

### Remedial Investigation/Feasibility Study Work Plan Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, Suffolk County, New York

#### Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



#### Prepared by

EA Engineering, P.C. and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211 (315) 431-4610

and

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> October 2008 Revision: FINAL EA Project No. 14368.33

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#### 1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform a Remedial Investigation (RI)/Feasibility Study (FS) at the Bianchi/Weiss Greenhouses site in East Patchogue, Suffolk County, New York (Figure 1).

The Work Assignment will be conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-33). This RI/FS Work Assignment consists of the following tasks:

- *Task 1*—Background review and preparation of work plans
- *Task 2*—Interim remedial measures
- Task 3—Evaluation of on-site soil
- *Task 4*—Evaluation of groundwater
- *Task 5*—Fish and Wildlife Resource Impact Analysis, surveying, and handling of investigative derived waste
- *Task 6*—Preparation of a RI report and FS.

A brief summary of Task 1 is discussed below. Task 2 is discussed in Section 2; Tasks 3, 4, and 5 are discussed in Section 3; and Task 6 is covered in Section 4.

#### 1.1 BACKGROUND REVIEW AND PREPARATION OF WORK PLANS

A review of available historic and/or background information was conducted in May and June 2008 as part of Task 1. Based on the information obtained during that review process, two work plans were prepared as part of Task 1 (i.e., a Project Management Work Plan and this RI/FS Work Plan). The Project Management and RI/FS Work Plans will be submitted as two separate deliverables to NYSDEC.

A scoping session and site visit with NYSDEC, Suffolk County Department of Health Services (SCDHS), EA, Louis Berger Associates, P.C. (Berger), and Enviroscience Consultants was held on 20 May 2008 at the site. Based on the discussions of the scoping session and physical observations made during the site visit, the interim remedial measures (IRM) and RI activities detailed in this RI/FS Work Plan have been slightly modified from the original Work Assignment.

Details of the activities to be performed under the IRM are provided in the Field Activities Plan

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(FAP) in Appendix A. In addition, EA previously generated a Generic Health and Safety Plan (HASP) and Generic Quality Assurance Project Plan (QAPP), which will be used for work conducted under the NYSDEC State Superfund Standby Contract Nos. D004438 and D004441. The site-specific HASP and QAPP addenda are provided in Appendixes B and C, respectively. A Community Air Monitoring Plan (CAMP) is provided in Appendix D, and a Soil Management Plan (SMP) is provided in Appendix E.

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#### 2. INTERIM REMEDIAL MEASURES

The IRM is being conducted to control site access, improve the existing on-site conditions, and limit the potential for migration of soil and surface water runoff. Site safety and aesthetics issues related to historical site demolition and investigation activities will be addressed in the IRM. The IRM activities will include the following:

- Site security
- Sampling and evaluation of subsurface drainage structures
- Sampling and disposal of stockpiled soil and demolition debris
- Grading and filling of site surface for drainage control and safety measures
- Cover system placement to prevent dust migration.

Details of the activities to be performed under the IRM are provided in the FAP (Appendix A).

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#### 3. REMEDIAL INVESTIGATION

The RI is being conducted to evaluate existing on-site and off-site conditions including hydrogeologic characteristics, the nature and extent of groundwater and soil contamination, and possible human exposure to the contaminants. The RI activities will include the following:

- Field investigation
- Data validation/determination of usability
- Health exposure assessment
- RI report
- Public meetings preparation
- FS preparation.

#### 3.1 FIELD INVESTIGATION ACTIVITIES

The following activities will be completed as part of the field investigation portion of the Work Assignment:

- Evaluation of on-site soil
- Evaluation of groundwater
- Hydrogeologic evaluation
- Sediment and surface water sampling program
- Storage and disposal of investigative-derived waste
- Site survey
- Fish and wildlife resource impact analysis.

Details of the field investigation activities are provided in the FAP (Appendix A).

#### 3.2 DATA VALIDATION/DETERMINATION OF USABILITY

The collection and reporting of reliable data are a primary focus of the sampling and analytical activities. Laboratory and field data will be reviewed to determine the limitations, if any, of the data, to ensure that the procedures are effective, and that the data generated provide sufficient information to achieve the project objectives. An independent, qualified third-party will evaluate the analytical data according to NYSDEC Division of Environmental Remediation Data Usability Summary Report guidelines, as detailed in Section 5 of the Generic QAPP.

#### 3.3 HEALTH EXPOSURE ASSESSMENT

A qualitative health exposure assessment will be performed. The assessment will be designed to identify potential exposure pathways of site contaminants to the general public. If deemed necessary, a quantitative assessment may be performed in the FS on contaminants of concern

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and exposure routes of interest. For budget purposes, it is assumed that a quantitative assessment will not be performed.

#### 3.4 REMEDIAL INVESTIGATION REPORT

EA/Berger will prepare a focused RI report, which will identify data gaps, if any, and any need for additional IRM. At a minimum, the report will include the following:

- Summary of task activities.
- Conceptual site model, which will include a site operation history, environmental setting, geological description, contamination assessment with a description of the nature and extent of contamination, hydrogeologic model, evaluation of contaminant fate and transport, and potential public health and environmental concerns.
- Summary tables of physical and analytical results.
- Conclusions and recommendations.

The data collected during the RI will be reduced by EA/Berger, analyzed, and made available to NYSDEC, New York State Department of Health (NYSDOH), and SCDHS for review. These findings will be used to determine if the collection of additional data are required, if a supplemental RI is necessary, or if sufficient data exist to start the FS.

#### 3.5 PUBLIC MEETING PREPARATION

The RI/FS will include participation in one public informational meeting at the conclusion of the RI/FS. NYSDEC will coordinate the meeting; EA/Berger will present the results of the RI and answer technical questions regarding the methodologies and findings. EA/Berger will provide visual aids to NYSDEC for the meeting. The visual aids may include large site maps on poster boards, data summary sheets, photographs, and/or slides of site activities. EA/Berger will incorporate information collected by the public agencies into the appropriate RI and/or FS reports.

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#### 4. FEASIBILITY STUDY

The major objective of the FS will be to support an informed risk management decision determining which remedy is the most appropriate, cost effective, and protective of public health and the environment. The FS will be conducted in accordance with the most recent versions of the *Guidance for Conducting Remedial Investigations and Feasibility Studies under Comprehensive Environmental Response, Compensation, and Liability Act* (United States Environmental Protection Agency [USEPA], 1988<sup>1</sup>) and NYSDEC Department of Environmental Remediation-10 *Draft Technical Guidance for Site Investigation and Remediation*<sup>2</sup> (DER-10). With limited options for remedial actions, the scope of the FS will be focused. If source areas are located during the RI, EA/Berger will assess whether they need to be addressed and determine how to address them.

EA/Berger will conduct the specific subtasks to achieve the following objectives.

#### 4.1 STANDARDS, CRITERIA, AND GUIDANCE

Standards, Criteria, and Guidance (SCGs) for each impacted media detected and SCGs necessary for evaluation of remedial actions will be identified and compared to existing conditions on-site.

#### 4.2 DEVELOPMENT OF REMEDIAL ACTION OBJECTIVES

EA/Berger will prepare remedial action objectives for each contaminant of concern and effected media. EA/Berger will research appropriate guidance and evaluate background analytical results to determine the remedial action objectives. Guidance to evaluate remedial action objectives includes, but is not limited to, DER-10.

