	60.0	10	1.8	mg/l	1	02/09/18 12:58	MW	SM2540 C-11
Sulfate	22.4	4.0	1.1	mg/l	2	02/19/18 21:40	JN	EPA 300/SW846 9056A
Total Organic Carbon	0.83 J	1.0	0.60	mg/l	1	02/20/18 04:00	CD	SW846 9060A

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

Job Change Order: JC60421

Requested Date:	2/12/2018	**Received Date:**	2/7/2018
Account Name:	NY Inactive Landfill Initiative (Pars	**Due Date:**	2/21/2018
Project Description:	PESNYL: ILI - Region 1, Old Quogue Landfill, East	**Deliverable:**	NYASPB
C/O Initiated By:	peled **PM:** TM	**TAT (Days):**	14

Sample #: JC60421-2, -4, -5 **Change:**

Dept: Revise V8260SL to V8260SL+

TAT: 14

Above Changes Per: Tammy McCloskey **Date/Time:** 2/12/2018 2:21:58 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

5.1

5

JC60421: Chain of Custody
Page 1 of 6

SGS Sample Receipt Summary

Job Number: JC60421 **Client:** PARSONS **Project:** QUOGUE LANDFILL - NY ILI

Date / Time Received: 2/7/2018 6:45:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9); Cooler 2: (3.3);

Cooler Temps (Corrected) °C: Cooler 1: (4.4); Cooler 2: (4.8);

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers:	2

Quality Control Preservation	Y or N	N/A
1. Trip Blank present / cooler:	☐ ☑	☐
2. Trip Blank listed on COC:	☐ ☑	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments COC notes Trip Blank was broken prior to receipt by Parsons.

SM089-03
Rev. Date 12/7/17

5.1
5

JC60421: Chain of Custody
Page 2 of 6

Responded to by: CSR: N/A

Response Date: Response Date: 2/7/2018

Response:

Response: Proceed with analysis

5.1

5

JC60421: Chain of Custody
Page 3 of 6

GW FB

JC60421 1

CHAIN-OF-CUSTODY / Analytical Request Document

Section A Laboratory Information

Lab Name: SGS - Accutest

Attention: Tammy Esposito McCloskey

Address: Route 2235 Route 130; Dayton, NJ 08810

Phone: 732-329-0200

Email:

Section B Client Information

Company: Parsons

Attention: Sara Weishaupt

Address: 301 Plainfield Road, Suite 350 Syracuse, NY 13212

Phone: 315-552-9681

Email: Sara.Weishaupt@parsons.com

Purchase Order No:

TAT - 10

Quogue LF

COC #: 1-SoF-010-001

Project Name: Inactive Landfill Initiative

Project Site: Quogue LF

Project Number: 450619.02000

Section C Deliverable Requirements

Report To: Sara.Weishaupt@parsons.com

Copy To: Lorraine.Weber@parsons.com; Laura.Drachenberg@parsons.com Maryanne.Koscielwicz@parsons.com; Heather.Fettig@parsons.com

Deliverables: Level 2, CAT B Report, NYSDEC EQUIS EDD

Section D Additional Information

Preservative codes (for water only): 0 1 0 2 7 1 0 0 0 2

	#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID MUST BE UNIQUE	Sample Date	Sample Time	Sample Purpose	Sample Matrix	Sample Type	# of Cont.	PFCs Modified 537	Modified Baseline VOCs - 8260	1,4-Dioxane 8270SIM	Modified Baseline Metals - 6010/7470	BOD - 5210B	COD 410.4	TOC - 9060A	TDS - SM 2540C	Sulfate/Chloride/Bromide - 300	Alkalinity - SM20 2320B	Hardness - SM20 2340C
	Bottles											3	2	1	2	1	2	1	1	1	1	
1	1	FieldQC	-	-	1-SoF-010-001-01	2/1/18	0815	FB	WQ	QC	2	X										
2	2	1-SoF-010-MW-01	48.12	50.41	1-SoF-010-001-02	2/7/18	0840	N	WG	GW	13	X	X	X	X	X	X	X	X	X	X	X
3	3	FieldQC	-	-	1-SoF-010-001-03	2/7/18	1450	EB	WQ	QC	2	X										
4	4	1-SoF-010-MW-02	41.11	50.96	1-SoF-010-001-04	2/7/18	1215	N	WG	GW	13	X	X	X	X	X	X	X	X	X	X	X
5	5	1-SoF-010-MW-03	43.58	50.79	1-SoF-010-001-05	2/7/18	1415	N	WG	GW	13	X	X	X	X	X	X	X	X	X	X	X
	6																					
	7																					
	8																					
	9																					
	10																					

E100 A27 C49 G30T3 I9J4 V845

Special Instructions: Trip Blank for Quogue LF was broken prior to receipt by Parsons.

ALL SAMPLES RECEIVED PRESERVED AS APPLICABLE

Relinquished By	Company / Date/Time	Accepted By	Company / Date/Time
P. Rachuljer	Parsons 2/7/18 1430	Chris Ford	SGS Accutest 2/7/18 1845
Chris Ford	Shipment Tracking: SGS/Accutest 2/7/18 1450	[illegible]	SGS 2/7/18 1845

Cooler Temp.: 2.8° 3.2° | Rec'd on Ice: Yes No | Custody Seals Intact: Yes No | Samples Intact: Yes No

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (H3PO4)

TM-02218-30

INITIAL ASSESSMENT 2/8 CL

LABEL VERIFICATION

C:\Users\P0014820\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\U8B84GGE\COC for ILI_Region 1_3.xlsx

JC60421: Chain of Custody
Page 4 of 6

Job Change Order: JC60421

Requested Date:	4/5/2018	**Received Date:**	2/7/2018
Account Name:	Parsons Engineering Science for	**Due Date:**	2/21/2018
Project Description:	PESNYL: ILI - Region 1, Quogue Landfill, East Quo	**Deliverable:**	NYASPB
C/O Initiated By:	kristin.degra **PM:** TM	**TAT (Days):**	1

==========

Sample #: JC60421-2, -4, -5

Change: Please NO OUT data for AG, AL, CA, CD, CO, K, MG, NA, B and V. Please adjust metals units to mg/L

Dept:

TAT: 1

==========

Above Changes Per: Client / Maryanne Kosciewicz **Date/Time:** 4/5/2018 2:19:35 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

5.1

5

Job Change Order: JC60421

Requested Date:	4/6/2018	**Received Date:**	2/7/2018
Account Name:	Parsons Engineering Science for	**Due Date:**	2/21/2018
Project Description:	PESNYL: ILI - Region 1, Quogue Landfill, East Quo	**Deliverable:**	NYASPB
C/O Initiated By:	kristin.degra **PM:** KD	**TAT (Days):**	1

Sample #: JC60421-2, -4, -5 **Change:**
Please NO OUT data for SB and retrieve/add data for B (already run).

Dept:

TAT: 1

Above Changes Per: Client **Date/Time:** 4/6/2018 1:41:05 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

5.1 5

JC60421: Chain of Custody
Page 6 of 6

CHAIN OF CUSTODY

SGS

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JC60421

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 2235 Route 130
City: Dayton | State: NJ | Zip: 08810
Project Contact: Tammy.McCloskey@sgs.com | E-mail:
Phone #: 732-329-0200 | Fax #:
Sampler(s) Name(s): SW/CL | Phone:

Project Information

Project Name: PESNYL: IU - Region 1, Old Quogue Landfill, East Quogue, NY
Street:
City: | State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: | State: | Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

LCID357/DOOFL

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	1-SUF-010-001-01		2/7/18	8:15:00 AM	SW/CL	AQ	2								X	
2	1-SUF-010-001-02		2/7/18	8:40:00 AM	SW/CL	AQ	2								X	
3	1-SUF-010-001-03		2/7/18	10:30:00 AM	SW/CL	AQ	2								X	
4	1-SUF-010-001-04		2/7/18	12:15:00 PM	SW/CL	AQ	2								X	
5	1-SUF-010-001-05		2/7/18	2:15:00 PM	SW/CL	AQ	2								X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- ☐ Std. 10 Business Days
- ☐ 6 Day RUSH
- ☐ 4 Day EMERGENCY
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☒ other 14

Emergency & Rush TAT data available VIA Lablink

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULL T1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☒ Other NYASPB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Must ship in their own coolers for PFA/PFO

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time	Received By:	Relinquished By:	Date Time:	Received By:
1	2-8-18 1700	1 FEDEX	2 Fed Ex		2 02/09/18 915
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal # 297 ☐ Intact ☐ Not Intact	Preserved where applicable ☐	On Ice ☐ Cooler Temp. 2.6
6		5			

5.2 5

JC60421: Chain of Custody
Page 1 of 2
SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JC60421 **Client:** ALNJ **Project:** PESNYL

Date / Time Received: 2/9/2018 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1001891751210003281100563393511623

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

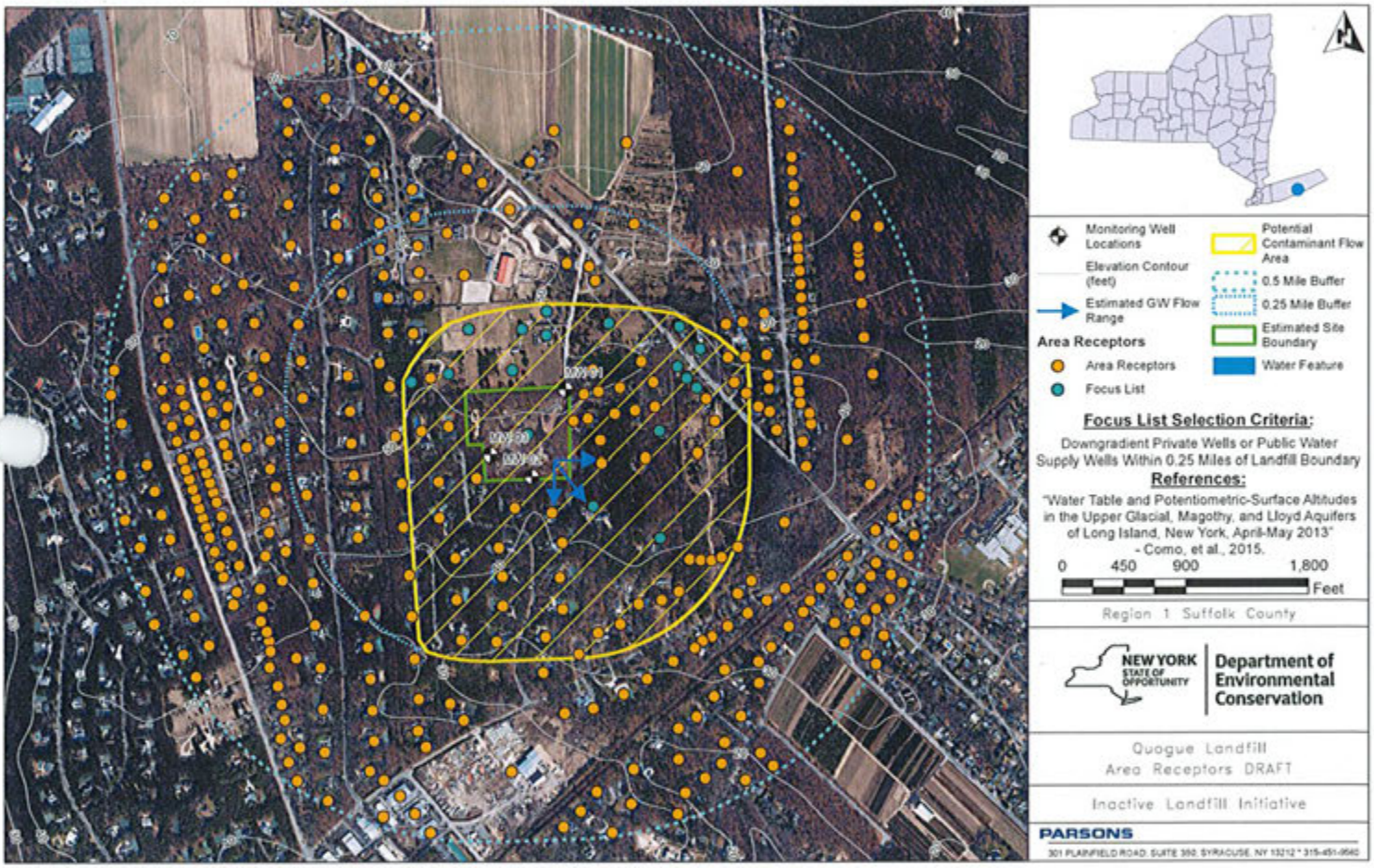
SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 2/9/2018 9:15:00 AM Reviewer: _____ Date: _____

5.2
5

JC60421: Chain of Custody
Page 2 of 2

Attachment B – Quogue Landfill Area Receptors Figure



Document Path: Q:\GIS\NYSDEC\450619-WA#33-Inactive Landfill Initiative\MXDs\NYSDEC ILI Region 1 Water Receptors.mxd

ADDENDA D – PHASE II – REMEDIATION REPORT – JANUARY 2007

Town of Southampton

Phase II Environmental Site Assessment Report

Former Animal Shelter

Damascus Road, East Quogue, New York

Prepared For

The Town of Southampton

Southampton, New York

January 2007

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

RLA:JOBS:Southampton2597(01/02/07)

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

FORMER ANIMAL SHELTER
DAMASCUS ROAD
EAST QUOGUE, NEW YORK

PREPARED FOR

TOWN OF SOUTHAMPTON

BY

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK

JANUARY 2007

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
FORMER ANIMAL SHELTER
DAMASCUS ROAD
EAST QUOGUE, NEW YORK

TABLE OF CONTENTS

List of Appendices

TABLE OF CONTENTS (continued)

List of Figures

List of Tables

1.0 INTRODUCTION

1.1 Project Background

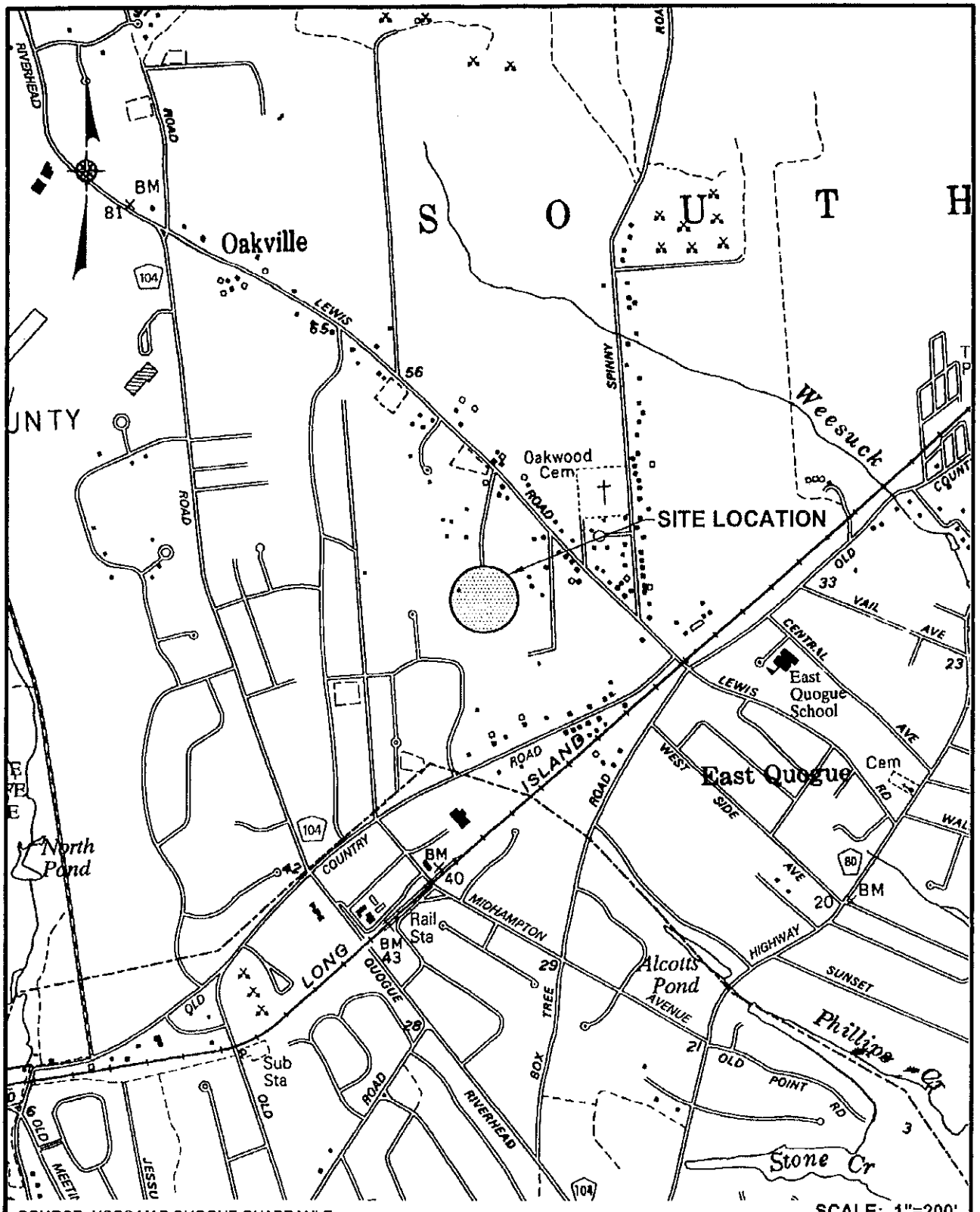
The Town of Southampton retained Dvirka and Bartilucci Consulting Engineers (D&B) to conduct a Phase II Environmental Site Assessment (ESA) at the property located at the end of Damascus Road in East Quogue, New York. The site location is shown on Figure 1-1. This work was conducted as a result of the Town's interest in possible redevelopment of the site for athletic fields and associated facilities.

Based upon D&B's review of available maps and information, the Damascus Road site involves three adjacent areas of Town-owned properties that have a total area of approximately 12 acres. Reported prior use of portions of the site have included open burning, filling of solid waste (including cars), fire training, use as an animal shelter and, most recently, vacant land since the animal shelter was removed in 2004.

A Phase I ESA of the site completed in May 1999, contained the following recommendations:

- Conduct a subsurface investigation to determine whether releases of fuel had occurred from the 1,000-gallon underground storage fuel oil tank (UST) reportedly located on the east side of the animal shelter building;
- Collect and analyze soil samples (for petroleum, chemical and heavy metals) in the northwest area of the site that were previously used for septage/sewage leaching;
- Collect and analyze soil samples in the southern and western portions of the site to determine the presence of petroleum, chemicals or heavy metals; and
- Investigate the central portion of the site for evidence of buried drums.

No previous environmental sampling at the property has been identified.



Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

SOUTHAMPTON ANIMAL HOSPITAL
146 DAMASUS ROAD
SOUTHAMPTON, NEW YORK

SITE LOCATION MAP

FIGURE 1-1

F:\259712597-USGS.dwg, FIG 1, 12/08/06 12:16:28 PM, LGlubiak

2.0 FIELD INVESTIGATION

This section presents a summary of the activities performed as part of the Damascus Road site Phase II ESA. The field investigation program included a geophysical survey, surface soil sampling and subsurface soil sampling. This section also includes the rationale used for choosing the sample locations, and the analytical parameters and methods.

2.1 Field Procedures, Sample Locations and Analytical Parameters

2.1.1 Geophysical Survey

While the 1999 Phase I ESA report noted the potential presence of buried drums in pits in the southwest portion of the site, the study recommended that the investigation for buried drums be performed in the center of the property. In order to assess whether shallow buried metallic objects, including drums, were present anywhere on the site, D&B's field investigation included a geophysical survey over all accessible portions of the site, using a Model GA-52CX magnetometer. The magnetometer survey was conducted using a grid with a spacing of approximately 10 feet.

2.1.2 Surface Soil Sampling

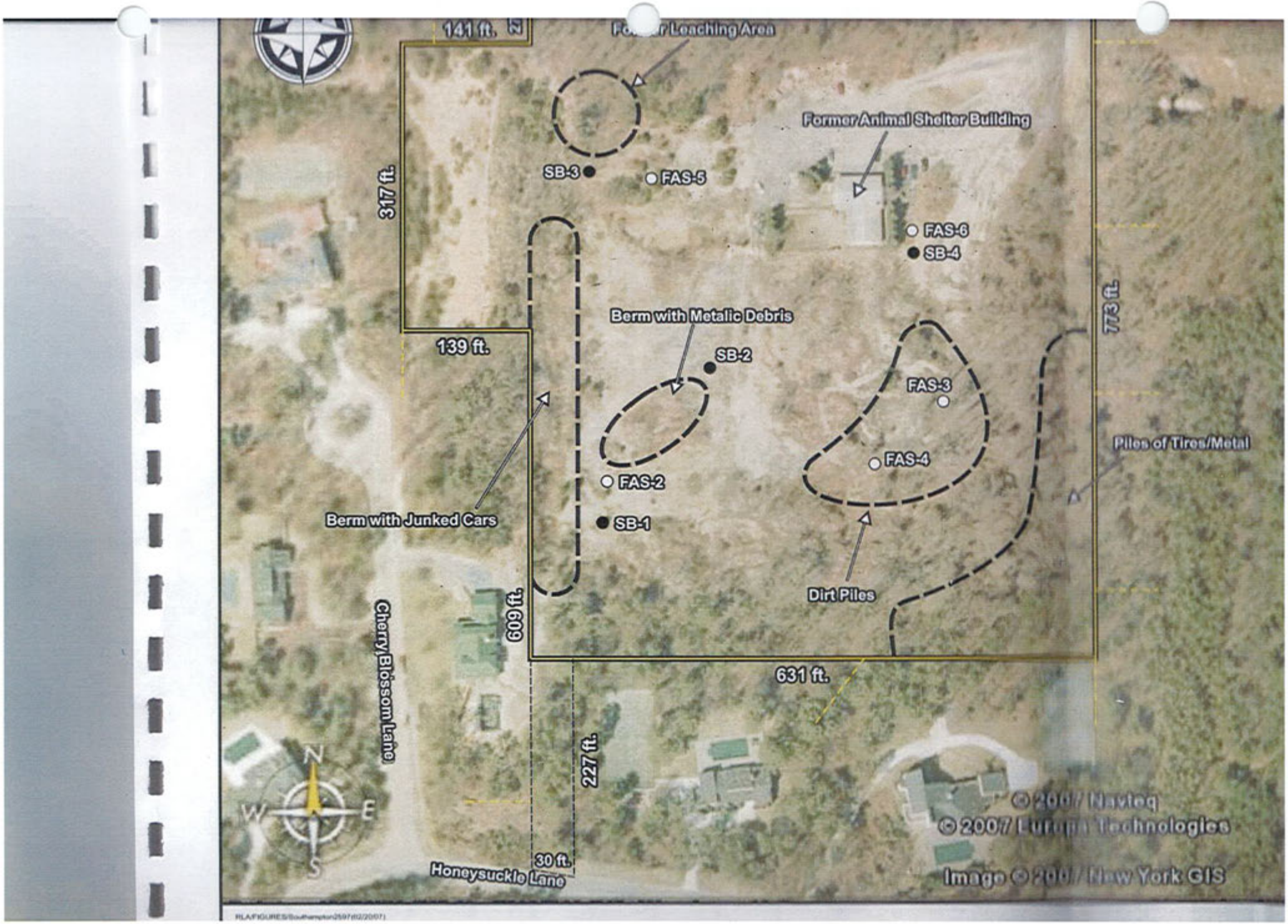
Surface soil samples were collected in October 2006 at six locations throughout the site to evaluate the potential for exposure to contaminants during possible future site redevelopment or site use activities. Three samples were collected at potential areas of environmental concern (AECs) that were identified during the 1999 Phase I ESA. These areas include the black soil area associated with a fire training area (black surface soil is no longer visible), the soil piles in the southern portion of the site and the berm along the western boundary of the site. Three additional samples were collected at unbiased locations throughout the property. Sample locations are shown on Figure 2-1.

1.2 Project Objective and Scope

The objective of the Phase II ESA was to evaluate environmental conditions at the Damascus Road site. This objective was attained by performing a geophysical survey and collecting surface soil and subsurface soil samples for laboratory analysis.

1.3 Report Organization

The remainder of this report consists of three sections. Section 2.0 (Field Investigation) describes the scope of work for the Phase II ESA, including the sample locations, sampling procedures, analytical methods and data validation procedures. The site hydrogeology and the results of the geophysical survey and soil analyses, including data validation results, are described in Section 3.0 (Findings). The conclusions of the Phase II ESA and recommendations regarding additional investigation and remediation, if warranted, are presented in Section 4.0 (Conclusions and Recommendations).


141 ft.
Former Leaching Area
Former Animal Shelter Building
SB-3
FAS-5
317 ft.
FAS-6
SB-4
773 ft.
Berm with Metalic Debris
139 ft.
SB-2
FAS-3
Piles of Tires/Metal
FAS-4
FAS-2
Berm with Junked Cars
SB-1
Dirt Piles
609 ft.
Cherry Blossom Lane
631 ft.
227 ft.
30 ft.
Honeysuckle Lane
© 2007 Navteq
© 2007 Europa Technologies
Image © 2007 New York GIS

Samples were collected using a dedicated disposable scoop from 0 to 6 inches below grade or the pile/berm surface. Each sample was analyzed for Target Compound List (TCL) volatile organic compounds with a library search (VOCs+10), TCL semivolatile organic compounds with a library search (SVOCs+20), TCL pesticides, TCL PCBs, Target Analyte List (TAL) metals and cyanide.

2.1.3 Subsurface Soil Sampling

Based on the AECs identified during the 1999 Phase I ESA and after review of available aerial photographs and historic site information, subsurface soil samples were collected in October 2006 at five locations. The AECs that were sampled include the former sanitary leaching area in the northwest portion of the site, the UST adjacent to the former animal shelter building and the apparent waste disposal pits in the southwest and central portions of the site.

Samples were collected using the direct push sampling method by Zebra Environmental Corporation. Sampling was conducted continuously from grade to a depth of 12 feet (below the presumed depth of the UST and the depth of penetration for the magnetometer survey). Each sample was screened for VOCs using a photoionization detector (PID) and geologically logged, including indications of potential contamination such as staining or odors.

The "worst-case" 2-foot interval from each boring, based on PID readings and field observations, was submitted to the laboratory for analysis of TCL VOCs+10, TCL SVOCs+20, TCL pesticides, TCL PCBs, TAL metals and cyanide. Where no "worst-case" interval was identified (samples FAS-1, FAS-2, and FAS-3), the sample from 2 to 4 feet below grade was submitted for analysis, as this is the maximum depth likely to be disturbed during the planned future park construction.

2.2 Analytical Methods and Data Validation

Chemical laboratory analyses of soil samples collected by D&B were performed by Mitkem Corporation. Mitkem is certified under the New York State Department of Health Environmental Laboratory Accreditation Program (ELAP) for the analyses performed.

All analyses were performed using New York State Department of Environmental Conservation (NYSDEC) 6/00 Analytical Services Protocols (ASP) methods using standard, 28-day turnaround time. A Category B data package was provided, using batch quality assurance/quality control (QA/QC) samples.

The data packages were reviewed in accordance with NYSDEC QA/QC requirements. All QA sample (calibrations, blanks, spikes, etc.) results have been reviewed for transcription errors and contract compliance. The results of the data validation process are presented as a Data Usability Summary Report (DUSR) in Section 3.4.

3.3.2 Surface Soil

Table 3-1
SURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	FAS-1	FAS-2	FAS-3	FAS-4	FAS-5	FAS-6	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
SAMPLE TYPE	Surface	Surface	Surface	Surface	Surface	Surface			
PERCENT SOLIDS	90	89	95	78	97	95			
DILUTION FACTOR	1	1	1	1	1	1			
DATE OF COLLECTION	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Volatile Organics									
Dichlorodifluoromethane	U	U	U	U	U	U	10	--	--
Chloromethane	U	U	U	U	U	U	10	--	--
Vinyl chloride	U	U	U	U	U	U	10	20	210
Bromomethane	U	U	U	U	U	U	10	--	--
Chloroethane	U	U	U	U	U	U	10	--	--
Trichlorofluoromethane	U	U	U	U	U	U	10	--	--
1,1-Dichloroethene	U	U	U	U	U	U	10	330	100,000
Acetone	U	U	U	U	U	U	10	50	100,000
Iodomethane	U	U	U	U	U	U	10	--	--
Carbon disulfide	U	U	U	U	U	U	10	--	--
Methylene chloride	4 J	3 J	U	U	4 J	U	10	50	51,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	10	190	100,000
Methyl tert-butyl ether	U	U	U	U	U	U	10	930	62,000
1,1-Dichloroethane	U	U	U	U	U	U	10	330	19,000
Vinyl acetate	U	U	U	U	U	U	10	--	--
2-Butanone	U	U	U	U	U	U	10	120	100,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	10	250	59,000
2,2-Dichloropropane	U	U	U	U	U	U	10	--	--
Bromochloromethane	U	U	U	U	U	U	10	--	--
Chloroform	U	U	U	U	U	U	10	370	10,000
1,1,1-Trichloroethane	U	U	U	U	U	U	10	680	100,000
1,1-Dichloropropene	U	U	U	U	U	U	10	--	--
Carbon tetrachloride	U	U	U	U	U	U	10	760	1,400
1,2-Dichloroethane	U	U	U	U	U	U	10	20	2,300
Benzene	U	U	U	U	U	U	10	60	2,900
Trichloroethene	U	U	U	U	U	U	10	470	10,000
1,2-Dichloropropane	U	U	U	U	U	U	10	--	--
Dibromethane	U	U	U	U	U	U	10	--	--
Bromodichloromethane	U	U	U	U	U	U	10	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	10	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	10	--	--
Toluene	U	U	U	U	U	U	10	700	100,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	10	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	10	--	--
1,3-Dichloropropane	U	U	U	U	U	U	10	--	--
Tetrachloroethene	U	U	U	U	U	U	10	1,300	5,500
2-Hexanone	U	U	U	U	U	U	10	--	--
Dibromochloromethane	U	U	U	U	U	U	10	--	--
1,2- Dibromethane	U	U	U	U	U	U	10	--	--
Chlorobenzene	U	U	U	U	U	U	10	1,100	100,000
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	10	--	--
Ethylbenzene	U	U	U	U	U	U	10	1,000	30,000
Xylene (total)	U	U	U	U	U	U	10	260	100,000
Styrene	U	U	U	U	U	U	10	--	--
Bromoform	U	U	U	U	U	U	10	--	--
Isopropylbenzene	U	U	U	U	U	U	10	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	10	--	--
Bromobenzene	U	U	U	U	U	U	10	--	--
1,2,3-Trichloropropane	U	U	U	U	U	U	10	--	--
n-Propylbenzene	U	U	U	U	U	U	10	3,900	100,000
2-Chlorotoluene	U	U	U	U	U	U	10	--	--
1,3,5-Trimethylbenzene	U	U	U	U	U	U	10	8,400	47,000
4-Chlorotoluene	U	U	U	U	U	U	10	--	--
tert-Butylbenzene	U	U	U	U	U	U	10	5,900	100,000
1,2,4-Trimethylbenzene	U	U	U	U	U	U	10	3,600	47,000
sec-Butylbenze	U	U	U	U	U	U	10	11,000	100,000
4-Isopropyltoluene	U	U	U	U	U	U	10	--	--
1,3-Dichlorobenzene	U	U	U	U	U	U	10	2,400	17,000
1,4-Dichlorobenzene	U	U	U	U	U	U	10	1,800	9,800
n-Butylbenzene	U	U	U	U	U	U	10	12,000	100,000
1,2-Dichlorobenzene	U	U	U	U	U	U	10	1,100	100,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	10	--	--
1,2,4-Trichlorobenzene	U	U	U	U	U	U	10	--	--
Hexachlorobutadiene	U	U	U	U	U	U	10	--	--
Naphthalene	U	U	2 J	U	U	U	10	12,000	100,000
1,2,3-Trichlorobenzene	U	U	U	U	U	U	10	--	--
Total VOCs	4	3	U	U	4	U		--	--
Total VOC TICs	U	U	U	U	U	U		--	--

QUALIFIERS
U: Compound analyzed for but not detected
J: Compound detected at a concentration below CRDL, value estimated

Table 3-1
SURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	FAS-1	FAS-2	FAS-3	FAS-4	FAS-5	FAS-6	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
SAMPLE TYPE	Surface	Surface	Surface	Surface	Surface	Surface			
PERCENT SOLIDS	90	89	95	78	97	95			
DILUTION FACTOR	1	1	1	1	1	1			
DATE OF COLLECTION	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Semi-volatile Organics									
Phenol	U	U	U	U	U	U	330	330	100,000
bis (2-Chloroethyl) ether	U	U	U	U	U	U	330	--	--
2-Chlorophenol	U	U	U	U	U	U	330	--	--
1,3-Dichlorobenzene	U	U	U	U	U	U	330	2,400	17,000
1,4-Dichlorobenzene	U	U	U	U	U	U	330	1,800	9,800
1,2-Dichlorobenzene	U	U	U	U	U	U	330	1,100	100,000
2-Methylphenol	U	U	U	U	U	U	330	330	100,000
2,2'-oxybis (1-Chloropropane)	U	U	U	U	U	U	330	--	--
4-Methylphenol	U	U	U	U	U	U	330	330	34,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	330	--	--
Hexachloroethane	U	U	U	U	U	U	330	--	--
Nitrobenzene	U	U	U	U	U	U	330	--	--
Isophorone	U	U	U	U	U	U	330	--	--
2-Nitrophenol	U	U	U	U	U	U	330	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	330	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	330	--	--
1,2,4-Trichlorobenzene	U	U	U	U	U	U	330	--	--
Naphthalene	U	U	U	U	U	U	330	12,000	100,000
4-Chloroaniline	U	U	U	U	U	U	330	--	--
bis (2-Chloroethoxy)methane	U	U	U	U	U	U	330	--	--
Hexachlorobutadiene	U	U	U	U	U	U	330	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	330	--	--
2-Methylnaphthalene	U	U	U	U	U	U	330	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	330	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	330	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	825	--	--
2-Chloronaphthalene	U	U	U	U	U	U	330	--	--
2-Nitroaniline	U	U	U	U	U	U	825	--	--
Dimethylphthalate	U	U	U	U	U	U	330	--	--
Acenaphthylene	U	U	U	U	U	U	330	100,000	100,000
2,6-Dinitrotoluene	U	U	U	U	U	U	330	--	--
3-Nitroaniline	U	U	U	U	U	U	825	--	--
Acenaphthene	U	U	U	U	U	U	330	20,000	100,000
2,4-Dinitrophenol	U	U	U	U	U	U	825	--	--
4-Nitrophenol	U	U	U	U	U	U	825	--	--
Dibenzofuran	U	U	U	U	U	U	330	7,000	14,000
2,4-Dinitrotoluene	U	U	U	U	U	U	330	--	--
Diethylphthalate	U	U	U	U	U	U	330	--	--
4-Chlorophenyl-phenylether	U	U	U	U	U	U	330	--	--
Fluorene	U	U	U	U	U	U	330	30,000	100,000
4-Nitroaniline	U	U	U	U	U	U	825	--	--
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	330	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	330	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	330	--	--
Hexachlorobenzene	U	U	U	U	U	U	330	--	--
Pentachlorophenol	U	U	U	U	U	U	825	800	2,400
Phenanthrene	U	U	U	U	U	U	330	100,000	100,000
Anthracene	U	U	U	U	U	U	330	100,000	100,000
Carbazole	U	U	U	U	U	U	330	--	--
Di-n-butylphthalate	48 J	46 J	47 J	70 J	41 J	U	330	--	--
Fluoranthene	U	U	U	U	U	U	330	100,000	100,000
Pyrene	U	U	U	U	U	U	330	100,000	100,000
Butylbenzylphthalate	U	U	U	U	U	U	330	--	--
3,3'-Dichlorobenzidine	U	U	U	U	U	U	330	--	--
Benzo(a)anthracene	U	U	U	U	U	U	330	1,000	1,000
Chrysene	U	U	U	U	U	U	330	1,000	1,000
bis (2-Ethylhexyl) phthalate	U*	U*	U*	U*	U*	U*	330	--	--
Di-n-octylphthalate	U	U	U	U	U	U	330	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	330	1,000	1,000
Benzo(k)fluoranthene	U	U	U	U	U	U	330	800	1,000
Benzo(a)pyrene	U	U	U	U	U	U	330	1,000	1,000
Indeno (1,2,3-cd)pyrene	U	U	U	U	U	U	330	500	500
Dibenzo(a,h)anthracene	U	U	U	U	U	U	330	330	330
Benzo (g,h,i)perylene	U	U	U	U	U	U	330	100,000	100,000
Total SVOCs	48	46	47	70	41	0		--	--
Total SVOC TICs	4,690	U	190	500	230	150		--	--

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound detected at a concentration below CRDL, value estimated.
U*: Result qualified as non-detect, based on data validation criteria.