#### 4.3 SCOPING AND DEVELOPMENT OF REMEDIAL ALTERNATIVES

A scoping meeting between NYSDEC and EA/Berger will be held to discuss the remedial alternatives applicable to the site. Based on discussions during this meeting, EA/Berger will submit a brief letter report with the remedial alternatives to be considered for the site, along with the conceptual details of the remedial alternatives, which will be reviewed by NYSDEC. As per guidance from the USEPA, the FS will be focused.

<sup>1.</sup> U.S. Environmental Protection Agency. 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies under Comprehensive Environmental Response, Compensation, and Liability Act. 1540IG-891004.

<sup>2.</sup> New York State Department of Environmental Conservation. 2002. Draft Technical Guidance for Site Investigation and Remediation. December.

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#### 4.4 DETAILED ANALYSIS

The detailed analysis of the remedial alternatives will include evaluation of the following factors:

- Overall protection of human health and the environment
- Compliance with SCGs
- Long-term effectiveness and permanence
- Reduction of toxicity, mobility, and volume
- Short-term effectiveness
- Implementability
- Assessment of alternatives carbon footprint
- Cost.

#### 4.5 REPORT PREPARATION

The FS report will include discussions of each of these evaluation criteria for each of the alternatives (or technologies) being considered. A summary, including a comparative analysis, will also be included in the report. EA/Berger will recommend a preferred remedy that is protective of public health and the environment, complies to the maximum extent practicable with SCGs and cleanup objectives, reflects a preference for treatment over simple disposal, and is cost effective. EA/Berger will prepare a conceptual plan for implementing the preferred alternative and will verify its feasibility.

The FS report will include brief site background and site characterization discussions as this information will be available in the RI report. The discussions will be limited to only the information necessary to justify the findings of the FS. The report will include a conceptual design of the preferred remedy, which includes a detailed engineer's cost estimate. The FS report will be stamped by a Professional Engineer in accordance with the New York State Education Law. Three hard copies of the initial report and five hard copies of the final report, along with one electronic copy in portable document format, will be submitted to NYSDEC.

#### 4.6 PROPOSED REMEDIAL ACTION PLAN AND PUBLIC MEETING

NYSDEC will prepare a Proposed Remedial Action Plan, which describes the preferred remedy. EA/Berger will provide the tables and figures from the RI/FS reports to support this plan, and review and comment on an initial draft of the plan. NYSDEC will schedule and lead a public meeting to discuss the findings of the FS. EA/Berger will attend the meeting, present the results of the RI/FS, and provide assistance to NYSDEC in preparation of visual aides.

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#### 5. HEALTH AND SAFETY PLAN

A Generic HASP was developed for the Work Assignments conducted under NYSDEC Standby Contract Nos. D004438 and D004441. As previously stated, the Generic HASP was submitted to NYSDEC under separate cover on 11 August 2006. An addendum to the Generic HASP was developed to address site-specific health and safety issues (Appendix B) for the proposed activities to complete the RI/FS.

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#### 6. QUALITY ASSURANCE PROJECT PLAN

A Generic QAPP has been developed describing sampling, analysis, testing, and monitoring that could potentially be conducted during Work Assignments under NYSDEC Standby Contract Nos. D004438 and D004441. As previously stated, the Generic QAPP was submitted to NYSDEC under separate cover in October 2006. An addendum to the Generic QAPP has been developed (Appendix C) to address site-specific quality assurance/quality control issues for the proposed activities to complete the RI/FS.

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#### 7. COMMUNITY AIR MONITORING PLAN

A CAMP was developed as an appendix to the work plan to address the community air monitoring activities to be performed during each ground intrusive field investigation activity performed on-site and off-site during the RI. The details and implementation of the CAMP are provided in Appendix D.

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#### 8. SOIL MANAGEMENT PLAN

A SMP was developed as an appendix to the work plan to address excavation, dust control, grading, filling, resurfacing, and decontamination procedures that may be necessary to complete IRM and field investigation activities on-site during the RI. The details and implementation of the SMP are provided in Appendix E.



# Appendix A Field Activities Plan



# Field Activities Plan Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

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#### 1. PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform a Remedial Investigation (RI)/Feasibility Study (FS) at the Former Bianchi/Weiss Greenhouses site in East Patchogue, Suffolk County, New York (Figure 1).

The Work Assignment will be conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-33). An initial step in the RI/FS is preparation of this Field Activities Plan (FAP), which describes the anticipated field activities. The elements of this FAP have been prepared in accordance with the most recent and applicable guidelines and requirements of NYSDEC and the New York State Department of Health (NYSDOH). This FAP has been developed as part of the RI/FS Work Plan for the former Bianchi/Weiss Greenhouses site in East Patchogue, New York.

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#### 2. DESCRIPTION AND RATIONALE OF FIELD ACTIVITIES

The primary focus of the RI/FS is to evaluate existing on-site and off-site conditions, including hydrogeologic characteristics, the nature and extent of groundwater and soil contamination, and possible human exposure to the contaminants, as well as develop a remedial approach to address site contamination. The following tasks will be completed as part of the RI portion of the RI/FS:

- **Records Review and Site History**—An Environmental Database Report was ordered and reviewed, in addition to files provided to EA/Berger from the NYSDEC Project manager for information regarding site history.
- *Interim Remedial Measures*—Implemented to control site access, improve the existing on-site conditions, and limit the potential for off-site migration of soil and surface water runoff.
- *Evaluation of On-site Soil*—Delineate the nature and extent of impacts within the on-site soil, as well as evaluate the backfill material placed in the former location of the underground storage tanks (UST), and determine the toxicity of the on-site soil through field and laboratory analysis.
- *Evaluation of Groundwater*—Install monitoring wells and conduct a monitoring well sampling event to delineate the extent of contaminants of concern within a groundwater monitoring well network both horizontally and vertically within the groundwater aquifer. Identify contaminant plume transport and the hydraulic relationship between the site and localized groundwater flow.
- *Hydrogeology Evaluation*—Identify hydrogeologic characteristics and the hydraulic relationship between the site and localized groundwater flow. Monitor groundwater elevations to determine the local groundwater flow gradient and direction. Determine tidal influences on groundwater vertical gradient fluctuations, hydraulic conductivity, and groundwater velocities.
- Sediment/Surface Water Sampling Program—Collect surface water from off-site streams to determine the potential hydraulic connection to groundwater and contaminants of concern from the site, as well as sediment samples at the location below the surface water samples.
- *Storage and Disposal of Waste*—EA/Berger will provide proper storage, handling, and disposal of investigative-derived waste.
- *Fish and Wildlife Resource Impact Analysis*—EA/Berger will complete a fish and wildlife impact analysis in accordance with NYSDEC Division of Environmental

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Remediation Draft Technical Guidance for Site Investigation and Remediation (DER-10) Section 3.10.1 dated December 2002.

- **Data Usability Summary Report**—An independent third party data validator will be subcontracted to review all analytical data generated during the course of the RI.
- Site Survey and Base Map Preparation—Involves the surveying of all investigation/characterization locations, performing a topographic survey, and preparation of a site base map by a licensed professional land surveyor. EA will locate all field sampling locations using a high-precision global positioning system (GPS) unit as directed by the NYSDEC representatives.