Table 3-1
SURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	FAS-1	FAS-2	FAS-3	FAS-4	FAS-5	FAS-6	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
SAMPLE TYPE	Surface	Surface	Surface	Surface	Surface	Surface			
PERCENT SOLIDS	90	89	95	78	97	95			
DILUTION FACTOR	1	1	1	1	1	1			
DATE OF COLLECTION	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Pesticides									
alpha-BHC	U	U	U	U	U	U	1.7	20	97
beta-BHC	U	U	U	U	U	U	1.7	36	72
delta-BHC	U	U	U	U	U	U	1.7	40	100
gamma-BHC	U	U	U	U	U	U	1.7	--	280
Heptachlor	U	U	U	U	U	U	1.7	42	420
Aldrin	U	U	U	U	U	U	1.7	5	19
Heptachlor epoxide	U	U	U	U	U	U	1.7	--	--
Endosulfan I	U	U	U	U	U	U	1.7	2,400	420
Dieldrin	U	U	U	U	U	U	3.3	5	4,800
4,4'-DDE	6.0	U	U	U	U	U	3.3	3.3	1,800
Endrin	U	U	U	U	U	U	3.3	14	2,200
Endosulfan II	U	U	U	U	U	U	3.3	2,400	4,800
4,4'-DDD	U	U	U	U	U	U	3.3	3.3	2,600
Endosulfan sulfate	U	U	U	U	U	U	3.3	2,400	4,800
4,4'-DDT	18	U	U	U	U	U	3.3	3.3	1,700
Methoxychlor	U	U	U	U	U	U	17	--	--
Endrin ketone	U	U	U	U	U	U	3.3	--	--
Endrin aldehyde	U	U	U	U	U	U	3.3	--	--
alpha-Chlordane	4.8 P	U	U	U	U	3.5 P	1.7	94	910
gamma-Chlordane	4.5	U	U	U	U	3.1	1.7	94	910
Toxaphene	U	U	U	U	U	U	170	--	--
PCBs									
Aroclor-1016	U	U	U	U	U	U	33	100	1,000
Aroclor-1221	U	U	U	U	U	U	67	100	1,000
Aroclor-1232	U	U	U	U	U	U	33	100	1,000
Aroclor-1242	U	U	U	U	U	U	33	100	1,000
Aroclor-1248	U	U	U	U	U	U	33	100	1,000
Aroclor-1254	63 P	U	U	U	U	U	33	100	1,000
Aroclor-1260	U	U	U	U	U	U	33	100	1,000

QUALIFIERS:
U: Compound analyzed for but not detected.
P: Greater than 25% difference between primary and confirmation columns; lower value reported.

Table 3-1
SURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	FAS-1	FAS-2	FAS-3	FAS-4	FAS-5	FAS-6	Instrument Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
SAMPLE TYPE	Surface	Surface	Surface	Surface	Surface	Surface			
PERCENT SOLIDS	90	89	95	78	97	95			
DILUTION FACTOR	1	1	1	1	1	1			
DATE OF COLLECTION	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006	10/12/2006			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Metals									
Aluminum	1,500	33,800	649	628	925	1,200	9	--	--
Antimony	0.42 B	U	0.099 B	0.087 B	0.20 B	0.12 B	3	--	--
Arsenic	0.70	3.3	0.39 B	0.60 B	0.86	0.56 B	3	13	16
Barium	12.8	245	1.2 B	1.4 B	4.1 B	5.6 B	10	350	350
Beryllium	0.058 B	4.5	0.028 B	0.043 B	0.047 B	0.046 B	0.3	7.2	14
Cadmium	0.22	U	U	U	0.38	U	0.3	2.5	2.5
Calcium	308	169,000	29.6	9.2 B	39.8	277	317	--	--
Chromium	2.1	11.6	1.2	2.9	2.2	1.6	2	30	36
Cobalt	0.89 B	0.39 B	0.44 B	0.52 B	0.95 B	0.47 B	3	--	--
Copper	4.6	4.6	1.0	1.6	6.0	2.0	2	50	270
Iron	2,160	2,770	963	1,650	2,490	1,470	2	--	--
Lead	18.0	5.6	1.8	3.5	15.3	6.8	2	63	400
Magnesium	190	66,400	73.4	101	152	230	3	--	--
Manganese	35.6	1,730	11.9	12.3	29.7	15	4	1,600	2,000
Mercury	0.018 B	U	U	U	0.0091 B	U	0.1	0.18	0.81
Nickel	1.3 B	0.59 B	0.50 B	0.51 B	1.1 B	0.83 B	3	30	140
Potassium	60.1	2,340	34.0	46.6	48.1	70.7	320	--	--
Selenium	0.52 B	U	0.18 B	0.23 B	0.54 B	0.36 B	5	3.9	36
Silver	U	U	U	U	U	U	8	2	36
Sodium	11.3 B	839	7.0 B	8.5 B	8.4 B	10.6 B	155	--	--
Thallium	0.13 B	U	0.057 B	U	U	0.055 B	5	--	--
Vanadium	3.5	4.4	2.0	4.4	3.0	3.4	3	--	--
Zinc	121	8.7	2.7	1.8	22.4	6.3	2	109	2,200
Cyanide	U	U	U	U	U	U	2	27	27

QUALIFIERS:
U: Constituent analyzed for but not detected.
B: Concentration is between instrument detection limit and contract required detection limit.
NOTES:
Concentration exceeds unrestricted use criterion.

There were no detected concentrations above New York's RPSCOs for unrestricted site use in any of the surface soil samples for VOCs, SVOCs or pesticides/PCBs.

Sample FAS-1 contained zinc at a concentration of 121 milligrams per kilogram (mg/kg), slightly above the unrestricted use criterion of 109 mg/kg. The detected concentration was well below the zinc criterion for protection of public health for residential site use of 2,200 mg/kg. According to the NYSDEC regulations (6 NYCRR Part 375-1.8(g)), residential use allows a property to be used for any use other than raising livestock or producing animal products for human consumption. None of the other surface soil samples contained any metals or cyanide at concentrations that exceeded the unrestricted use criteria.

3.3.3 Subsurface Soil

Analytical results for subsurface soil for all compounds are summarized in Table 3-2. Laboratory data sheets are included in Appendix C.

None of the subsurface soil samples contained VOCs, SVOCs, pesticides, PCBs, metals or cyanide at concentrations exceeding unrestricted use criteria.

3.4 Data Usability Summary Report

Six surface and five subsurface soil samples were collected on October 12, 2006 and October 13, 2006 at the Former Animal Shelter site in Southampton, New York. The samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide.

Sample analysis was performed by Mitkem Corporation Inc., a subcontractor to Dvirka and Bartilucci Consulting Engineers. The samples were analyzed in accordance with New York State Department of Environmental Conservation (NYSDEC) 6/00 Analytical Services Protocol (ASP) methods.

Table 3-2
SUBSURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	SB-1	SB-2	SB-3	SB-4	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	2-4	2-4	2-4	9-11			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	96	95	91	89			
DILUTION FACTOR	1	1	1	1			
DATE OF COLLECTION	10/13/2006	10/13/2006	10/13/2006	10/13/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Volatile Organics							
Dichlorodifluoromethane	U	U	U	U	10	--	--
Chloromethane	U	U	U	U	10	--	--
Vinyl chloride	U	U	U	U	10	20	210
Bromomethane	U	U	U	U	10	--	--
Chloroethane	U	U	U	U	10	--	--
Trichlorofluoromethane	U	U	U	U	10	--	--
1,1-Dichloroethene	U	U	U	U	10	330	100,000
Acetone	U	U	U	U	10	50	100,000
Iodomethane	U	U	U	U	10	--	--
Carbon disulfide	U	U	U	U	10	--	--
Methylene chloride	U	U	U	U	10	50	51,000
trans-1,2-Dichloroethene	U	U	U	U	10	190	100,000
Methyl tert-Butyl Ether	U	U	U	U	10	930	62,000
1,1-Dichloroethane	U	U	U	U	10	330	19,000
Vinyl Acetate	U	U	U	U	10	--	--
2-Butanone	U	U	U	U	10	120	100,000
cis-1,2-Dichloroethene	U	U	U	U	10	250	59,000
2,2-Dichloropropane	U	U	U	U	10	--	--
Bromochloromethane	U	U	U	U	10	--	--
Chloroform	U	U	U	U	10	370	10,000
1,1,1-Trichloroethane	U	U	U	U	10	680	100 000
1,1-Dichloropropene	U	U	U	U	10	--	--
Carbon tetrachloride	U	U	U	U	10	760	1,400
1,2-Dichloroethane	U	U	U	U	10	20	2,300
Benzene	U	U	U	U	10	60	2,900
Trichloroethene	U	U	U	U	10	470	10,000
1,2-Dichloropropane	U	U	U	U	10	--	--
Dibromethane	U	U	U	U	10	--	--
Bromodichloromethane	U	U	U	U	10	--	--
cis-1,3-Dichloropropene	U	U	U	U	10	--	--
4-Methyl-2-pentanone	U	U	U	U	10	--	--
Toluene	U	U	U	U	10	700	100,000
trans-1,3-Dichloropropene	U	U	U	U	10	--	--
1,1,2-Trichloroethane	U	U	U	U	10	--	--
1,3-Dichloropropane	U	U	U	U	10	--	--
Tetrachloroethene	U	U	U	U	10	1,300	5,500
2-Hexanone	U	U	U	U	10	--	--
Dibromochloromethane	U	U	U	U	10	--	--
1,2- Dibromethane	U	U	U	U	10	--	--
Chlorobenzene	U	U	U	U	10	1,100	100,000
1,1,1,2-Tetrachloroethane	U	U	U	U	10	--	--
Ethylbenzene	U	U	U	U	10	1,000	30,000
Xylene (total)	U	U	U	U	10	260	100,000
Styrene	U	U	U	U	10	--	--
Bromoform	U	U	U	U	10	--	--
Isopropylbenzene	U	U	U	U	10	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	10	--	--
Bromobenzene	U	U	U	U	10	--	--
1,2,3-Trichloropropane	U	U	U	U	10	--	--
n-Propylbenzene	U	U	U	U	10	3,900	100,000
2-Chlorotoluene	U	U	U	U	10	--	--
1,3,5-Trimethylbenzene	U	U	U	U	10	8,400	47,000
4-Chlorotoluene	U	U	U	U	10	--	--
tert-Butylbenzene	U	U	U	U	10	5,900	100,000
1,2,4-Trimethylbenzene	U	U	U	U	10	3,600	47,000
sec-Butylbenze	U	U	U	U	10	11,000	100,000
4-Isopropyltoluene	U	U	U	U	10	--	--
1,3-Dichlorobenzene	U	U	U	U	10	2,400	17,000
1,4-Dichlorobenzene	U	U	U	U	10	1,800	9,800
n-Butylbenzene	U	U	U	U	10	12,000	100,000
1,2-Dichlorobenzene	U	U	U	U	10	1,100	100,000
1,2-Dibromo-3-chloropropane	U	U	U	U	10	--	--
1,2,4-Trichlorobenzene	U	U	U	U	10	--	--
Hexachlorobutadiene	U	U	U	U	10	--	--
Naphthalene	U	U	U	U	10	12,000	100,000
1,2,3-Trichlorobenzene	U	U	U	U	10	--	--
Total VOCs	U	U	U	U		--	--
Total VOC TICs	U	U	U	U		--	--

QUALIFIERS:
U: Compound analyzed for but not detected.

Table 3-2
SUBSURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	SB-1	SB-2	SB-3	SB-4	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	2-4	2-4	2-4	9-11			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	96	95	91	89			
DILUTION FACTOR	1	1	1	1			
DATE OF COLLECTION	10/13/2006	10/13/2006	10/13/2006	10/13/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Semi-volatile Organics							
Phenol	U	U	U	U	330	330	100,000
bis (2-Chloroethyl) ether	U	U	U	U	330	--	--
2-Chlorophenol	U	U	U	U	330	--	--
1,3-Dichlorobenzene	U	U	U	U	330	2,400	17,000
1,4-Dichlorobenzene	U	U	U	U	330	1,800	9,800
1,2-Dichlorobenzene	U	U	U	U	330	1,100	100,000
2-Methylphenol	U	U	U	U	330	330	100,000
2,2'-oxybis (1-Chloropropane)	U	U	U	U	330	--	--
4-Methylphenol	U	U	U	U	330	330	34,000
N-Nitroso-di-n-propylamine	U	U	U	U	330	--	--
Hexachloroethane	U	U	U	U	330	--	--
Nitrobenzene	U	U	U	U	330	--	--
Isophorone	U	U	U	U	330	--	--
2-Nitrophenol	U	U	U	U	330	--	--
2,4-Dimethylphenol	U	U	U	U	330	--	--
2,4-Dichlorophenol	U	U	U	U	330	--	--
1,2,4-Trichlorobenzene	U	U	U	U	330	--	--
Naphthalene	U	U	U	U	330	12,000	100,000
4-Chloroaniline	U	U	U	U	330	--	--
bis (2-Chloroethoxy)methane	U	U	U	U	330	--	--
Hexachlorobutadiene	U	U	U	U	330	--	--
4-Chloro-3-methylphenol	U	U	U	U	330	--	--
2-Methylnaphthalene	U	U	U	U	330	--	--
Hexachlorocyclopentadiene	U	U	U	U	330	--	--
2,4,6-Trichlorophenol	U	U	U	U	330	--	--
2,4,5-Trichlorophenol	U	U	U	U	825	--	--
2-Chloronaphthalene	U	U	U	U	330	--	--
2-Nitroaniline	U	U	U	U	825	--	--
Dimethylphthalate	U	U	U	U	330	--	--
Acenaphthylene	U	U	U	U	330	100,000	100,000
2,6-Dinitrotoluene	U	U	U	U	330	--	--
3-Nitroaniline	U	U	U	U	825	--	--
Acenaphthene	U	U	U	U	330	20,000	100,000
2,4-Dinitrophenol	U	U	U	U	825	--	--
4-Nitrophenol	U	U	U	U	825	--	--
Dibenzofuran	U	U	U	U	330	7,000	14,000
2,4-Dinitrotoluene	U	U	U	U	330	--	--
Diethylphthalate	U	U	U	U	330	--	--
4-Chlorophenyl-phenylether	U	U	U	U	330	--	--
Fluorene	U	U	U	U	330	30,000	100,000
4-Nitroaniline	U	U	U	U	825	--	--
4,6-Dinitro-2-methylphenol	U	U	U	U	330	--	--
N-Nitrosodiphenylamine	U	U	U	U	330	--	--
4-Bromophenyl-phenylether	U	U	U	U	330	--	--
Hexachlorobenzene	U	U	U	U	330	--	--
Pentachlorophenol	U	U	U	U	825	800	2,400
Phenanthrene	U	U	U	U	330	100,000	100,000
Anthracene	U	U	U	U	330	100,000	100,000
Carbazole	U	U	U	U	330	--	--
Di-n-butylphthalate	U	38 J	47 J	42 J	330	--	--
Fluoranthene	U	U	U	U	330	100,000	100,000
Pyrene	U	U	U	U	330	100,000	100,000
Butylbenzylphthalate	U	U	U	U	330	--	--
3,3'-Dichlorobenzidine	U	U	U	U	330	--	--
Benzo(a)anthracene	U	U	U	U	330	1,000	1,000
Chrysene	U	U	U	U	330	1,000	1,000
bis (2-Ethylhexyl) phthalate	U*	U*	U*	U*	330	--	--
Di-n-octylphthalate	U	U	U	U	330	--	--
Benzo(b)fluoranthene	U	U	U	U	330	1,000	1,000
Benzo(k)fluoranthene	U	U	U	U	330	800	1,000
Benzo(a)pyrene	U	U	U	U	330	1,000	1,000
Indeno (1,2,3-cd)pyrene	U	U	U	U	330	500	500
Dibenzo(a,h)anthracene	U	U	U	U	330	330	330
Benzo (g,h,i)perylene	U	U	U	U	330	100,000	100,000
Total SVOCs	0	38	47	42		--	--
Total SVOC TICs	360	U	1,680	U		--	--

NOTES:
U: Compound analyzed for but not detected.
J: Compound detected at a concentration below CRDL, value estimated
U*: Result qualified as non-detect, based on data validation criteria.