Details of field activities are provided in the following sections. Figure 2 is a site map of the former Bianchi/Weiss Greenhouses and the surrounding areas.

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#### 3. RECORDS REVIEW AND SITE HISTORY

#### 3.1 LOCATION

The subject site is located at 25 Orchard Road, in East Patchogue, Suffolk County, New York. The Property is a square-shaped parcel that has main access to the property on Orchard Road. An alternative access road exists on Hedges Road to the north of the property, but is currently overgrown with vegetation. Residential properties are located to the north, south, east and west of the property.

#### 3.2 CURRENT USE OF THE PROPERTY

The subject site is currently unoccupied/vacant. The subject site formerly operated as a nursery and for commercial growing purposes for at least 80 years. All previously existing buildings have recently been demolished.

#### 3.3 RECORDS REVIEW

A radius map report was obtained from Environmental Data Resources, Inc. (EDR). The EDR report was obtained to supplement information considered additional environmental records. A copy of the EDR database report is presented in its entirety in Attachment A. Additionally, explanations of the content of the databases are provided within the EDR report in Attachment A.

The subject site is identified within the New York Spills (NY Spills) and Inactive Hazardous Waste Disposal (IHWS) databases. These databases are solely for informational purposes and do not indicate that a release has occurred or that the site has been impacted by a release.

- The NY Spills database shows a listing for all spills reported to the NYSDEC since 1 April 1986. The subject site has been identified as having an active spill case.
- The IHWS database is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites. This site is classified as a significant threat to public health or to the environment, requiring action.

The adjacent property, Mankers Greenhouse located at 355 South Country Road, which is approximately 0.25 to 0.5 mi west of the site, was identified within the Leaking Storage Tank (LTANKS) Incident Reports and the Historical Leaking Storage Tank (HIST LTANKS) Incident Reports.

• The LTANKS and HIST LTANKS database records contain an inventory of reported leaking underground and aboveground storage tanks incidents to the NYSDEC since 1 April 1986. These incidents may have been caused by a tank test failure, tank failure, or

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a tank overfill. One incident was reported for this site. The incident reported (Spill ID No. 87-09879) was the result of a tank test failure. The leaking vent line was un-testable on a 20,000-gal tank that held #4 fuel oil. The manway for the tank was modified for a retest.

• The system was retested and it passed the tightness test after the vent line was repaired. This spill has not been closed by the NYSDEC.

Four separate greenhouses are located within one mile of the target property. Griffin Greenhouse Supplies is located on 340 Munsell Road, which lies to the northeast of the property; Steigerwald Greenhouses is located on 470 South Country Road which lies to the west of the property; Mankers Greenhouse located at 355 South Country Road, which is approximately 0.25 to 0.5 mi west of the property; and Poppies Florist is located on 25 Patchogue Yaphank Road Ste 3, which is located to the north of the property.

#### 3.3.1 Property Tax Files

According to the EDR LienSearch report, no environmental liens are listed for the property located on 25 Orchard Road, town of Patchogue, New York. The property was acquired by the Henron Development Corporation from Russell Weiss, Kirk Weiss, and Wayne Weiss in November 2005.

#### 3.3.2 Physical Setting Sources

#### 3.3.2.1 Topography

The subject site is located on the U.S. Geological Survey (USGS) Bellport, New York 7.5-minute topographic quadrangle map, dated 1967 (Attachment B).

Elevation at the site is approximately 16 ft above mean sea level. The nearest surface water feature, as noted on the topographic map, is Moss Creek which is located approximately 0.25-mi south of the subject site and Abets Creek, which is located approximately 0.25-mi southwest of the subject site. Both creeks flow from north to south.

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#### **3.3.2.2** Geology

A review of the geologic map of New York, Lower Hudson Sheet published by the University of the State of New York, the State Education Department and dated 1970, indicates that the subject site lies within the coastal plain deposits above the Monmouth, Matawan and Magothy Group, which are part of the Upper Cretaceous Period. According to the EDR report, the subject site is located within the the sands and loams associated with the Pliestocene Epoch in the Quarternary Period.

During the Cretacous Period, a large rift formed as the continents began drifting apart. The rift was filled in with sediments from eroding mountains. This sediment consisted of gravel, clays, silts, and sand forming the Magothy Formation and the Raritan Formation. During the Pliestocene Epoch, four major glacial events helped to carve out the formation of Long Island. The glaciers melted and receded leaving behind unsorted till deposits in glacial features called moraines.

The three principal aquifers of Long Island are (top to bottom) the Upper Glacial Aquifer, the Magothy Aquifer, and the Lloyd Aquifer. The uppermost geologic unit, the Upper Glacial Aquifer, is composed of sediments deposited during the Pleistocene ice ages. The Harbor Hill Moraine and Ronkonkoma Moraine, which run the length of Long Island, are made of poorly sorted glacial till deposited at the glacial terminus (end). Between them and to the south are outwash plain deposits of sorted sands and gravels.

The Magothy Formation unconformably overlies the Raritan Formation. The Magothy occurs beneath Quaternary glacial cover throughout most of Long Island and is composed of unconsolidated sands with some layers of silts and clays. The bottom 50 to 100 ft. is made of coarse sand and gravel. The formation is exposed in coastal bluffs on the north shore and dives down into the subsurface to a depth of about 600 ft. below sea level on the south shore. The Magothy Formation thickens seaward and is about 1,000-ft thick in southwestern Suffolk County. The Magothy represents near shore and transitional alluvial depositional environments, similar to the Raritan Formation.

The Raritan Formation unconformably overlies Newark Basin and older rocks, representing the beginning of a series of major transgressions and regressions of the seas during Cretaceous time. The Raritan consists of clay, sand, lignite, and gravels representing progradational alluvial plain, coastal and nearshore marine environments. On Long Island, the Raritan is subdivided into the upper Raritan Clay Member and the lower Lloyds Sand Member, which a major aquifer on the Island. The clay member is a confining unit and the Lloyd Sand is a confined aquifer. The top of the Raritan (Lloyd) Aquifer is about 200 ft. below sea level beneath the north shore and dives down to about 1,500 ft beneath the south shore. The Raritan Formation thickens seaward. Under Long Island, the clay member has a maximum thickness of 300 ft and the Lloyd Sand has a maximum thickness of 500 ft.

The basement beneath Long Island is made principally of gneissic metamorphic rocks that formed during an early continental collision about 1 billion years ago. A belt of metamorphic rocks that formed in the Grenville Orogeny underlies much of eastern North America.

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According to the Soil Service Geographic Database (SSURGO), the site is underlain by the Haven loam. This soil, which has moderate infiltration rates, is described as being deep and moderately-deep, moderately-well to well-drained soils, and having moderately-coarse textures. Typically this soil has 59 in. of silt-clay materials, consisting of coarse-grained soil, sand, clean sand and well-graded sand; and coarse-grained soils, sand, sands with fine and sitly sand.

Within a 0.25 mi of the site lies the Riverhead sandy loam. This soil, which has moderate infiltration rates, is described as being deep and moderately-deep, moderately-well to well-drained soils, and having moderately-coarse textures. Typically this soil has 64 in. of silty or clayey-gravel or sand materials, consisting of coarse-grained soil, sand, clean sand and well-graded sand and coarse grained soils, sand, sands with fines and sitly sand.

Within a 0.25 mi of the site lies the Plymouth loamy sand. This soil, which has high-filtration rates, is described as being deep, moderately-well drained to excessively-drained sands and gravels. Typically this soil has 59 in. of silty or clayey-gravel or sand materials, consisting of coarse-grained soil, sand, clean sand and well-graded sand.

#### 3.3.2.3 Wetlands and Floodplain

A review of information from the U.S. Department of the Interior National Wetland Inventory Map of Suffolk County, New York, indicates wetland areas are located within 0.25 mi. of the subject site. In addition, the subject site is located in an area designated as a floodplain on the Flood Insurance Rate Map, Panel 36103C0713G, for the subject site (EDR 2007) (Attachment B). Several additional panels are also located within the search area, 36013C0714G, 36103C0926G and 36103C0927G.

#### 3.3.3 Historical Use – Property and Adjoining Properties

The following discussions are presented for compiling historical information on the activities that occurred on the subject site.

Based upon a review of historical information of the EDR report as included in the following sections, the subject site first appears with nine commercial structures including six greenhouses on the 1947 USGS topographical map. No USGS topographical maps were provided for the site location between 1904 and 1947 in the EDR report. Historical site data documents operations of the greenhouses began in 1929. These structures were utilized as a nursery for commercial growing purposes. Two 275-gal fuel oil ASTs, one 1,000-gal AST, and one 20,000-gal fuel oil UST were identified as being located on the property.

#### 3.3.4 Historical Topographic Maps

Historic USGS topographic maps dated 1904, 1947 and 1967 were reviewed. Copies of the topographic maps are presented in Attachment B. The results of this review are included in the following table:

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Source

USGS

**USGS** 

USGS

Date

1904

1947

1967

Adjacent Properties
Adjacent properties are sparsely developed as
residential neighborhoods.
The adjacent properties to the north, south, east
and west appear to be developed as residential
or commercial properties. To the west,
Chimney Greenhouses has been developed

between Mud Creek and Abets Pond.

further developed.

The adjacent properties to the north appear to be

#### 3.3.5 Aerial Photographs

Road.

Aerial photographs dated 1957, 1969, 1976, 1980, 1994, and 2006 were reviewed. Copies of the aerial photographs are presented in Attachment B. Observations made from the reviewed aerial photographs are presented in the following table:

25 Orchard Road

greenhouse structures and a few small

The subject site appears similar to the

1947 topographic map. The large

building in the southeast corner has been removed and a half circle

driveway appears along South Country

The subject site appears to be

The subject site appears to be

developed at this time with the

undeveloped at this time.

buildings on the property.

Date	Source	25 Orchard Road	Adjacent Properties
1957	USGS	The six greenhouses exist on the site at this time.	Farmland is located to the north, west and south; few residential homes appear to the north and east.
1969	USGS	The three other structures located on the site have been developed.	Residential homes appear to the north, south, east and west.
1976	USGS	Subject site appears similar to the 1969 aerial photograph.	Adjacent properties appear similar to the 1957 aerial photograph.
1980	USGS	Subject site appears similar to the 1969 and 1976 aerial photographs.	Adjacent properties appear similar to the 1969 and 1976 aerial photographs.
1994	USGS	Subject site appears similar to the 1969, 1976 and 1980 aerial photographs.	Adjacent properties appear similar to the 1969, 1976 and 1980 aerial photographs; residential homes are present to the east, north, west and south.
2006	USGS	Subject site appears similar to the 1969, 1976, 1980 and 1994 aerial photographs.	Adjacent properties appear similar to the 1994 aerial photograph.

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#### 4. INTERIM REMEDIAL MEASURES

EA/Berger will implement IRM to control site access, improve the existing on-site conditions, and limit the potential for off-site migration of soil and surface water runoff. Site safety and aesthetics issues related to historical site demolition and investigation activities will be addressed with the IRM.

#### 4.1 SITE SECURITY

Site security measures will be implemented at the site to provide secure access and control of site conditions and to limit trespassers from unauthorized access to the site. A general inspection of the site fencing was completed during the initial scoping session and site visit in May 2008. Based on this limited inspection, the site fencing appeared to be in working condition along the perimeter of the site. It was noted during the site visit that the site access gate was in poor condition and would need to be replaced as an institutional control measure. Figure 3 shows the perimeter fence boundary. An additional access gate was observed at the northern portion of the property along Old Orchard Road and Hedges Road. EA/Berger will complete a more detailed assessment of the site fencing to determine if other improvements or repairs need to be addressed to provide site security. A fencing subcontractor will be procured to handle all upgrades and repairs to the site fence.

#### 4.2 SUBSURFACE DRAINAGE STRUCTURES

Historical sampling at the sites nine subsurface drainage structures revealed the presence of SVOCs, metals and chlordane above applicable NYSDEC standards, criteria, and guidance values. Based on the results of the previous investigation and observations made during the scoping session and site visit a limited excavation of sediment/soil within the nine subsurface drainage structures (CP-1, CP-2, DW-1, DW-2, DW-3, DW-4, DB, LP-1, and LP-2) will be completed. In addition, sediment, soil, and/or water samples at two stormwater drainage structures and an unknown subsurface structure located northeast of the former generator building will be collected. The locations of the subsurface drainage structures, two stormwater drainage structures, and the unknown structure are illustrated on Figure 4.

Soil will be excavated until visually clean or a minimum of 1 ft of material is removed at each structure, and all material will be placed in a lined roll-off, staged on-site. Endpoint sampling will be performed at the base of each excavation. Excavated material removed from the subsurface drainage structures will be stored in a lined, covered roll-off to prevent the migration of potentially contaminated sediment/soil from the site. Roll-off units used to temporarily store material shall be water tight. A cover shall be placed over the units to prevent precipitation from contacting the stored material. Proper storage, handling, and stockpiling of on-site soil is presented in the Soil Management Plan in Appendix E.

All subsurface drainage structure samples will be analyzed for volatile organic compounds

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(VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B, semivolatile organic compounds (SVOCs) by USEPA Method 8270C, target analyte list (TAL) metals by USEPA Method 6010, and pesticides by USEPA Method 8081A/imidacloprid by high-pressure liquid chromatography (HPLC) in accordance with the NYSDEC Analytical Services Protocol. A composite toxicity characteristic leaching procedure (TCLP) sample will be collected from the stockpiled material for proper disposal at an off-site location. TCLP analysis will be performed using USEPA Method 1311.

Prior to the excavations, any notable conduits will be evaluated to determine the flow directions and subsequent discharge areas. Based on the results of the endpoint samples additional excavation will be completed as necessary. The drainage structures shall be covered upon completion of the excavations.

#### 4.3 EXISTING STOCKPILED SOIL AND DEMOLITION DEBRIS

Historical demolition activities at the site generated two stockpiles of a mixture of demolition debris, including bricks, concrete, piping, and soil. The stockpiles are currently located on the northwest portion of the site near the Orchard Road access gate. EA/Berger will perform sampling of the material to identify its characteristics for proper off-site disposal or use. Six TCLP samples will be collected and analyzed to complete the characterization. Due to the large amount of concrete debris three of the six TCLP samples will be composite concrete chip samples collected from various concrete pieces located within the stockpiles. Concrete chip samples will be collected using a hammer and chisel from exposed concrete surface areas, with bias toward visually stained areas. The remaining three samples will consist of composited soil from the stockpiles. TCLP analysis will be performed using USEPA Method 1311. No quality assurance/quality control (QA/QC) samples will be collected for TCLP analysis.