Table 3-2
SUBSURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	SB-1	SB-2	SB-3	SB-4	Contract Required Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	2-4	2-4	2-4	9-11			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	96	95	91	89			
DILUTION FACTOR	1	1	1	1			
DATE OF COLLECTION	10/13/2006	10/13/2006	10/13/2006	10/13/2006			
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Pesticides							
alpha-BHC	U	U	U	U	1.7	20	97
beta-BHC	U	U	U	U	1.7	36	72
delta-BHC	U	U	U	U	1.7	40	100
gamma-BHC	U	U	U	U	1.7	--	280
Heptachlor	U	U	U	U	1.7	42	420
Aldrin	U	U	U	U	1.7	5	19
Heptachlor epoxide	U	U	U	U	1.7	--	--
Endosulfan I	U	U	U	U	1.7	2,400	420
Dieldrin	U	U	U	U	3.3	5	4,800
4,4'-DDE	U	U	U	U	3.3	3.3	1,800
Endrin	U	U	U	U	3.3	14	2,200
Endosulfan II	U	U	U	U	3.3	2,400	4,800
4,4'-DDD	U	U	U	U	3.3	3.3	2,600
Endosulfan sulfate	U	U	U	U	3.3	2,400	4,800
4,4'-DDT	U	U	U	U	3.3	3.3	1,700
Methoxychlor	U	U	U	U	17	--	--
Endrin ketone	U	U	U	U	3.3	--	--
Endrin aldehyde	U	U	U	U	3.3	--	--
alpha-Chlordane	U	U	U	U	1.7	94	910
gamma-Chlordane	U	U	U	U	1.7	94	910
Toxaphene	U	U	U	U	170	--	--
PCBs							
Aroclor-1016	U	U	U	U	33	100	1,000
Aroclor-1221	U	U	U	U	67	100	1,000
Aroclor-1232	U	U	U	U	33	100	1,000
Aroclor-1242	U	U	U	U	33	100	1,000
Aroclor-1248	U	U	U	U	33	100	1,000
Aroclor-1254	U	U	U	U	33	100	1,000
Aroclor-1260	U	U	U	U	33	100	1,000

QUALIFIERS:
U: Compound analyzed for but not detected.

Table 3-2
SUBSURFACE SOIL SAMPLE RESULTS
FORMER ANIMAL SHELTER, SOUTHAMPTON, NEW YORK

SAMPLE ID	SB-1	SB-2	SB-3	SB-4	Instrument Detection Limit	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Residential Use Criteria
SAMPLE DEPTH (FT)	2-4	2-4	2-4	9-11			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	96	95	91	89			
DILUTION FACTOR	1	1	1	1			
DATE OF COLLECTION	10/13/2006	10/13/2006	10/13/2006	10/13/2006			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Metals							
Aluminum	805	867	6,640	1,280	9	--	--
Antimony	0.10 B	0.15 B	0.11 B	0.12 B	3	--	--
Arsenic	0.98	0.67	1.8	0.69	3	13	16
Barium	2.1 B	2.1 B	10.4	3.1 B	10	350	350
Beryllium	0.049 B	0.043 B	0.20	0.056 B	0.3	7.2	14
Cadmium	U	U	U	U	0.3	2.5	2.5
Calcium	8.9 B	50.5	U	98.3	317	--	--
Chromium	7.6	2.2	7	8.2	2	30	36
Cobalt	0.72	0.72 B	1.6	0.70 B	3	--	--
Copper	1.9	1.1	1.6	2.2	2	50	270
Iron	1,700	1,180	5,870	2,170	2	--	--
Lead	0.84	0.74	2.9	4.9	2	63	400
Magnesium	127	108	618	172	3	--	--
Manganese	8.8	12.3	27.0	20.1	4	1,600	2,000
Mercury	U	U	0.016 B	U	0.1	0.18	0.81
Nickel	0.80 B	0.86 B	3.0	1.4 B	3	30	140
Potassium	42.6	37.7	163	83.7	320	--	--
Selenium	0.40 B	0.31 B	1.1	0.38 B	5	3.9	36
Silver	U	U	U	U	8	2	36
Sodium	6.4 B	11.3 B	11.1 B	13.4 B	155	--	--
Thallium	0.065 B	U	0.13 B	U	5	--	--
Vanadium	3.4	2.3	10.9	3.9	3	--	--
Zinc	2.2	1.7	7.7	5.1	2	109	2,200
Cyanide	U	U	0.49 B	U	2	27	27

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Concentration is between instrument detection limit and contract required detection limit

The data packages submitted by Mitkem have been reviewed to determine if the sample analyses were performed in accordance with the specified methods and Quality Assurance/Quality Control (QA/QC) requirements. The findings of the review process are summarized below.

All samples were analyzed within the method specified holding times and all QA/QC requirements (i.e., tunes, calibrations, surrogate recoveries, blanks, etc.) were met.

The volatile fraction of sample FAS-1 had two internal standard area counts outside QC limits. However, since all surrogate recoveries were within QC limits, no qualification of the data was required.

Bis(2-ethylhexyl)phthalate was detected in both method blanks associated with the surface and subsurface soil samples. The bis(2-ethylhexyl)phthalate results for the samples have been qualified as non-detect and are flagged "U*" on the data summary tables.

No other problems were found with the data and all results are deemed usable for environmental assessment purposes as qualified above.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the sample results and observations made during the Phase II Environmental Site Assessment field program conducted in October 2006, the following conclusions have been made:

- The geophysical survey results suggest that the underground fuel oil tank near the former on-site building is no longer present.
- VOCs, SVOCs, pesticides and PCBs were not detected at concentrations exceeding NYSDEC unrestricted use criteria in any of the six surface soil samples collected during this investigation.
- Zinc was detected at a concentration slightly exceeding its unrestricted use criterion in surface soil sample FAS-1. The detected zinc concentration was well below the NYSDEC criterion for residential site use.
- None of the subsurface soil samples contained VOCs, SVOC, pesticides, PCBs, metals or cyanide at concentrations exceeding NYSDEC unrestricted use criteria.
- Significant amounts of metallic debris, waste tires and junk vehicles were present in berms along the western and southern property boundaries, and in the southwestern area of the site.

4.2 Recommendations

Based on the conclusions presented in Section 4.1 above, the following recommendations are made for the Former Animal Shelter site:

- If the site is considered for development associated with active recreational uses, it is recommended that the metallic debris, waste tires and junked vehicles be removed from the site. This could be conducted as part of the site redevelopment activities.
- Since the only concentration of any parameter detected in the soil samples that exceeded the State's unrestricted use criteria (zinc in surface soil samples FAS-1) did not exceed the residential use criterion, this detection will not impact the planned future site use for active recreation. As a result, soil remediation is not recommended.

ADDENDA E – Supplemental Phase II Environmental Site Assessment – December 2009

Dvirka and Bartilucci
CONSULTING ENGINEERS

330 Crossways Park Drive, Woodbury, New York 11797-2015
516-364-9890 • 718-460-3634 • Fax: 516-364-9045
e-mail: findingsolutions@db-eng.com

December 30, 2009

Allyn Jackson, Commissioner
Department of Parks and Recreation
Town of Southampton
6 Newtown Road
Hampton Bays, NY 11946

Re: Damascus Road, E. Quogue Town Property
Supplemental Phase II Environmental Site Assessment
D&B No. 2723

Dear Mr. Jackson:

Attached is the Supplemental Phase II Environmental Site Assessment for the Damascus Road Property. Copies have also been sent to Jon Erwin and Chris McKenzie. Please note that Appendix A provides a Compact Disc (CD) in a paper "pocket."

Subsequent to your review and approval, we will submit a copy to Alex Moskie (NYSDEC).

Please don't hesitate to contact me if you have any questions.

Very truly yours,

Steven M. Cabrera
Senior Associate

SMCt/kap
Enclosures
cc: J. Erwin (Town of Southampton)
C. McKenzie (Beveridge & Diamond)
T. Fox (D&B)
M. Walsh (D&B)
♦2723\SMC09Ltr.doc-03

SUPPLEMENTAL
PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

DAMASCUS ROAD SITE
EAST QUOGUE, NEW YORK

Prepared for:

TOWN OF SOUTHAMPTON

Prepared by:

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK

DECEMBER 2009

List of Tables

1.0 INTRODUCTION AND BACKGROUND

1.1 Project Background

The Town of Southampton (the Town) retained Dvirka and Bartilucci Consulting Engineers (D&B) to conduct a Phase II Environmental Site Assessment (ESA) of the property located at the end of Damascus Road in East Quogue, New York. The site location is shown on Figure 1-1. This work was conducted as a result of the Town's interest in possible redevelopment of the site for athletic fields and associated facilities.

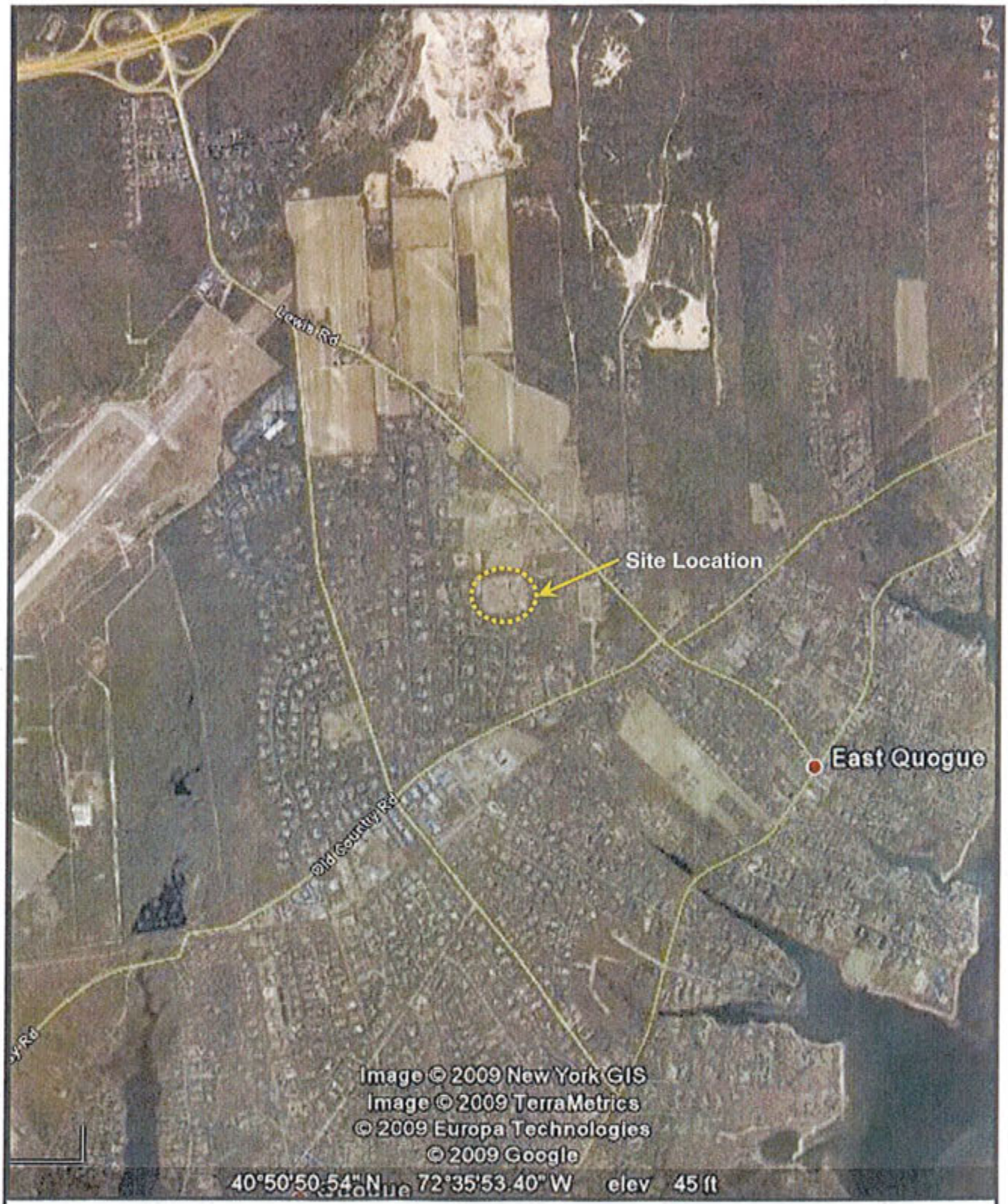
Based upon D&B's review of available maps and information provided by the Town, the Damascus Road Site (the Site) involves three adjacent areas of Town-owned properties that have a total area of approximately 12 acres. Reported prior use of portions of the Site have included open burning, filling of solid waste (including cars), fire training, use as an animal shelter, on-site septic system leaching, and most recently, vacant land since the animal shelter was removed in 2004.

1.2 Summary of 1999 Phase I ESA

A Phase I ESA of the Site completed in May 1999, contained the following recommendations:

- Conduct a subsurface investigation to determine whether releases of fuel had occurred from the 1,000-gallon underground storage fuel oil tank (UST) reportedly located on the east side of the animal shelter building;
- Collect and analyze soil samples (for petroleum, chemical and heavy metals) in the northwest area of the Site that was previously used for septage/sewage leaching;
- Collect and analyze soil samples in the southern and western portions of the Site to determine if petroleum, chemicals or heavy metals are present; and
- Investigate the central portion of the Site for evidence of buried drums.

No previous environmental sampling at the property had been identified.



Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

146 DAMASCUS ROAD
SOUTHAMPTON, NEW YORK

SITE LOCATION AERIAL MAP

FIGURE 1-1

\\NT3\Jobs_Env\Permitting\2723 (Damascus Road)\Supplemental Assessment\Figure.ppt (MMW 12-21-09)

1.3 Summary of 2007 Phase II ESA

Based on the areas of potential environmental concerns and the recommendations presented in the Phase I ESA, the Town retained D&B Consulting Engineers to conduct a Phase II ESA. The Phase II ESA included a geophysical survey, surface and subsurface soil sampling.

In October 2006, six surface soil samples and four subsurface soil samples were collected from the areas of environmental concern identified in the Phase I ESA. The samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and Polychlorinated Biphenyls (PCBs) and Target Analyte List (TAL) metals and cyanide. The results were compared to the NYSDEC Remedial Program Soil Cleanup Objectives (RPSCOs) for "unrestricted use criteria" contained in 6 NYCRR Part 375. Although the appropriate RPSCOs for the proposed use of the Site (athletic fields) is "restricted residential" based on the NYCRR Part 375 regulations, the more stringent "unrestricted use" and "residential use" RPSCOs were utilized as a conservative measure.

In the 2007 Phase II ESA, the only chemical constituents detected at concentrations exceeding the RSCOs for the unrestricted use criteria were zinc (in surface sample FAS-1) and manganese (in surface sample FAS-2). However, neither of these concentrations exceed the RSCO for residential or unrestricted residential use criteria.