Based on the analytical results from the TCLP sampling EA/Berger will procure a subcontractor to load, haul, and dispose of the stockpiled material at an off-site location. If the material analysis distinguishes the stockpiles are common construction debris and non-hazardous then Henron Development Corporation will be offered the right of first refusal to handle the disposal and/or use of the stockpiled material.

Due to the noted public interest in the removal of this material, this task item will be the first priority under the IRM.

#### 4.4 SITE GRADING, FILLING, AND RESURFACING

Upon completion of the removal of on-site stockpiles, and the excavation and sampling of subsurface drainage structures, EA/Berger will procure a subcontractor to provide site grading, filling, and general site resurfacing to mitigate the potential migration of site surface soil along the perimeter of the property and open pits, trenches, and holes that are an immediate safety concern. Site control measures such as silt fencing, haybales, and soil placement/movement will be included in the soil management plan used to provide a scope of services for subcontracting purposes. In

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addition, areas of the site where regrading is required, approximately three in. of mulching shall be performed to control dust migration. All dust monitoring activities will be completed during the site grading, filling, and resurfacing activities in accordance with NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4031.

A Community Air Monitoring Plan (CAMP) has also been developed to monitor particulates during all intrusive field activities and is provided in Appendix D of the RI/FS work plan. The Soil Management Plan addresses excavation activities, grading, filling, resurfacing, dust control, and decontamination procedures and is provided as Appendix E of the RI/FS work plan.

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#### 5. EVALUATION OF ON-SITE SOIL

EA/Berger will implement an on-site soil sampling program to delineate the nature and extent of impacts within the on-site soil, as well as evaluate the backfill material placed in the former location of the underground storage tanks (UST) and determine the toxicity of the on-site soil through field and laboratory analysis. This data will be used to define the limits of impacted soil on-site.

#### 5.1 SOIL SAMPLING METHODOLOGY

#### 5.1.1 Subsurface Soil Sampling

Soil sampling in the area of the former greenhouses will be conducted using a stainless steel hand auger in 1-ft intervals. This will provide a higher recovery rate for sample collection since the material well be removed over smaller intervals. Soil borings will be advanced using direct-push technologies (Geoprobe®) in the areas of the USTs. Soil will be collected continuously at each boring location and screened in the field using a photoionization detector (PID). An on-site geologist will prepare soil boring logs describing subsurface soil encountered at each of the borings. Descriptions of soil sample texture, composition, color, consistency, moisture content, recovery, odor, PID reading's and staining will be documented using the Unified Soil Classification System (USCS). Soil samples collected from the soil borings will be collected directly from the sample interval using a properly decontaminated stainless steel spoon and placed into the appropriate laboratory glassware.

#### 5.1.2 Surface Soil Sampling

Surface soil samples may be collected through the use of a stainless steel bowl and spoon. Sample homogenization for all parameters other than VOCs will be accomplished by placing the sample into the stainless steel mixing bowl and stirring with a stainless steel spoon until the sample appears consistent throughout.

Soil samples will be placed in appropriate sample containers, sealed, and submitted to the laboratory for analysis. The samples will be labeled, handled, and packaged following the procedures described in the Generic QAPP and QAPP Addendum. QA/QC samples will be collected at the frequency detailed in the Generic QAPP, QAPP Addendum, and Table 1 of the QAPP Addendum. Sample forms to be completed during soil sampling activities are included in Attachment C.

#### 5.2 SOIL SAMPLING LOCATIONS

Soil borings will be advanced in the vicinity of the former greenhouses at a frequency of one sample per 900ft<sup>2</sup>. In addition, four subsurface soil samples will be collected at the location of the previously removed UST and six TCLP samples from the former greenhouse building's

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footprints. Surface soil sampling will be performed across the entire site at a frequency of one sample per 150 ft. The following paragraphs provide the details of those activities.

#### **5.2.1** Soil Boring Sampling

#### 5.2.1.1 Former Greenhouses Area

Subsurface soil sampling, to delineate the horizontal (approximately 600 ft  $\times$  300 ft) and vertical (approximately 4 ft below ground surface [bgs]), will be performed to determine the extent of contamination within the vicinity of the former greenhouses. Horizontal delineation will be conducted by establishing a 30 ft  $\times$  30 ft grid to facilitate the collection of one soil sample every 900 ft<sup>2</sup> (Figure 5). Vertical delineation will be conducted by collecting one soil sample for every 1 ft interval. The samples will be collected from 6 in. intervals and analyzed for chlordane utilizing a semi-quantitative enzyme immunoassay. Semi-quantitative (greater or less than) field test kit results will be compared with 100 parts per billion (ppb), 1,000 ppb, and 3,000 ppb calibrators to determine the extent of chlordane impacts with respect to the New York State Code of Rules and Regulations (NYCRR) Part 375 Unrestricted Soil Cleanup Objective of 94 ppb for chlordane. Testing procedures for the immunoassay test kits is provided as an attachment to the QAPP in Appendix C. Field identified "clean samples", which are detected at less than 100 ppb of chlordane, will be confirmed by a laboratory analysis. Confirmatory clean samples will be limited to 550 samples, and will be biased to outer limits of areas where elevated detections of chlordane are observed using the field test kits and field mapping techniques. In addition to the sampling frequency indicated above, 5 percent or up to 30 samples will be submitted for laboratory confirmation where elevated concentrations of chlordane are detected in the field test kits.

Initial field sampling will be completed in the areas where detection results were previously identified during the surface soil sampling program conducted by others. A map indicating the approximate locations of the previous surface soil samples is included in Attachment D. Actual field sampling locations will be determined in the field based on the field test kit results.

Based on the results of the field test kits (estimated to be 2,112 samples), up to 580 soil samples, which is 27 percent confirmation samples, will be collected from approximately 200 soil borings and submitted for pesticide analysis using USEPA Method 8081A.

#### **5.2.1.2 Former UST Location**

Four subsurface soil samples will be collected at the location of the former 20,000 gal UST to determine if "clean fill" or site soil was utilized to backfill the excavation. Two additional samples will be collected at an area where USTs were reported to have been located. Figure 6 illustrates the proposed soil sampling locations within the former footprint of the 20,000 gal UST. Samples will be collected where potential contamination is identified or just above the groundwater table.

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All six samples will be analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, TAL metals by USEPA Method 6010, pesticides by USEPA Method 8081A, and polychlorinated biphenyls (PCBs) by USEPA Method 8082 in accordance with the NYSDEC

#### 5.2.1.3 Former Greenhouses Area, TCLP Samples

Six TCLP samples, analyzed by USEPA Method 1311, will be collected from beneath the former greenhouse buildings footprints to properly determine the characteristics of the soil. An upper 12 in. of soil from three building footprints will be collected as one composite sample, another upper 12 in. of soil from the remaining three building footprints will be collected as another composite sample. The same collection procedure will be done for the 2-3 ft soil interval and the 4-5 ft soil interval. The same three building footprints will be composited geographically so that the two northern and eastern building footprints are composited and the southern building footprints are composited. Figure 8 shows the proposed soil sampling locations within the footprint of the six former greenhouses and composite groups.

#### 5.2.2 Surface Soil Sampling

Surface soil samples will be collected at a minimum frequency of one every 150 ft from within the property boundary from the 0 - 9 in. depth interval. Samples collected for VOCs will be from the bottom 3 in. of the sampling location. Figure 8 depicts the grid layout of the proposed surface soil sampling locations. The figure depicts 27 surface soil sampling locations; however, up to 50 surface soil samples will be available for collection and analysis based on visual observations, historically documented areas of concern, and/or above areas where ASTs, garages, storage areas, dumpsters, and transformers were located. Figure 8 also shows the surface soil sampling locations sampled by others during previous investigations, which will be used as guidance for this surface soil sampling program. In addition, samples will be collected along the site boundary, near residential property lines, to determine if off-site impacts have occurred.

Surface soil samples will be analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, TAL metals by USEPA Method 6010, pesticides by USEPA Method 8081A and imidacloprid by HPLC, and PCBs by USEPA Method 8082 in accordance with the NYSDEC Analytical Services Protocol.

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#### 6. EVALUATION OF GROUNDWATER

EA/Berger will install monitoring wells and complete one groundwater sampling event at the site. A total of 10 new monitoring wells will be installed and sampled, in addition to the sampling of 38 existing monitoring wells previously installed by Suffolk County Department of Health Services (SCDHS). Figure 9 shows the locations of the existing and proposed new monitoring well locations. Monitoring wells will be installed in accordance with the DER-10. All groundwater samples collected will be analyzed for pesticides. In addition, 10 of the 48 wells will also be tested for VOCs, SVOCs, TAL metals and PCBs. The following paragraphs provide the details of those activities.

#### 6.1 MONITORING WELL INSTALLATION

Ten monitoring wells will be installed to further define the extent of groundwater contamination and better understand the local hydrology. This includes two monitoring wells that will be installed to replace monitoring wells WO-01 and WO-02, which could not be located at the site. Three monitoring wells will be installed at groundwater sample point WO-33 to verify the chlordane detections as well as to evaluate the vertical gradient on the eastern side of Abets Creek. These monitoring wells will be installed to 10 ft bgs, 35 ft bgs, and 60 ft bgs respectively. Two monitoring wells will be installed adjacent to groundwater sample point W0-39 to evaluate the influence of Abets Creek on the local aquifer and verify that site contaminants do not migrate beyond Abets Creek. A shallow monitoring well will be installed to a depth of approximately 15 ft bgs and a deep monitoring well will be installed adjacent to the shallow monitoring well to a depth of approximately 90 ft bgs. One monitoring well will be installed to a depth of approximately 25 ft bgs at the western end of Valencia Court to define the eastern extent of the off-site groundwater contamination. One shallow monitoring well, approximately 15 feet bgs, will be installed upgradient of the site along Hedges Avenue. One monitoring well will be installed adjacent to the test pit that was installed at the site where a green horizon was observed. Monitoring well installation, construction details, and lithologic logging procedures are discussed below.

All new monitoring wells will be installed using 4.25 ft diameter hollow-stem augers with split-spoon samples collected at 5 ft intervals. Geophysical logging, using gamma and conductivity sensors will be conducted at WO-3D, WO-20, WO-27, WO-33D, WO-36, WO-38, and WO-39; and one of the new monitoring well locations to provide a comparison between visual and geophysical soil characteristics. Following drilling and logging procedures, wells will be constructed with 2-in. diameter, schedule 40, polyvinyl chloride (PVC) casing threaded into a 5-ft length of 0.02-slotted PVC screen to match existing monitoring wells. The annular space between the PVC and the wall of each well boring will be filled with #2 size well gravel to a depth of 2 ft above the well screen. A 2-ft seal will be formed by using bentonite in the annular space to immediately above the #2 well gravel. The remaining annular space will be tremied with grout. Each well will be equipped with an expandable locking well plug and a protective steel housing (flushmount or stick-up, as appropriate) over the PVC. Following well installation,

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each new well will be hand-surged and developed with a submersible pump to remove as much sediment from the well as practical. Well development procedures will be performed until turbid free (50 nephelometric turbidity unit [NTUs]). Purge water and soil cuttings will be containerized and staged at the site for analysis and disposal.

#### 6.2 MONITORING WELL SAMPLING

Monitoring well sampling will be conducted two weeks following well completion and development, and will include water level measurements, well purging, field measurements, and sample collection at each monitoring well location. All newly installed wells and existing monitoring wells will be included in this sampling event. A copy of the purging and sampling log form used to record well purging, water quality measurements, and sampling flow rates is provided as Attachment C. The objective of the groundwater sampling protocol is to obtain samples that are representative of the aquifer in the well vicinity so that analytical results reflect the composition of the groundwater as accurately as possible. Water level measurements and analytical results will be included in the RI Report.

All groundwater samples will be analyzed for pesticides by USEPA Method 608. In addition, 10 monitoring wells (WO-01, WO-02, WO-2A, WO-07, WO-08, WO-10, MW-33S, MW-33I, MW-33D, the newly installed upgradient well (MW-41)) will also be sampled for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, PCBs by USEPA method 8082, and TAL metals by USEPA Method 6010, in accordance with the NYSDEC Analytical Services Protocol. An additional 10 groundwater samples from select wells will be field-filtered and analyzed for pesticides by USEPA Method 608.

Rapid and significant changes can occur in groundwater samples upon exposure to sunlight, temperature, and pressure changes at ground surface. Therefore, groundwater sampling will be conducted in a manner that will minimize interaction of the sample and the surface environment. The equipment and protocol for collecting groundwater samples by each method are described in Section 6.3.3. Groundwater samples will be collected after 3-5 well volumes are purged, water quality measurements are stabilized, and turbidity is recorded below 50 NTU. All purge water will be containerized, handled, and disposed of as detailed in Section 9.

#### 6.3 GROUNDWATER SAMPLING BY PURGE METHOD

#### **6.3.1** Purging and Sampling Equipment

Well purging will be performed by using submersible or peristaltic pumps or by using dedicated polyethylene bailers. Equipment for sampling may include the following:

- Submersible or peristaltic pumps with Teflon® lined polyethylene tubing
- Electronic water level measurement unit with accuracy of 0.01 ft
- Flow measurement device (containers graduated in milliliters) and stop watch.

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#### **6.3.2** Field Analytical Equipment

Field equipment to be used at the Site will include a Horiba U-22 water quality meter (or similar) with a flow-through cell, which includes probes for measurement of pH, reduction-oxidation potential (Eh), turbidity, salinity, dissolved oxygen, temperature, and conductivity. Additionally, a PID will be used to get a headspace reading on the well head. Each piece of equipment will be checked by the EA/Berger Site Manager to be in proper working order before its use and calibrated as required by the manufacturer. Prior to each use, field analytical equipment probes will be decontaminated. After each use, the instruments will be checked and stored in an area shielded from weather conditions.

The calibration of each instrument will be checked at the beginning of each day of groundwater sampling.