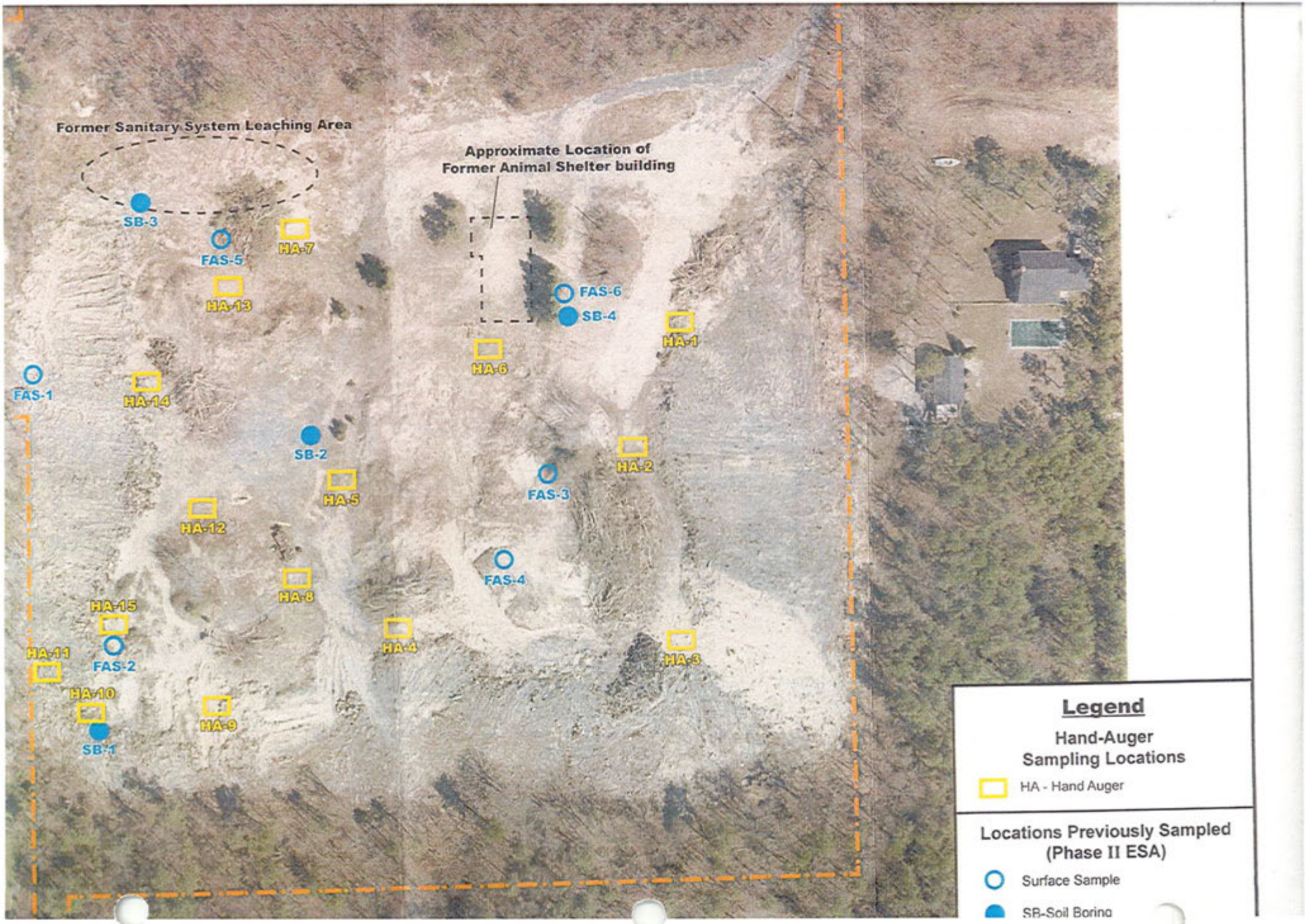
Based on the results of the sampling and analysis, the Phase II ESA report completed in January 2007 (see copy of main sections in Appendix B) recommended that the debris, waste tires and junked vehicles be removed from the Site as part of the redevelopment for athletic fields. Soil remediation and further study were not recommended.

1.4 Rationale for Supplemental Phase II ESA

Subsequent to the Phase II Report, and in response to communications with the NYSDEC, the Town submitted a debris removal protocol to the NYSDEC that included screening soils on-site as part of the debris removal work. In response, the NYSDEC required

the Town to conduct additional soil sampling to ensure that materials to be screened are free of contamination.

Ultimately, after subsequent communications and meetings with the NYSDEC, the Town agreed to conduct hand-auger, sub-surface sampling at fifteen (15) locations throughout the Site, with oversight provided by NYSDEC, as part of a Supplemental Phase II ESA.


Former Sanitary System Leaching Area
Approximate Location of
Former Animal Shelter building
SB-3
FAS-5
HA-7
HA-13
FAS-6
SB-4
HA-1
HA-6
FAS-1
HA-14
SB-2
HA-2
HA-5
FAS-3
HA-12
FAS-4
HA-8
HA-15
HA-4
HA-3
HA-11
FAS-2
HA-10
HA-9
SB-1
Legend
Hand-Auger
Sampling Locations
HA - Hand Auger
Locations Previously Sampled
(Phase II ESA)
Surface Sample
SB-Soil Boring

sampling equipment was decontaminated with an alconox and water solution. A new set of latex gloves and sample bottles were used at each location. Samples for laboratory Quality Assurance/Quality Control (QA/QC) analysis were also collected.

All of the samples were analyzed for TCL SVOCs, pesticides and PCBs and TAL metals and cyanide. Based on guidance from the NYSDEC representative and the results of the PID screening, 4 of the 15 samples were also selected for TCL VOC analysis.

2.3 Analytical Methods and Data Validation

Chemical laboratory analyses of soil samples collected by D&B were performed by Mitkem Corporation. Mitkem is certified under the New York State Department of Health Environmental Laboratory Accreditation Program (ELAP) for the analyses performed.

All analyses were performed using New York State Department of Environmental Conservation (NYSDEC) 6/00 Analytical Services Protocols (ASP) methods using standard, 28-day turnaround time. A Category B data package was provided, using batch quality assurance/quality control (QA/QC) samples.

The data packages were reviewed in accordance with NYSDEC QA/QC requirements. All QA sample (calibrations, blanks, spikes, etc.) results have been reviewed for transcription errors and contract compliance. The results of the data validation process are presented as a Data Usability Summary Report (DUSR) in Section 3.3.

3.0 FINDINGS

In general, the shallow geology identified at the Site consists of sand and gravel.

3.1 Identification of Standards, Criteria and Guidelines

Analytical results for all parameters in the surface soil and subsurface soil samples were compared to the NYSDEC Remedial Program Soil Cleanup Objectives (RPSCOs) which are presented in 6 NYCRR Part 375, and became effective on December 14, 2006. RPSCOs have been developed for unrestricted Site use and restricted Site uses to protect human health, groundwater and ecological resources from contaminants.

3.2 Results

This section presents the results of the laboratory analysis of the 15 subsurface samples collected on November 19, 2009. A CD of the full Analytical Data Package from Mitkem Laboratories is provided in Appendix A. As a conservative measure, all results were compared to the most stringent Remedial Program Recommended Soil Cleanup Objectives (RSCOs), namely the RSCOs for the "unrestricted use" in 6 NYCRR Part 375. However, given the proposed active recreational use of the Site (athletic fields), the appropriate use category, determined based on 6 NYCRR Part 375-1.8(g)(2)(ii)(b) and with NYSDEC concurrence, is "restricted residential." Therefore, all samples were also compared to the RSCOs for the restricted residential criteria in Part 375-6.8.

Volatile Organic Compounds (VOCs)

None of the subsurface soil samples contained VOCs at concentrations exceeding unrestricted use criteria. See Table 3-1.

TABLE 3-1
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	HA-01	HA-03	HA-05	HA-13	6 NYCRR Part 375 Unrestricted Use Criteria
SAMPLE DEPTH (FT)	0-4	0-4	0-3.5	0-3	
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	
PERCENT MOISTURE	6	6	7	8	
DILUTION FACTOR	1	1	1	1	
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
VOCs					
Dichlorodifluoromethane	UJ	UJ	UJ	UJ	--
Chloromethane	UJ	U	UJ	UJ	--
Vinyl Chloride	UJ	UJ	UJ	UJ	20
Bromomethane	U	U	U	U	--
Chloroethane	U	U	U	U	--
Trichlorofluoromethane	UJ	UJ	UJ	UJ	--
1,1-Dichloroethene	UJ	UJ	UJ	UJ	330
Acetone	U	UJ	U	U	50
Iodomethane	UJ	UJ	UJ	UJ	--
Carbon Disulfide	U	U	U	U	--
Methylene Chloride	U	U	U	U	50
Trans-1,2-Dichloroethene	UJ	UJ	UJ	UJ	190
Methyl Tert-Butyl Ether	UJ	UJ	UJ	UJ	930
1,1-Dichloroethane	UJ	UJ	UJ	UJ	270
Vinyl Acetate	UJ	UJ	UJ	UJ	--
2-Butanone	U	UJ	U	U	--
Cis-1,2-Dichloroethene	UJ	UJ	UJ	UJ	250
2,2-Dichloropropane	UJ	UJ	UJ	UJ	--
Bromochloromethane	UJ	UJ	UJ	UJ	--
Chloroform	UJ	UJ	UJ	UJ	370
1,1,1-Trichloroethane	UJ	UJ	UJ	UJ	680
1,1-Dichloropropene	UJ	UJ	UJ	UJ	--
Carbon Tertrachloride	UJ	UJ	UJ	UJ	760
1,2-Dichloroethane	UJ	UJ	UJ	UJ	20
Benzene	UJ	UJ	UJ	UJ	60
Trichloroethene	UJ	UJ	UJ	UJ	470
1,2-Dichloropropane	UJ	UJ	UJ	UJ	--
Dibromomethane	UJ	UJ	UJ	UJ	--
Bromodichloromethane	UJ	UJ	UJ	UJ	--
Cis-1,3-Dichloropropene	UJ	UJ	UJ	UJ	--
4-Methyl-2-Pentanone	U	U	U	U	--
Toluene	1.6 J	1.3 J	9.6 J	7.8 J	700
Trans-1,3-Dichloropropene	UJ	UJ	UJ	UJ	--
1,1,2-Trichloroethane	UJ	U	UJ	UJ	--
1,3-Dichloropropane	UJ	UJ	UJ	UJ	--
Tetrachloroethene	UJ	UJ	UJ	UJ	1300
2-Hexanone	UJ	UJ	UJ	UJ	--
Dibromochloromethane	UJ	UJ	UJ	UJ	--
1,2-Dibromoethane	UJ	UJ	UJ	UJ	--
Chlorobenzene	UJ	UJ	UJ	UJ	1100
1,1,1,2-Tetrachloroethane	UJ	UJ	UJ	UJ	--
Ethylbenzene	UJ	UJ	UJ	UJ	1000

TABLE 3-1 (CONTINUED)
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	HA-01	HA-03	HA-05	HA-13	
SAMPLE DEPTH (FT)	0-4	0-4	0-3.5	0-3	
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	
PERCENT MOISTURE	6	6	7	8	6 NYCRR Part
DILUTION FACTOR	1	1	1	1	375 Unrestricted
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	Use Criteria
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
m,p-Xylene	UJ	UJ	UJ	UJ	260
o-Xylene	UJ	UJ	UJ	UJ	260
Xylene (Total)	UJ	UJ	UJ	UJ	260
Styrene	UJ	UJ	UJ	UJ	--
Bromoform	UJ	UJ	UJ	UJ	--
Isopropylbenzene	UJ	UJ	UJ	UJ	--
1,1,2,2-Tetrachloroethane	U	U	U	U	--
Bromobenzene	UJ	UJ	UJ	UJ	--
1,2,3-Trichloropropane	UJ	UJ	UJ	UJ	--
n-Propylbenzene	UJ	UJ	UJ	UJ	3900
2-Chlorotoluene	UJ	UJ	UJ	UJ	--
1,3,5-Trimethylbenzene	UJ	UJ	UJ	UJ	8400
4-Chlorotoluene	UJ	UJ	UJ	UJ	--
tert-Butylbenzene	UJ	UJ	UJ	UJ	5900
1,2,4-Trimethylbenzene	UJ	UJ	UJ	UJ	3600
sec-Butylbenzene	UJ	UJ	UJ	UJ	1100
4-Isopropyltoluene	UJ	UJ	UJ	UJ	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	2400
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	1800
n-Butylbenzene	UJ	UJ	UJ	UJ	1200
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	1100
1,2-Dibromo-3-Chloropropane	U	U	U	U	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	--
Hexachlorobutadiene	UJ	UJ	UJ	UJ	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	--
Naphthalene	UJ	UJ	UJ	UJ	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	UJ	UJ	UJ	UJ	--
Cyclohexane	UJ	UJ	UJ	UJ	--
Methyl Acetate	U	U	U	U	--
Methylcyclohexane	UJ	UJ	UJ	UJ	--

Qualifiers:

U: Constituent analyzed for but not detected.

J: Compound detected at a concentration below CRDL and value estimated

UJ: Constituent not detected but detection limit estimated.

Notes:

--: Cleanup criteria does not exist.

Semivolatile Organic Compounds (SVOCs)

None of the subsurface soil samples contained SVOCs at concentrations exceeding unrestricted use criteria. See Table 3-2.

Pesticides and PCBs

The pesticides DDT, DDE, and/or DDD were detected at concentrations exceeding their unrestricted use RSCO (3.3 ug/kg) in 9 or the 15 samples, namely HA-1, 2, 3, 4, 5, 6, 9, 10, and 13. The concentrations of the exceedances ranged from 4.2 ug/kg to 36.0 ug/kg. However, none of the samples exceeded the RPRSCO for the restricted residential use criteria, the appropriate category for the proposed use of the Site. See Table 3-3.

The PCB Arochlor 1254 was detected in concentrations exceeding the RSCO (100 ug/kg) for the unrestricted use criteria in samples HA-5 (230 ug/kg) and HA-11 (170 mg/kg). However, neither of these samples exceeded the RSCO (1000 ug/kg) for the restricted residential use criteria. See Table 3-4.

Metals

Zinc was detected at a concentration exceeding the RSCO (109 mg/kg) for the unrestricted use criteria in samples HA-2 (197 mg/kg) and HA-13 (249 mg/kg). However, neither sample exceeded the restricted residential RSCO for zinc (10,000 mg/kg). See Table 3-5.

3.3 Data Usability Summary Report

Fifteen soil samples were collected on November 19, 2009 at the Damascus Road Site in East Quogue, New York. The samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, metals and cyanide.

TABLE 3-2
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
SEMI-VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	HA-01	HA-02	HA-03	HA-04	HA-05	HA-06	HA-07	HA-08	
SAMPLE DEPTH (FT)	0-4	0-4	0-4	0-3	0-3.5	0-4	0-4	0-4	
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	
PERCENT MOISTURE	6	-	6	8	7	5	5	5	6 NYCRR Part 375 Unrestricted Use Criteria
DILUTION FACTOR	1	1	1	1	1	1	1	1	
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
SVOCs									
Phenol	U	U	U	U	U	U	U	U	330
Bis(2-Chloroethyl) Ether	U	U	U	U	U	U	U	U	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	--
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	--
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	--
2-Methylphenol	U	U	U	U	U	U	U	U	--
2,2'-Oxybis (1-Chloropropane)	U	U	U	U	U	U	U	U	--
4-Methylphenol	U	U	U	U	U	U	U	U	--
N-Nitroso-di-n-Propylamine	U	U	U	U	U	U	U	U	--
Hexachloroethane	U	U	U	U	U	U	U	U	--
Nitrobenzene	U	U	U	U	U	U	U	U	--
Isophorone	U	U	U	U	U	U	U	U	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--
2-4-Dichlorophenol	U	U	U	U	U	U	U	U	--
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	--
Napthalene	U	U	U	U	U	U	U	U	12000
4-Chloroaniline	U	U	U	U	U	U	U	U	--
Bis(2-Chloroethoxy) Methane	U	U	U	U	U	U	U	U	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--
4-Chloro-3-Methylphenol	U	U	U	U	U	U	U	U	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--
Dimethylphthalate	U	U	U	U	U	U	U	U	--
Acenaphthylene	U	U	U	U	U	U	U	U	100000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--
3-Nitroaniline	U	U	U	U	U	U	U	U	--
Acenaphthene	U	U	U	U	U	U	U	U	20000
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--
Dibenzofuran	U	U	U	U	U	U	U	U	--
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--
Diethylphthalate	U	U	U	U	U	U	U	U	--
4-Chlorophenyl-Phenylether	U	U	U	U	U	U	U	U	--
Fluorene	U	U	U	U	U	U	U	U	30000
4-Nitroaniline	U	U	U	U	U	U	U	U	--
4,6-Dinitro-2-Methylphenol	U	U	U	U	U	U	U	U	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--
4-Bromophenyl-Phenylether	U	U	U	U	U	U	U	U	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	--
Pentachlorophenol	U	U	U	U	U	U	U	U	800
Phenanthrene	U	U	U	U	U	U	U	U	100000
Anthracene	U	U	U	U	U	U	U	U	100000
Carbazole	U	U	U	U	U	U	U	U	--
Di-n-Butylphthalate	39 J	76 J	46 J	52 J	49 J	50 J	63 J	49 J	--
Fluoranthene	U	U	U	U	U	U	U	U	100000
Pyrene	U	U	U	U	U	U	U	U	100000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	--
3,3'-Dichlorobenzidine	U	U	U	U	U	U	U	U	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1000
Chrysene	U	U	U	U	U	U	U	U	1000
Bis(2-Ethylhexyl) Phthalate	UJ	110 J	UJ	UJ	UJ	UJ	UJ	UJ	--
Di-n-octylphthalate	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--
Benzo(b) Fluoranthene	U	U	U	U	U	U	U	U	1000
Benzo(k) Fluoranthene	U	U	U	U	U	U	U	U	800
Benzo(a) Pyrene	U	U	U	U	U	U	U	U	1000
Indene (1,2,3-cd) Pyrene	U	U	U	U	U	U	U	U	500
Dibenzo(a,h) Anthracene	U	U	U	U	U	U	U	U	330
Benzo (g,h,i) Perylene	U	U	U	U	U	U	U	U	100000

Qualifiers:

U. Constituent analyzed for but not detected

J- Compound detected at a concentration below CRDL, value estimated

UJ. Constituent not detected but detection limit estimated

Notes:

-- Cleanup criteria does not exist

TABLE 3-2 (CONTINUED)
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
SEMI-VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	HA-09	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	
SAMPLE DEPTH (FT)	0-4	0-4	0-4	0-4	0-3	0-4	0-4	
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	
PERCENT MOISTURE	6	4	7	4	8	5	4	6 NYCRR Part 375 Unrestricted Use Criteria
DILUTION FACTOR	1	1	1	1	1	1	1	
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
SVOCs								
Phenol	U	U	U	U	U	U	U	330
Bis(2-Chloroethyl) Ether	U	U	U	U	U	U	U	–
2-Chlorophenol	U	U	U	U	U	U	U	–
1,3-Dichlorobenzene	U	U	U	U	U	U	U	–
1,4-Dichlorobenzene	U	U	U	U	U	U	U	–
1,2-Dichlorobenzene	U	U	U	U	U	U	U	–
2-Methylphenol	U	U	U	U	U	U	U	–
2,2'-Oxybis (1-Chloropropane)	U	U	U	U	U	U	U	–
4-Methylphenol	U	U	U	U	U	U	U	–
N Nitroso-di-n-Propylamine	U	U	U	U	U	U	U	–
Hexachloroethane	U	U	U	U	U	U	U	–
Nitrobenzene	U	U	U	U	U	U	U	–
Isophorone	U	U	U	U	U	U	U	–
2-Nitrophenol	U	U	U	U	U	U	U	–
2,4-Dimethylphenol	U	U	U	U	U	U	U	–
2-4-Dichlorophenol	U	U	U	U	U	U	U	–
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	–
Napthalene	U	U	U	U	U	U	U	12000
4-Chloroaniline	U	U	U	U	U	U	U	–
Bis(2-Chloroethoxy) Methane	U	U	U	U	U	U	U	–
Hexachlorobutadiene	U	U	U	U	U	U	U	–
4-Chloro-3-Methylphenol	U	U	U	U	U	U	U	–
2-Methylnaphthalene	U	U	U	U	U	U	U	–
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	–
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	–
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	–
2-Chloronaphthalene	U	U	U	U	U	U	U	–
2-Nitroaniline	U	U	U	U	U	U	U	–
Dimethylphthalate	U	U	U	U	U	U	U	–
Acenaphthylene	U	U	U	U	U	U	U	100000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	–
3-Nitroaniline	U	U	U	U	U	U	U	–
Acenaphthene	U	U	U	U	U	U	U	20000
2,4-Dinitrophenol	U	U	U	U	U	U	U	–
4-Nitrophenol	U	U	U	U	U	U	U	–
Dibenzofuran	U	U	U	U	U	U	U	–
2,4-Dinitrotoluene	U	U	U	U	U	U	U	–
Diethylphthalate	U	U	U	U	U	U	U	–
4-Chlorophenyl-Phenylether	U	U	U	U	U	U	U	–
Fluorene	U	U	U	U	U	U	U	30000
4-Nitroaniline	U	U	U	U	U	U	U	–
4,6-Dinitro-2-Methylphenol	U	U	U	U	U	U	U	–
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	–
4-Bromophenyl-Phenylether	U	U	U	U	U	U	U	–
Hexachlorobenzene	U	U	U	U	U	U	U	–
Pentachlorophenol	U	U	U	U	U	U	U	800
Phenanthrene	U	U	U	U	U	U	U	100000
Anthracene	U	U	U	U	U	U	U	100000
Carbazole	U	U	U	U	U	U	U	–
Di-n-Butylphthalate	62 J	62 J	92 J	81 J	110 J	69 J	110 J	–
Fluoranthene	U	U	46 J	U	U	U	U	100000
Pyrene	U	U	37 J	U	U	U	U	100000
Butylbenzylphthalate	U	U	82 J	U	U	35 J	U	–
3,3'-Dichlorobenzidine	U	U	U	U	U	U	U	–
Benzo(a)anthracene	U	U	U	U	U	U	U	1000
Chrysene	U	U	U	U	U	U	U	1000
Bis(2-Ethylhexyl) Phthalate	U	U	U	U	U	U	U	–
Di-n-octylphthalate	U	U	U	U	U	U	U	–
Benzo(b) Fluoranthene	U	U	U	U	U	U	U	1000
Benzo(k) Fluoranthene	U	U	U	U	U	U	U	800
Benzo(a) Pyrene	U	U	U	U	U	U	U	1000
Indeno (1,2,3-cd) Pyrene	U	U	U	U	U	U	U	500
Dibenzo(a,h) Anthracene	U	U	U	U	U	U	U	330
Benzo (g,h,i) Perylene	U	U	U	U	U	U	U	100000

Qualifiers:

U: Constituent analyzed for but not detected.

J: Compound detected at a concentration below CRDL, value estimated

UJ: Constituent not detected but detection limit estimated

Notes:

– Cleanup criteria does not exist.

TABLE 3-3
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
PESTICIDES

SAMPLE ID	HA-01	HA-02	HA-03	HA-04	HA-05	HA-06	HA-07	HA-08	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria
SAMPLE DEPTH (FT)	4	4	4	3	3.5	4	4	4		
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface		
PERCENT MOISTURE	6	6	6	8	7	5	5	5		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Pesticides										
Alpha-BHC	U	U	U	U	U	U	U	U	20	97
Beta-BHC	U	U	U	U	U	U	U	U	36	72
Delta-BHC	U	U	U	U	U	U	U	U	40	100000
Gamma-BHC (Lindane)	U	U	U	U	U	U	U	U	100	280
Heptachlor	U	U	U	U	U	U	U	U	420	420
Aldrin	U	U	U	U	U	U	U	U	5.0	19
Heptachlor Epoxide	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	2400	4800
Dieldrin	U	U	U	U	U	U	U	U	5.0	39
4,4'- DDE	UJ	12 J	4.7 J	4.8 J	4.4 PJ	UJ	UJ	UJ	3.3	1800
Endrin	U	U	U	U	U	U	U	U	140	2200
Endosulfan II	U	U	U	U	U	U	U	U	2400	4800
4,4'- DDD	U	U	U	U	15	U	U	U	3.3	2600
Endosulfan Sulfate	5.2	5.5	U	U	U	U	U	U	2400	4800
4,4'- DDT	U	36	24	15	17	4.9	U	U	3.3	1700
Methoxychlor	U	U	U	U	U	U	U	U	--	--
Endrin Ketone	U	U	U	U	U	U	U	U	--	--
Endrin Aldehyde	U	U	U	U	U	U	U	U	--	--
Alpha-Chlordane	UJ	2.0 PJ	UJ	3.0 PJ	14 PJ	2.1 PJ	UJ	UJ	94	910
Gamma-Chlordane	U	U	U	3.2	17	2.5	U	U	--	--
Toxaphene	U	U	U	U	U	U	U	U	--	--

Qualifiers:

U: Constituent analyzed for but not detected.

P: Percent difference between the primary column and the concentration column is greater than 25 percent, lower value reported.

J: Estimated value.

Notes:

--: Cleanup criteria does not exist.

TABLE 3-3 (CONTINUED)
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
PESTICIDES

SAMPLE ID	HA-09	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria
SAMPLE DEPTH (FT)	4	4	4	4	3	4	4		
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface		
PERCENT MOISTURE	6	4	7	4	8	5	4		
DILUTION FACTOR	1	1	1	1	1	1	1		
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Pesticides									
Alpha-BHC	U	U	U	U	U	U	U	20	97
Beta-BHC	U	U	U	U	U	U	U	36	72
Delta-BHC	U	U	U	U	U	U	U	40	100000
Gamma-BHC (Lindane)	U	U	U	U	U	U	U	100	280
Heptachlor	U	U	U	U	U	U	U	420	420
Aldrin	U	U	U	U	U	U	U	5.0	19
Heptachlor Epoxide	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	2400	4800
Dieldrin	U	U	U	U	U	U	U	5.0	39
4,4'- DDE	5.7 J	4.2 J	UJ	UJ	8.6 J	UJ	UJ	3.3	1800
Endrin	U	U	U	U	U	U	U	140	2200
Endosulfan II	U	U	U	U	U	U	U	2400	4800
4,4'- DDD	U	U	U	U	U	U	U	3.3	2600
Endosulfan Sulfate	U	U	U	U	U	U	U	2400	4800
4,4'- DDT	13	8.4	U	U	17	U	U	3.3	1700
Methoxychlor	U	U	U	U	U	U	U	--	--
Endrin Ketone	U	U	U	U	U	U	U	--	--
Endrin Aldehyde	U	U	U	U	U	U	U	--	--
Alpha-Chlordane	UJ	UJ	77 PJ	UJ	UJ	UJ	UJ	94	910
Gamma-Chlordane	U	U	62	U	U	U	U	--	--
Toxaphene	U	U	U	U	U	U	U	--	--

Qualifiers:

U: Constituent analyzed for but not detected.

P: Percent difference between the primary column and the concentration column is greater than 25 percent; lower value reported.

J: Estimated value.

Notes:

--: Cleanup criteria does not exist.

TABLE 3-4
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
PCBS

SAMPLE ID	HA-01	HA-02	HA-03	HA-04	HA-05	HA-06	HA-07	HA-08	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria
SAMPLE DEPTH (FT)	4	4	4	3	3.5	4	4	4		
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface		
PERCENT MOISTURE	6	6	6	8	7	5	5	5		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
PCBs										
Aroclor 1016	U	U	U	U	U	U	U	U	100	1000
Aroclor 1221	U	U	U	U	U	U	U	U	100	1000
Aroclor 1232	U	U	U	U	U	U	U	U	100	1000
Aroclor 1242	U	U	U	U	U	U	U	U	100	1000
Aroclor 1248	U	U	U	U	U	U	U	U	100	1000
Aroclor 1254	U	U	U	U	230 PJ	U	U	U	100	1000
Aroclor 1260	U	U	U	U	U	U	U	U	100	1000

SAMPLE ID	HA-09	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria
SAMPLE DEPTH (FT)	4	4	4	3	3.5	4	4		
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface		
PERCENT MOISTURE	6	4	7	4	8	5	4		
DILUTION FACTOR	1	1	1	1	1	1	1		
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
PCBs									
Aroclor 1016	U	U	U	U	U	U	U	100	1000
Aroclor 1221	U	U	U	U	U	U	U	100	1000
Aroclor 1232	U	U	U	U	U	U	U	100	1000
Aroclor 1242	U	U	U	U	U	U	U	100	1000
Aroclor 1248	U	U	U	U	U	U	U	100	1000
Aroclor 1254	U	U	170 PJ	U	U	U	U	100	1000
Aroclor 1260	U	U	U	U	U	U	U	100	1000

Qualifiers:

U: Constituent analyzed for but not detected.

P: Percent difference between the primary column and the concentration column is greater than 25 percent; lower value reported.

J: Estimated value.

TABLE 3-5
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
METALS

SAMPLE ID	HA-01	HA-02	HA-03	HA-04	HA-05	HA-06	HA-07	HA-08	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria	Eastern USA/New York State* Background Concentration
SAMPLE DEPTH (FT)	4	4	4	3	3.5	4	4	4			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	84	94	94	92	93	95	95	95			
DILUTION FACTOR	1	1	1	1	1	1	1	1			
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Metals											
Aluminum	1710	1570	2220	2870	2880	1880	2280	1470	--	--	33000
Antimony	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--	n/a
Arsenic	0.82 B	0.81	0.78 B	0.81	1.0	0.57 B	0.92	0.54 B	13	16	3-12*
Barium	4.3 B	14.3	11.5	14.4	8.3	4.9 B	4.8 B	4.3 B	350	350	15-600
Beryllium	U	U	U	U	U	0.0051 B	U	U	7.2	14	0-1.75
Cadmium	UJ	0.081 BJ	0.097 BJ	0.19 J	0.050 BJ	UJ	UJ	UJ	2.5	2.5	0.1-1
Calcium	212	1040	1310	522	6860	414	314	98.5	--	--	130-35000*
Chromium	2.9	3.8	3.8	5.1	4.0	3.0	3.6	2.9	30	36	1.5-40*
Cobalt	1.0 B	0.77 B	0.81 B	0.94 B	0.76 B	0.76 B	0.68 B	0.77 B	--	--	2.5-60*
Copper	2.1	8.4	4.0	13.0	8.0	2.9	6.7	3.8	50	270	1-50
Iron	2570	2340	3130	6650	2970	2280	2600	1940	--	--	2000-550000
Lead	5.0	32.1	35.1	40.0	14.3	11.8	9.0	3.8	63	400	--
Magnesium	251	642	783	328	4200	317	338	246	--	--	100-5000
Manganese	33.7	29.0	38.4	48.6	21.6	29.5	20.8	25.0	1600	2000	50-5000
Mercury	U	0.026 B	0.013 B	0.056	0.017 B	0.0060 B	U	U	0.18	0.81	0.001 - 0.2
Nickel	1.7 B	1.9 B	2.2 B	2.5	2.4	1.7	1.5 B	2.0	30	140	0.5 - 25
Potassium	83.9	77.3	91.9	90.8	122	70.9	83.7	70.4	--	--	8500 - 43000*
Selenium	U	U	U	0.48 B	U	U	U	U	3.9	36	0.1 - 3.9
Silver	U	U	U	U	U	U	U	U	2	36	n/a
Sodium	U	U	U	U	U	U	U	U	--	--	6000 - 8000
Thallium	0.30 B	U	0.35 B	0.21 B	U	0.26 B	U	0.38 B	--	--	n/a
Vanadium	4.4	5.5	6.7	6.5	6.3	4.4	5.1	3.8	--	--	1 - 300
Zinc	9.4 J	197 J	107 J	65.6 J	31.6 J	10.5 J	6.9 J	9.8 J	109	2200	9 - 50
Cyanide	U	U	U	U	U	U	U	U	27	27	n/a

Qualifiers:

U: Constituent analyzed for but not detected.

B: Concentration is between instrument detection limit and contract required detection limit.

J: Estimated value.

UJ: Constituent not detected but detection limit estimated.

Notes:

n/a: Background concentrations not available.

--: Cleanup criteria does not exist.

*: New York State background.

**: Background concentration varies between urban (200-500ppm) and rural areas (4-61ppm).

TABLE 3-5 (CONTINUED)
SUBSURFACE SOIL SAMPLE RESULTS
DAMASCUS ROAD SITE, E. QUOGUE, NY
METALS

SAMPLE ID	HA-09	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	6 NYCRR Part 375 Unrestricted Use Criteria	6 NYCRR Part 375 Restricted Residential Use Criteria	Eastern USA/New York State* Background Concentration
SAMPLE DEPTH (FT)	4	4	4	4	3	4	4			
SAMPLE TYPE	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface			
PERCENT SOLIDS	94	96	93	96	92	95	96			
DILUTION FACTOR	1	1	1	1	1	1	1			
DATE OF COLLECTION	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Metals										
Aluminum	2010	1100	4650	1180	2840	1420	1170	--	--	33000
Antimony	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--	n/a
Arsenic	1.1	0.89	1.1	0.50 B	1.2	0.42 B	0.95	13	16	3-12*
Barium	21.4	2.2 B	12.7	3.6 B	19.9	4.0 B	3.4 B	350	350	15-600
Beryllium	U	U	U	U	U	U	U	7.2	14	0-1.75
Cadmium	0.046 BJ	UJ	0.061 BJ	UJ	0.27 J	UJ	UJ	2.5	2.5	0.1-1
Calcium	141	85.8	911	88.6	402	2570	102	--	--	130-35000*
Chromium	3.1	3.1	5.4	2.8	3.9	3.5	2.0	30	36	1.5-40*
Cobalt	0.87 B	0.55 B	0.92 B	0.90 B	0.66 B	0.58 B	0.55 B	--	--	2.5-60*
Copper	10.2	1.8	9.0	1.3	4.4	1.4	2.4	50	270	1-50
Iron	2380	1770	4800	1790	3100	1850	1510	--	--	2000-550000
Lead	11.0	3.6	24.3	2.2	48.5	4.4	4.3	63	400	**
Magnesium	219	151	385	164	388	1570	156	--	--	100-5000
Manganese	23.5	19.0	36.9	23.4	32.0	25.9	19.1	1600	2000	50-5000
Mercury	0.022 B	U	0.026 B	U	0.018 B	U	U	0.18	0.81	0.001 - 0.2
Nickel	1.5 B	1.2 B	2.9	1.4 B	2.1	1.8	1.2 B	30	140	0.5 - 25
Potassium	80.8	66.4	141	69.5	113	71.8	67.3	--	--	8500 - 43000*
Selenium	U	U	U	U	U	U	U	3.9	36	0.1 - 3.9
Silver	U	U	U	U	U	U	U	2	36	n/a
Sodium	U	U	U	U	U	U	U	--	--	6000 - 8000
Thallium	0.34 B	U	0.38 B	0.18 B	0.32 B	U	0.15 B	--	--	n/a
Vanadium	4.6	3.2	8.7	3.5	6.0	3.7	3.1	--	--	1 - 300
Zinc	33.2 J	UJ	40.3 J	UJ	249 J	10.4 J	8.6 J	109	2200	9 - 50
Cyanide	U	U	U	U	U	U	U	27	27	n/a

Qualifiers:

U: Constituent analyzed for but not detected.

B: Concentration is between instrument detection limit and contract required detection limit.

J: Estimated value.

UJ: Constituent not detected but detection limit estimated.

Notes:

n/a: Background concentrations not available.

--: Cleanup criteria does not exist.

**: New York State background.

***: Background concentration varies between urban (200-500ppm) and rural areas (4-81ppm)

Samples analysis was performed by Mitkem Corporation Inc., a subcontractor to Dvirka and Bartilucci Consulting Engineers. The samples were analyzed in accordance with New York State Department of Environmental Conservation (NYSDEC) 6/00 Analytical Services Protocol (ASP) methods.

The data package: SH2379 was submitted by Mitkem have been reviewed to determine if the sample analyses were performed in accordance with the specified methods and Quality Assurance/Quality Control (QA/QC) requirements. The findings of the review process are summarized below.