#### **6.3.3** Groundwater Sampling Purge Method

The following procedures will be used for monitoring well groundwater sampling:

- Wear appropriate personal protective equipment as specified in the HASP and the HASP Addendum. In addition, samplers will use new sampling gloves for the collection of each sample.
- Unlock and remove the well cap.
- Obtain PID readings and record them in the field logbook.
- Measure the static water level in the well with an electronic water level indicator. The
  water level indicator will be washed with Alconox detergent and water, then rinsed with
  deionized water between individual wells to prevent cross-contamination.
   Decontamination fluids will be containerized with the monitoring well purge water.
- Calculate the center point of the screen and volume of water column.
- Place polyethylene sheeting around the well casing to prevent contamination of sampling equipment in the event sampling equipment is dropped.
- Utilize low-flow sampling procedures.
- Allow field parameters of pH, Eh, dissolved oxygen, specific conductivity, and temperature to stabilize before sampling over a 15-minute period. Purging will be complete if the following conditions are met:
  - Consecutive pH readings are  $\pm 0.1$  pH units of each other
  - Consecutive dissolved oxygen readings are  $\pm 10$  percent of each other

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- Consecutive Redox readings are  $\pm 0.10$  units of each other
- Consecutive measured specific conductance is ±3 percent of each other
- Turbidity < 50 NTU
- Purge rate between 200 and 500 ml/min with a draw down less than 0.3 ft.

If these parameters are not met after purging the well, the EA/Berger Project Manager will be contacted to determine the appropriate action(s). If turbidity is >50 NTUs and metals shall be analyzed, an additional filtered metals sample shall be collected to determine the influence of turbidity on the metal results.

- If the well goes dry before the required volumes are removed, the well may be sampled when it recovers (recovery period up to 24 hours). The sample will be obtained from the well with a bailer suspended on new, clean nylon twine. The sampling will be performed with a new bailer dedicated to each individual well. The sample aliquot for VOC analysis will be collected by lowering and raising the bailer slowly to avoid agitation and degassing, then carefully pouring directly into the appropriate sample bottles.
- Sample bottles containing appropriate preservative for the parameter to be analyzed will be obtained from the laboratory.
- Obtain field measurement of pH, dissolved oxygen, temperature, and specific conductivity and record it on the purging and sampling form. The instruments will be decontaminated between wells to prevent cross-contamination.
- Place analytical samples in cooler and chill to 4°C. Samples will be shipped to the analytical laboratories within 24 hours.
- If a submersible pump is used, it will be decontaminated and the polyethylene suction/discharge line will be removed and disposed of accordingly.
- Re-lock well cap.
- Fill out field logbook, sample log sheet, labels, custody seals, and chain-of-custody forms.

Groundwater samples will be placed in appropriate sample containers, sealed, and submitted to the laboratory for analysis. The samples will be labeled, handled, and packaged following the procedures described in Generic QAPP and QAPP Addendum. QA/QC samples will be collected at the frequency detailed in the Generic QAPP, QAPP Addendum, and Table 1 of the QAPP Addendum. Sample forms to be completed during groundwater sampling activities are included in Attachment C.

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#### 6.4 ON-SITE AND OFF-SITE POTABLE WELLS

Historical documents provided by NYSDEC with the Work Assignment indicated that there were four on-site potable wells. Due to the extensive demolition work conducted at the site only two on-site potable wells were located during the scoping session and site walk. Figure 10 illustrates the approximate location of the four potable wells.

Prior to conducting sampling of the on-site potable wells, a geophysical survey will be completed to further investigate the locations of the potable wells not identified during the site walk.

The on-site potable wells will be purged and sampled using low-flow sampling techniques to determine the condition of the on-site potable water quality. Potable water samples will be analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, TAL metals by USEPA Method 6010, pesticides by USEPA Method 608, and imidacloprid by HPLC, in accordance with the NYSDEC Analytical Services Protocol.

SCHDS has historically sampled five potable wells located down gradient of the site. These wells and up to five additional off-site potable wells will be sampled in conjunction with the groundwater sampling event. The data will be used to compare on-site potable well water quality with down gradient potable wells. The off-site potable well samples will be analyzed for VOCs and pesticides by USEPA Method 8260B/608, and imidacloprid by HPLC, in accordance with the NYSDEC Analytical Services Protocol. The potable well samples will include field-filtered samples for analysis of pesticides by USEPA Method 608.

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#### 7. HYDROGEOLOGIC EVAULATION

#### 7.1 GAUGING EVENTS

During the course of the RI activities, two gauging events will be performed. Water levels will be collected from the entire monitoring well network to prepare a groundwater contour map and evaluate groundwater flow patterns. Water level measurements recorded will be included in the RI report. The wells to be gauged are included in the table below:

	Monitoring Well Network at the Bianchi/Weiss Greenhouses				
WO-03	WO-15	WO-27	WO-39		
WO-04	WO-16	WO-28	WO-40		
WO-05	WO-17	WO-29	MW-01		
WO-06	WO-18	WO-30	MW-02		
WO-07	WO-19	WO-31	MW-02A		
WO-08	WO-20	WO-32	MW-33S		
WO-09	WO-21	WO-33	MW-33I		
WO-10	WO-22	WO-34	MW-33D		
WO-11	WO-23	WO-35	MW-39S		
WO-12	WO-24	WO-36	MW-39D		
WO-13	WO-25	WO-37	MW-41		
WO-14	WO-26	WO-38	MW-42		

NOTE: Off-site wells included in groundwater gauging and sampling program are located down gradient of the site in a residential area.

Well IDs in **bold** text indicate monitoring wells that are proposed for installation as part of the Bianchi/Weiss Greenhouses RI.

#### 7.2 STREAM GAUGING

Five stream gauges will be placed on and around the site. Two will be placed in Abets Creek, two in Moss Creek, and one in Patchogue Bay. The locations of the proposed stream gauge locations are depicted on Figure 11. Each stream gauge will be surveyed to an elevation datum common to the monitoring wells (0.01 ft) and stream measurements will be recorded during each gauging event to an accuracy of 0.01 ft. Surface water level measurements will be collected from each stream gauge location whenever monitoring well water levels are recorded to document hydraulic connection between surface water and groundwater. The following procedures will be used for surface water sampling:

- Wear appropriate personal protective equipment as specified in the Generic HASP and the HASP Addendum.
- Obtain stream measurement readings and record them in the field logbook.

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#### 7.3 PRESSURE TRANSDUCERS AND SLUG TESTING

Seven pressure transducers will be installed to document hydraulic conditions across the site during a 96-hour period; one steam gauge location (Abets Creek if tidally influenced or Patchogue Bay, to be determined in the field) and six within monitoring wells (W011, W020, W033S, W033D, W039S, and W039D) to properly understand the tidal influence. One ambient air transducer shall be maintained on-site to record atmospheric conditions. Groundwater fluctuations will be determined during this 96-hour period. In addition to pressure transducers, slug tests will be performed at the above mentioned monitoring wells to determine the hydraulic conductivity and groundwater velocities. It is anticipated that rising head tests will be conducted at well locations where the well screen bridges the water table, and both rising and falling head tests will be conducted where the well screen does not bridge the water table. The following procedures will be used for slug testing.

#### Rising Head Test:

- Measure static water level in monitoring well.
- Hang pressure transducer probe in well at appropriate depth.
- Connect pressure transducer to data logger.
- Allow water level in well to re-equilibrate to undisturbed depth.
- Start the data logger and remove a volume of water via bailer.
- Record the rate of recharge until a recovery rate of 85 percent or greater is obtained.