All samples were analyzed within the method specified holding times and qualification of data based on this review is discussed below:

- Numerous VOCs percent recoveries were below QC limits in the MS and/or MSD and/or relative percent differences above QC limit and were qualified as estimated.
- Numerous VOCs percent differences were above QC limits in the continuing calibration and were qualified as estimated.
- Di-n-octylphthalate and bis(2-ethylhexyl)phthalate percent recoveries were above QC limits in the MS and/or MSD and were qualified as estimated.
- Duel column confirmation percent differences between runs were greater than QC limits and were qualified as estimated.
- Antimony, sodium and zinc were detected in preparation blank and detected in the samples at concentration less than ten times the concentration found in the blanks and were qualified as non-detect.
- The spike sample percent recoveries were below QC limits of 75% for antimony and zinc and were qualified as estimated.
- The cadmium and zinc relative percent differences were above the QC limit of 20 % for the laboratory duplicate and were qualified as estimated.

No other deviations were found with the data and all results are deemed usable for environmental assessment purposes as qualified above.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Pesticides and PCBs

As stated in Section 3.2, the concentration of DDT, DDE, and DDD that exceeded the unrestricted use RSCOs ranged from 4.2 to 36.0 ug/kg. However, these concentrations are far below the restricted residential RSCOs, 7,900 ug/kg, 8,900 mg/kg, and 13,000 ug/kg, respectively.

DDT is an organochlorine insecticide that was extensively used in Suffolk County between 1951 and 1966, by mosquito control programs along wetlands, grasslands and in agriculture. In 1966, the Suffolk County Vector Control terminated DDT usage. When applied to soil, DDT absorbs very strongly with surficial sediments. DDT may undergo microbial degradation in flooded soils or under anaerobic conditions. If biodegradation does occur, the degradation products, including DDE and DDD can be produced. The low solubility of DDT and subsequent daughter compounds DDE and DDD contributes to their persistence in the Long Island environment. Therefore, the detection of low concentrations of these compounds in soils in eastern Long Island is not unexpected.

It should also be noted that disturbance and screening of soils containing the above mentioned concentrations of DDT would not be expected to result in concentrations exceeding the Occupational Safety and Health Administration's (OSHA) Permissible Exposure Limit (PEL) for DDT of 1,000 ug/m^3. There are no PELs for the "daughter" compounds of DDE and DDD.

As stated in Section 3.2, the PCB Arochlor 254 (a.k.a. Chlorodiphenyl 54% Chlorine) was detected in concentrations exceeding the RSCO for the unrestricted use criteria (100 ug/kg) in sample HA-5 (230 ug/kg) and HA-11 (170 ug/kg). However, neither sample exceeded the RSCO for the restricted residential use criteria (1,000 ug/kg). These two samples are

approximately 340 feet apart, so there is no indication of any "concentration" of this PCB at the Site.

Polychlorinated biphenyls (PCBs) are synthetic chemicals which are no longer produced in the United States, but are still found in the environment. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977, because of evidence they build up in the environment and can cause adverse health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors and hydraulic oils. Workers exposed to high levels of PCBs on the job have documented skin and eye irritation.

Disturbance and screening of soils containing the above concentrations of PCBs would not be expected to result in concentrations exceeding the OSHA Permissible Exposure Limit (PEL) for PCBs of 500 ug/m^3 (Chlorodiphenyl 54%).

The low levels of the abovementioned pesticides and PCBs detected at the Site would not be expected to pose any adverse impact to the environmental or any health risk for either workers removing debris and screening soils on Site or individuals in the future who would use the proposed athletic fields, given the barrier of clean fill discussed below in Section 4.2.

Metals

As stated in 3.2, Zinc was detected at a concentration exceeding the unrestricted use RSCO (109 mg/kg) in samples HA-2 (197 mg/kg) and HA-13 (249 mg/kg). However, neither sample exceeded the restricted residential RSCO for zinc (10,000 mg/kg).

Metals for which RSCOs have not been established in Part 375 (i.e., Aluminum, Antimony, Calcium, Cobalt, Iron, Magnesium, Potassium, Sodium, Thallium and Vanadium) were compared to Eastern USA or New York State Background Concentrations. None of these metals exceeded the background concentrations.

4.2 Recommendations

Based on the findings of the Phase I, Phase II and Supplemental Phase II ESAs, it has been determined that soils at the Damascus Road Site can be safely screened on-site as part of the debris removal program, and reused as part of development of athletic fields. Furthermore, based on the lack of significant contamination in samples collected from 6 surface and 4 subsurface borings in the Phase II ESA and the 15 subsurface samples analyzed as part of the Supplemental Phase II ESA, neither remediation or additional soil sampling at the Site are warranted.

Nevertheless, as a sensible, conservative, precaution, and to protect workers at the Site and the environment, standard construction safety measures and dust suppression techniques should be undertaken by construction crews doing soil screening and debris removal, and ultimately, Site preparation and grading for the proposed athletic fields re-development. Such measures include use of protective head gear, gloves, boots and dust suppression equipment to minimize potential exposure to soils and dust.

For many development projects for which environmental site assessments are completed, a conservative precaution, or recommendation is to top the site with a layer of clean fill after final grading to serve as a "barrier" to any low-level contamination that might have been detected in the soil. Given that there were no contaminants detected at the Damascus Road Site above the RSCOs for the restricted residential criteria, this approach is not necessary. However, in should be noted that the proposed use of the Site as athletic fields would require, after final grading, a layer of topsoil over virtually the entire Site to promote grass growth. This layer of topsoil would provide equivalent, conservative protection in any event, as would asphalt or gravel over any small, ancillary parking or other appurtenant facilities that might be associated with the athletic fields.

Addenda F

Section III - Property History

Property History.

The Town purchased the site (Tax Map No. 288-1-35.1) from the East Quogue Fire Department in 1948. During the time the site operated as a landfill serving the residents of the community. The Town accepted bulk materials and landscaping materials at the site. At no time did the Town allow commercial dumping. The two adjacent parcel (Tax Map Nos.314-2-1.17 and 314-2-3.5) were added subsequent to the purchase of this parcel as part of a subdivision approval and never included in any of the Town operations conducted on the site. At one point during the operation of the landfill, the site (Parcel 288-1-35.1) served as a location for the offices of animal control. The offices of animal control and its entire operation were relocated to another site in 1999. There is no record of any hazardous substances being used as part of this operation.
In the 2006, the Town considered developing the site as a recreation facility. In 2007 and 2009, the Town commissioned two report on the site. The 2007 report included a geophysical survey, a surface soil sampling and subsurface soil sampling. In 2009, the Town, at the request of the DEC, conducted additional analysis of the site which included subsurface sampling at 15 locations on the site. The map of those locations is included in Addenda E which includes a copy of the report completed by Dvirka and Bartolucci. In this last report, D&B recommended that the test results indicated that "neither remediation nor additional soil samplings at the site are warranted."

Past Investigations/Actions:

A Phase II Investigation and a Supplemental Phase II Investigation were performed.

Soil samples were collected from six locations in 2007 by D&B during a Phase II Site Investigation. No ground water samples were included in this investigation. A geophysical survey was also performed which determined that underground heating oil tank serving the animal shelter was removed. Analysis for PFAS compounds was not included. A copy of this report is attached as Addenda D.

An additional 15 subsurface soil samples were collect across the site in 2009 by D&B during a supplemental site investigation. Analysis for PFAS compounds was not included. A copy of this report is attached as Addenda E.

NYSDEC Division of Materials Management Sampling Event

In February 2018, the NYSDEC arranged for sampling of three water table monitoring wells that were installed at the landfill. Groundwater samples were analyzed for VOCs, SVOCs, Metals, PFAS, anions, alkalinity, COD, hardness, TDS, and TOC. A copy of this report is attached as Addenda C.

Amec E&E, PC, re-sampling of landfill wells

Amec re-sampled the three landfill wells in August 2018. The samples were analyzed for PFAS compounds. A copy of this report is attached as Addenda F.

Site Geology and Hydrology:

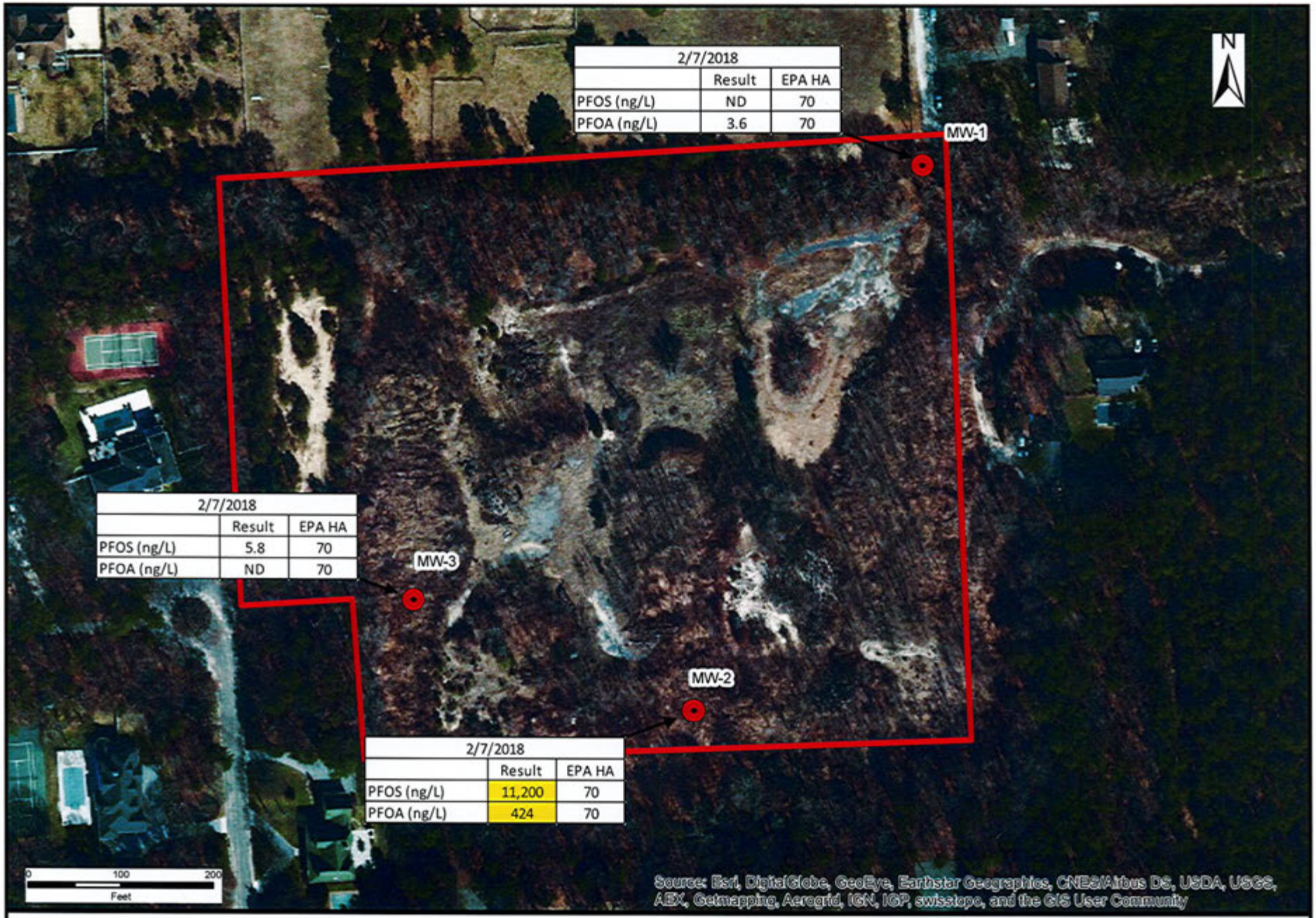
The site is underlain by sands and gravels of the Upper Glacial formation to a depth of approximately 200 feet. This is followed, in turn, by the Magothy formation, the Raritan Clay, the Lloyd Sand and crystalline bedrock. The Gardiners Clay and the Jameco Gravel also exist downgradient of the site in the in the 200 to 400 foot depth range. Precipitation seep into the ground surface and recharges the Upper Glacial formation. The groundwater flows in a southeasterly direction towards the Quantuck Bay and occurs below the site at a depth of approximately 40 feet.

Environmental Assessment:

Based on previous investigations, the contaminants of concern are PFAS, more specifically PFOS and PFOA, in the groundwater below and downgradient of the landfill. Water samples collected from the downgradient monitoring well at the site contained PFOS at 11,200 ng/L and PFOA at 424 ng/L which is in excess of the EPA HA of 70 ng/l. The water samples from the upgradient monitoring wells at the landfill did not exceed the HA, however, water samples

collected from other monitoring wells upgradient of the landfill have also displayed PFAS concentrations as high or higher than the concentrations detected at the landfill.

Soil samples have not, as yet, been analyzed for PFAS compounds.



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Section III Item 3
PFOS / PFOA Detections

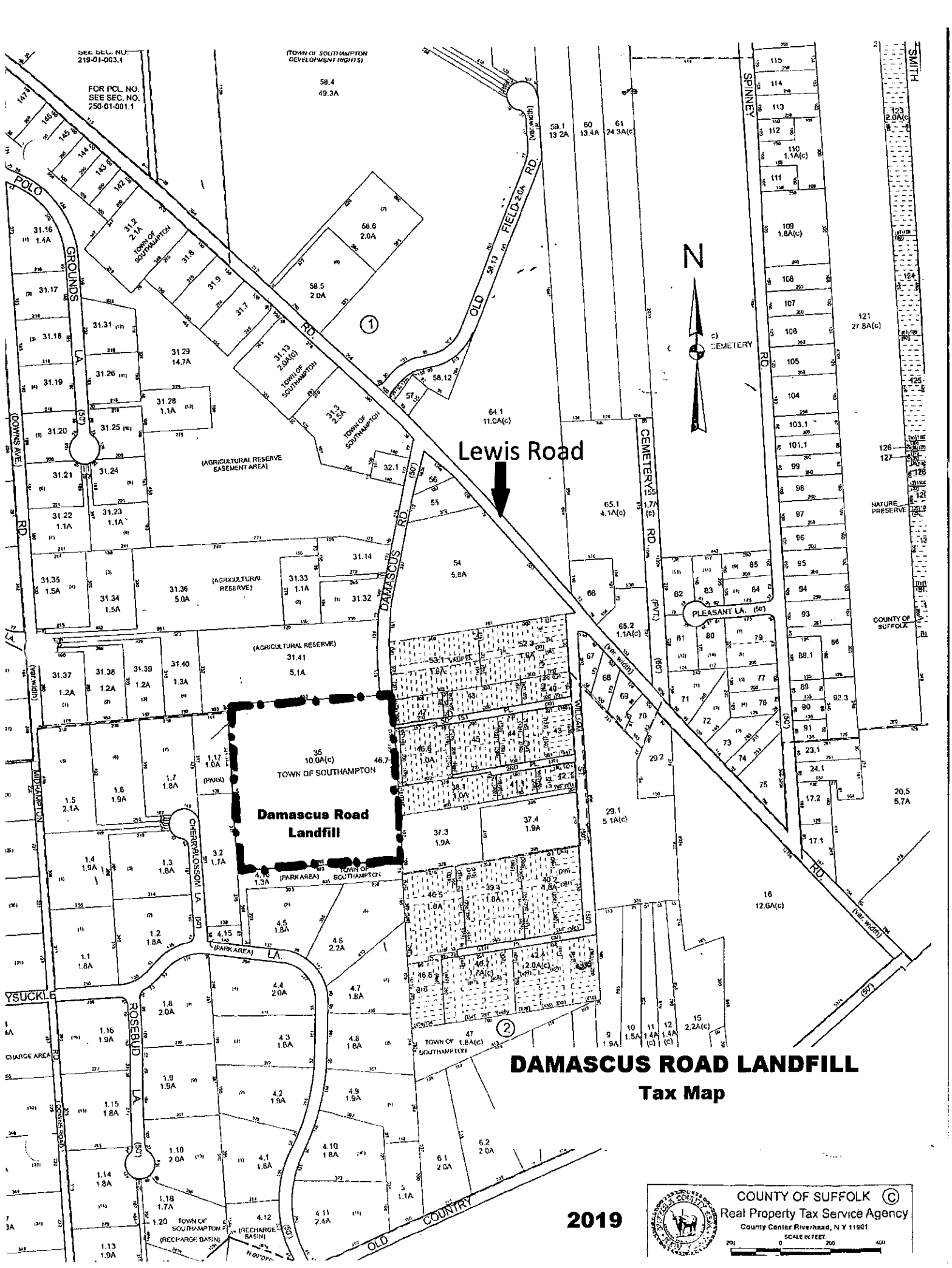
Damascus Road Landfill
East Quogue, New York 11942

Prepared/Date: JCL 03/07 ecked/Date: EAW 03/07/19

Legend

Monitoring Wells

= Exceeds EPA



DAMASCUS ROAD LANDFILL

Tax Map

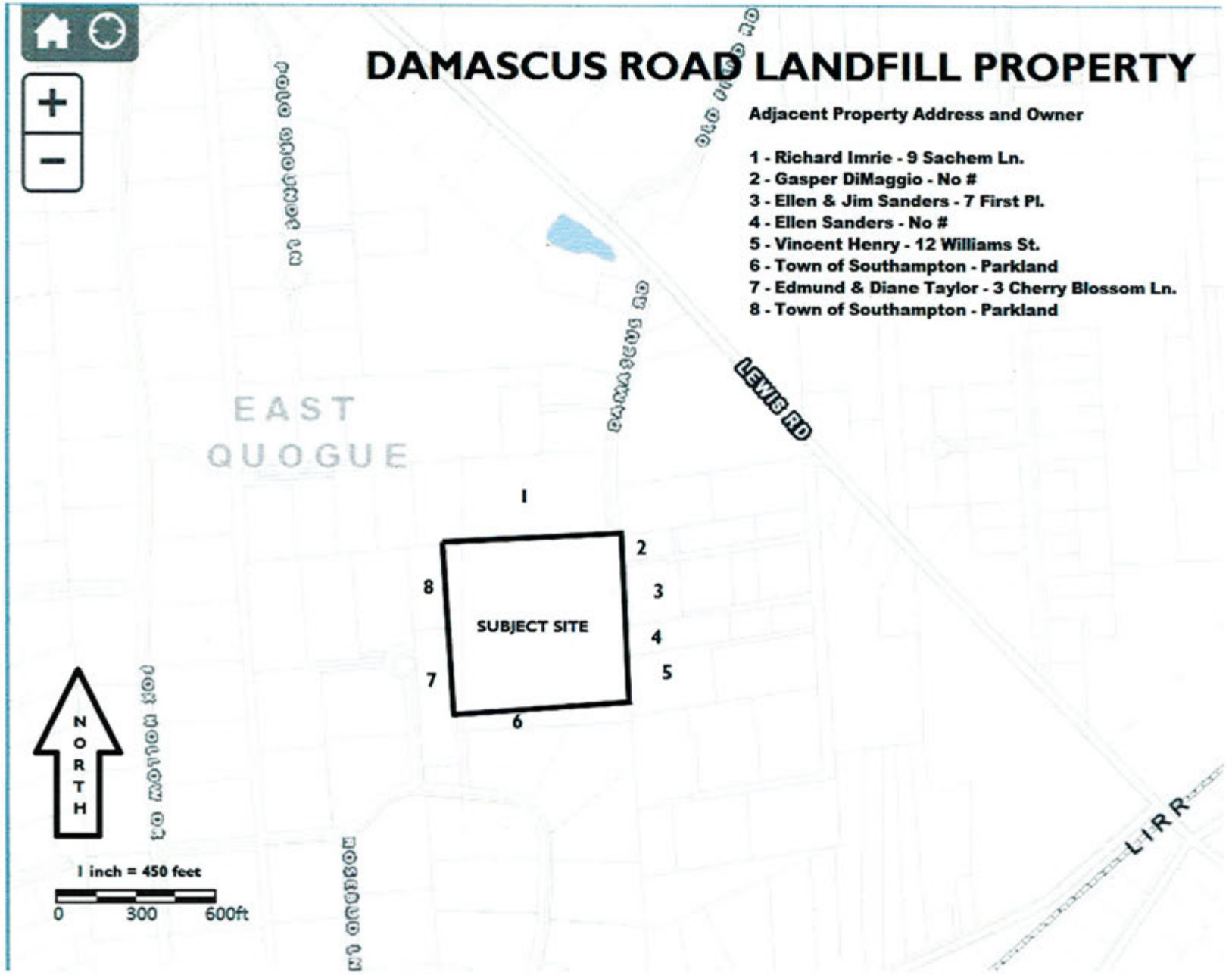
2019

COUNTY OF SUFFOLK ©
Real Property Tax Service Agency
County Center Riverhead, N Y 11901
SCALE IN FEET
200 0 200 400

DAMASCUS ROAD LANDFILL PROPERTY

Adjacent Property Address and Owner

1 - Richard Imrie - 9 Sachem Ln.
2 - Gasper DiMaggio - No #
3 - Ellen & Jim Sanders - 7 First Pl.
4 - Ellen Sanders - No #
5 - Vincent Henry - 12 Williams St.
6 - Town of Southampton - Parkland
7 - Edmund & Diane Taylor - 3 Cherry Blossom Ln.
8 - Town of Southampton - Parkland



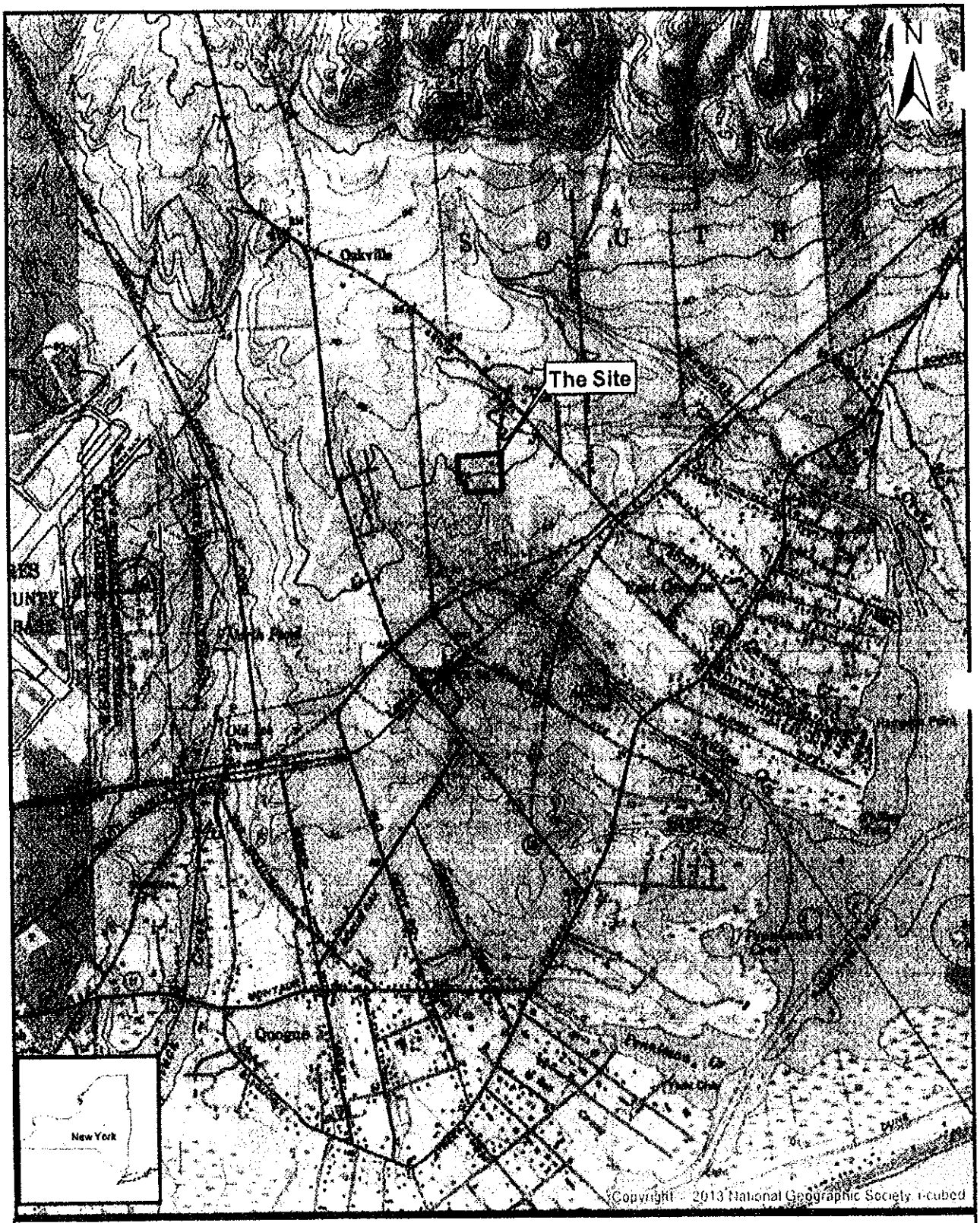


Figure 1
Site Location Map

amec

Damascus Road Landfill
East Quogue, New York 11942

Prepared/Date: JCL 10/04/13 | Checked/Date: EAW 10/04/13

0 0.5
Miles

ADDENDA G

CONTACT LISTS

	A	B	C	D	E	F	G	H	I	J
1	Current Occupant	Name, Title	Address 1	Address 2	Address 3	Street Address	City	State	Zip	email
2	**Site Contact List**									
3										
4										
5										
6	Title	Name	Address 1	Address 2	Address 3	Street Address	City	State	Zip	email
7	Senator	The Honorable Kirsten E. Gillibrand	U.S. Senate	Suite 250 North		155 Pinelawn Road	Melville	NY	11747	
8	Senator	The Honorable Charles Schumer	U.S. Senate	#300		145 Pine Lawn Road	Melville	NY	11747	
9	Rep	The Honorable Lee Zeldin	U.S. House of Representatives	Suite 20		31 Oak Street	Patchogue	NY	11772	lee.zeldin@mail.house.gov
10	Senator	The Honorable Kenneth P. LaValle	New York State Senate	Suite 4		325 Middle Country Road	Selden	NY	11784	lavalle@nysenate.gov
11	Assembly	The Honorable Fred W. Thiele, Jr.	New York State Assembly	Box 3062		2302 Main Street	Bridgehampton	NY	11932	ThieleF@nyassembly.gov
12	Executive	The Honorable Steven Bellone	Suffolk County Executive	H. Lee Dennison Building	P.O. Box 6100	100 Veterans Memorial Highway	Hauppauge	NY	11788	county.executive@suffolkcountyny.gov
13	Legislator	The Honorable Bridget Fleming	Suffolk County Legislature	P.O. Box 1827		75 Washington Street	Sag Harbor	NY	11963	Bridget.Fleming@suffolkcountyny.gov
14	Health Commissioner	James L. Tomarken, MD MSW, MPH, MBA, FRCPC, FACP	Suffolk County Department of Health Services			P.O. Box 9006	Great River	NY	11739	james.tomarken@suffolkcountyny.gov
15	Clerk	Judith A. Pascale	Suffolk County Clerk			310 Center Drive	Riverhead	NY	11901	countyclerk@suffolkcountyny.gov
16	Environmental Healt	Amy Juchatz	Suffolk County Department of Environment & Energy	H. Lee Dennison Building	P.O. Box 6100	100 Veterans Memorial Highway	Hauppauge	NY	11788	amy.juchatz@suffolkcountyny.gov
17	Acting Commissioner	Darnell Tyson, P.E.	Suffolk County Department of Public Works			335 Yaphank Avenue	Yaphank	NY	11980	public.works@suffolkcountyny.gov
18	Executive Director	John W. Pavacic	Central Pine Barrens Commission			624 Old Riverhead Road	Westhampton Beach	NY	11978	jpavacic@pb.state.ny.us
19	Supervisor	The Honorable Jay Schneiderman	Town of Southampton		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	jschneiderman@southamptontownny.gov
20	Councilwoman	The Honorable Christine Preston Scalera	Town of Southampton Councilwoman		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	cscalera@southamptontownny.gov
21	Councilwoman	The Honorable Julie Lofstad	Town of Southampton Councilwoman		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	jlofstad@southamptontownny.gov
22	Councilman	The Honorable John Bouvier	Town of Southampton Councilman		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	jbouvier@southamptontownny.gov
23	Councilman	The Honorable Tommy John Schiavoni	Town of Southampton Councilman		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	tjschiavoni@southamptontownny.gov
24	Clerk	The Honorable Sundy A. Schermeyer	Town of Southampton Clerk		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	townclerk@southamptontownny.gov
25	Chief Environmental	Martin Shea	Town of Southampton Conservation & Environment		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	mshea@southamptontownny.gov
26	Trustee	Edward J Warner, Jr.	Town of Southampton Trustee President		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	ewarner@southamptontownny.gov
27	Trustee	Scott Horowitz	Town of Southampton Trustees		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	shorowitz@southamptontownny.gov
28	Trustee	William Pell IV	Town of Southampton Trustees		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	BPell@southamptontownny.gov
29	Trustee	Bruce Stafford	Town of Southampton Trustees		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	bStafford@southamptontownny.gov
30	Trustee	Ann Welker	Town of Southampton Trustees		Southampton Town Hall	116 Hampton Road	Southampton	NY	11968	awelker@southamptontownny.gov
31	CEO	Adrienne Esposito	Citizen's Campaign for the Environment			225A Main Street	Farmingdale	NY	11735	aesposito@citizenscampaign.org
32	Chair	Jane Fasullo	Sierra Club - Foundation Chair		P.O. Box 210		Syosset	NY	11791	jfas1@optonline.net
33		Ms. Artineh Haven	Sustainable Long Island			45A Seaman Avenue	Bethpage	NY	11714	
34	Membership Directo	Ms. Demosthenes Maratos	Neighborhood Network			7180 Republic Airport	East Farmingdale	NY	11735	linnet@neighborhood-network.org
35		Mr. Neal Lewis	Long Island Sustainability Institute	Molloy College		7180 Republic Airport	East Farmingdale	NY	11735	
36	Director	Lonna Theiling	Quogue Library		P.O. Box 5036	4 Midland Street	Quogue	NY	11959	info@quoguelibrary.org
37	Superintendent/Prin	Robert J. Long, Jr.	East Quogue Union Free School District			6 Central Avenue	East Quogue	NY	11942	rlong@eastquogue.k12.ny.us
38	CEO	Jeff Szabo	Suffolk County Water Authority			4060 Sunrise Highway, Suite 1000	Oakdale	NY	11769	jszabo@scwa.com
39	Reporter	Assignment Desk	Associated Press			100 Supreme Court Drive	Mineola	NY	11501	apnyc@ap.org
40	Reporter	David Schwartz	Newsday			235 Pinelawn Road	Melville	NY	11747	david.schwartz@newsday.com
41	Reporter	News Desk	Newsday			235 Pinelawn Road	Melville	NY	11747	news@newsday.com
42	Reporter	Assignment Desk	Long Island Press		Suite 210	575 Underhill Blvd.	Syosset	NY	11791	tbolger@longislandpress.com
43	Reporter	Assignment Desk	Southampton Press			135 Windmill Lane	Southampton	NY	11968	mailbag@27east.com
44	Reporter	News Desk	WCBS Channel 2			524 West 57th Street	New York	NY	10019	desk@cbs2ny.com
45	Reporter	News Desk	NBC Channel 4			30 Rockefeller Plaza, 7th Floor	New York	NY	10112	desk@nbcnewyork.com
46	Reporter	Jodi Goldberg	Fox 5							jodi.goldberg@foxtv.com
47	Reporter	News Desk	ABC Channel 7			7 Lincoln Square	New York	NY	10023	WABC-TVLIBureau@abc.com
48	Reporter	News Desk	News 12 Long Island			1 Media Crossways	Woodbury	NY	11797	lidesk@news12.com
49	Reporter	News Desk	WLNY TV-55		Suite 55	270 S. Service Rd	Melville	NY	11714	wcbstvnewstips@cbs.com
50	Reporter	News Desk	FIOS 1 News							newstips@fios1news.com
51	President	Al Algieri	Civic Association of the Hamlet of East Quogue		P.O. Box 392		East Quogue	NY	11942	contact@eqcivic.com

	A	B	C	D	E	F	G	H	I	J
52	President	Sarah Mendenhall Luhmer	East Quogue Historical Society		P.O. Box 174		East Quogue	NY	11942	EastQuogueHistorical@gmail.com
53	President	Donna Lanzetta	East Quogue Chamber of Commerce		P.O. Box 877		East Quogue	NY	11942	info@eqny.com
54										

C[illegible]TACT LIST

Last Name	First Name	Street Address	Town	State	ZIP Code
Abramson (Family Trust)	Paul M	14 Honeysuckle Lane	East Quogue	NY	11942
Allegretta	Tine	6 5th Place	East Quogue	NY	11942
Altshul	John	3 1st Place	East Quogue	NY	11942
Berman	Jack	6 Cherry Blossom Lane	East Quogue	NY	11942
Hampton East LLL		4 Cherry Blossom Lane	East Quogue	NY	11942
Henry	Vincent	12 Williams St	East Quogue	NY	11942
Kelly	Cornelius	8 Cherry Blossom Lane	East Quogue	NY	11942
Kong	Mary	5 Sachem Lane	East Quogue	NY	11942
LaDau	Tony	7 Sachem Lane	East Quogue	NY	11942
Leslau	Noam	12 Honeysuckle Lane	East Quogue	NY	11942
Mason	Charles	145 Damascus Road	East Quogue	NY	11942
Pantelidis	Peter	2 Cherry Blossom Lane	East Quogue	NY	11942
Promuto	Samuel	20 Honeysuckle Lane	East Quogue	NY	11942
Remaly	Dorothy	6 Williams St.	East Quogue	NY	11942
Sanders Family Trust		7 Ist Place	East Quogue	NY	11942
Staino	Lydia	14 Williams St.	East Quogue	NY	11942

Residents Contact List - Damascus BCP # C152253

5/9/2019

MAP_ID	SCTM	ASSD_NAME1	hse_num	PROP_A2
4	0900288000100031014	Occupant	138	DAMASCUS RD
6	0900288000100031032	Occupant	140	DAMASCUS RD
5	0900288000100031033	Occupant	142	DAMASCUS RD
10	0900288000100053001	Occupant	145	DAMASCUS RD
2	0900288000100055000	Occupant	58	LEWIS RD
7	0900288000100054000	Occupant	66	LEWIS RD
14	0900288000100067000	Occupant	68	LEWIS RD
17	0900288000100068000	Occupant	70	LEWIS RD
18	0900288000100069000	Occupant	72	LEWIS RD
8	0900288000100066000	Occupant	73	LEWIS RD
11	0900288000100065002	Occupant	75	LEWIS RD
13	0900288000100049000	Occupant	6	WILLIAM ST
19	0900288000100042000	Occupant	10	WILLIAM ST
21	0900288000100037004	Occupant	14	WILLIAM ST
20	0900314000200029002	Occupant	76	LEWIS RD
28	0900340000200010000	Occupant	106	LEWIS RD
46	0900340000100034000	Occupant	121	LEWIS RD
47	0900340000100035000	Occupant	123	LEWIS RD