#### Falling Head Test:

- Measure static water level in monitoring well.
- Hang pressure transducer probe in well at appropriate depth.
- Connect pressure transducer to data logger.
- Allow water level in well to re-equilibrate to undisturbed depth.
- Start the data logger and insert slugs to displace a volume of water instantaneously.
- Record the rate of water level stabilization until a recovery rate of 85 percent or greater is obtained.

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#### 8. SURFACE WATER AND SEDIMENT SAMPLING PROGRAM

EA/Berger will conduct a sediment/surface water sampling program within Abets Creek, Moss Creek, and Patchogue Bay to determine possible pesticide contamination. Sediment and surface water samples will be collected from five previously determined locations corresponding to stream gauge placement. A complete review of the local stormwater drainage patterns will be assessed to determine if drainage systems discharge to Abets Creek. Based on the review, sediment/surface water sampling locations will be selected; preliminary locations are shown on Figure 11 as they will be identical to the stream gauge locations. In addition to the sediment/surface water samples collected at the stream gauge locations, one additional sediment/surface water sample will be collected from the northern portion of Abets Creek. An upstream sediment and surface water sample will be collected to define background conditions. The sediment/surface water sampling locations will be flagged after sampling to facilitate locating these sampling locations with a high precision GPS unit.

Sediment/Surface water sampling will be performed during lowest possible tide conditions to allow potential groundwater seepage to infiltrate the surface water body. All of the sediment/surface water sampling locations are located off-site. Prior to initiating the sediment/surface water sampling, property owners will be contacted through a telephone call and then through a 10-day written notice consistent with NYSDEC DER TAGM 4053.

#### 8.1 SURFACE WATER SAMPLING METHOD

Following identification of the surface water and sediment sampling locations, field personnel will collect the surface water sample by wading into the stream (starting at the downstream location) to reach the desired sample location. If the water is sufficiently deep, surface water samples will be collected using the sample container itself. Otherwise, surface water samples will be collected (if present) with a dipper, beaker, or pond sampler. It is anticipated that a maximum of six surface water samples will be collected.

The approximate location of the sample will be noted in the field logbook. Field measurement of pH, dissolved oxygen, temperature, turbidity, salinty and specific conductivity will be obtained and recorded in the field logbook.

#### 8.2 SEDIMENT SAMPLING METHOD

Sediment samples will be collected using a decontaminated ponar dredge or hand auger sampler in accordance with the following general protocol:

- The sampling location will be identified and recorded in the field logbook.
- The winch line and dredge sampler will be released and fall through the surface water into the sediment at the desired sample location. Any standing water that accumulated in

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the ponar dredge or hand auger will be decanted prior to sample collection. Sediment samples collected for VOC analysis will be immediately placed into a sample container upon reaching the surface.

- The sample container will be identified in terms of designation, depth, date, and time the sample was obtained.
- Samples will be preserved in accordance with the protocols outlined in the QAPP and shipped to the laboratory via overnight courier under proper chain of custody.
- The sampling tool will be decontaminated according to the decontamination procedures described in the work plan for non-aqueous sampling equipment.

Sediment/surface water samples will be analyzed for pesticides by USEPA Method 8081A/608 and imidacloprid by HPLC in accordance with the NYSDEC Analytical Services Protocol. In addition, sediment samples will be submitted for analysis of total organic carbon by USEPA Method 415.1.

Sediment/Surface water samples will be placed in appropriate sample containers, sealed, and submitted to the laboratory for analysis. The samples will be labeled, handled, and packaged following the procedures described in Generic QAPP and QAPP Addendum. QA/QC samples will be collected at the frequency detailed in the Generic QAPP, QAPP Addendum, and Table 1 of the QAPP Addendum. Sample forms to be completed during sediment sampling activities are included in Attachment C.

#### 8.3 GROUNDWATER SAMPLING

Groundwater samples will be collected from stainless steel piezometers installed at locations adjacent to, and along the embankment of the streams where sediment and surface water samples are collected. The piezometers will be installed to an approximate depth of 3 ft bgs or to a depth where groundwater accumulates in the piezometer. Samples will be collected using a peristaltic pump and water quality measurements will be recorded in accordance with Section 6.3.3. Both filtered and unfiltered samples will be collected for analysis of TAL metals and pesticides.

Groundwater samples will be submitted to Chemtech and analyzed for pesticides by USEPA Method 608, and TAL metals and mercury by USEPA Methods 6010 and 7470.

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#### 9. STORAGE AND DISPOSAL OF INVESTIGATIVE-DERIVED WASTE

EA/Berger is responsible for the proper storage, handling, and disposal of investigative-derived waste; including personal protective equipment, and solids and liquids generated during the direct-push/geoprobe program, monitoring well installation, and well sampling activities. All drummed materials will be clearly labeled as to their contents and origin. All investigative-derived waste will be managed in accordance with NYSDEC DER TAGM 4032.

Accordingly, handling and disposal will be as follows:

- Liquids generated from contaminated equipment decontamination that exhibit visual staining, sheen, or discernable odors will be collected in drums or other containers at the point of generation. They will be stored in a pre-designated staging area on-site. A waste subcontractor will then remove the drums and dispose at an off-site location.
- Liquid generated during well purging or a decontamination activity that does not exhibit visible staining, sheen, or discernable odors will be discharged to an unpaved area on the site, where it can percolate into the ground.
- Soil cuttings from drilling operations that do not exhibit visible staining, sheen, or discernable odors will be disposed of on-site. Off-site soil cuttings shall be staged on-site and analyzed to determine the proper disposal method.
- Soil cuttings from drilling operations that exhibit visible staining, sheen, or discernable odors will be staged on-site until an appropriate treatment/disposal procedure has been determined after the completion of the FS.
- Used protective clothing and equipment that is suspected to be contaminated with hazardous waste will be placed in plastic bags, packed in 55-gal ring-top drums, and transported to the drum staging area.
- Non-contaminated trash and debris will be placed in a trash dumpster and disposed of by a local garbage hauler.
- Non-contaminated protective clothing will be packed in plastic bags and placed in a trash dumpster for disposal by a local garbage hauler.

It is assumed for budgeting purposes that the approximately 20 soil cutting drums will be generated during monitoring well installation activities and approximately 5 purge water drums will be generated during groundwater sampling activities.

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#### 10. FISH AND WILDLIFE RESOURCE IMPACT ANALYSIS

A Fish and Wildlife Resource Impact Analysis will be completed in accordance with the NYSDEC DER-10 Section 3.10.1 to identify actual or potential impacts to fish and wildlife resources from site related contaminants. The Fish and Wildlife Resource Impact Analysis shall be completed following Sections 3.10(c)(1) through 3.10(c)(5).

Revision: FINAL Page 26 of 27 October 2008

#### 11. DATA VALIDATION/DETERMINATION OF USABILITY

The collection and reporting of reliable data is a primary focus of the sampling and analytical activities. Laboratory and field data will be reviewed to determine the limitations, if any, of the data and to assure that the procedures are effective and that the data generated provide sufficient information to achieve the project objectives. A qualified independent third party will evaluate the analytical data according to NYSDEC DER Data Usability Summary Report guidelines. The Data Usability Summary Report will be provided in the RI report.

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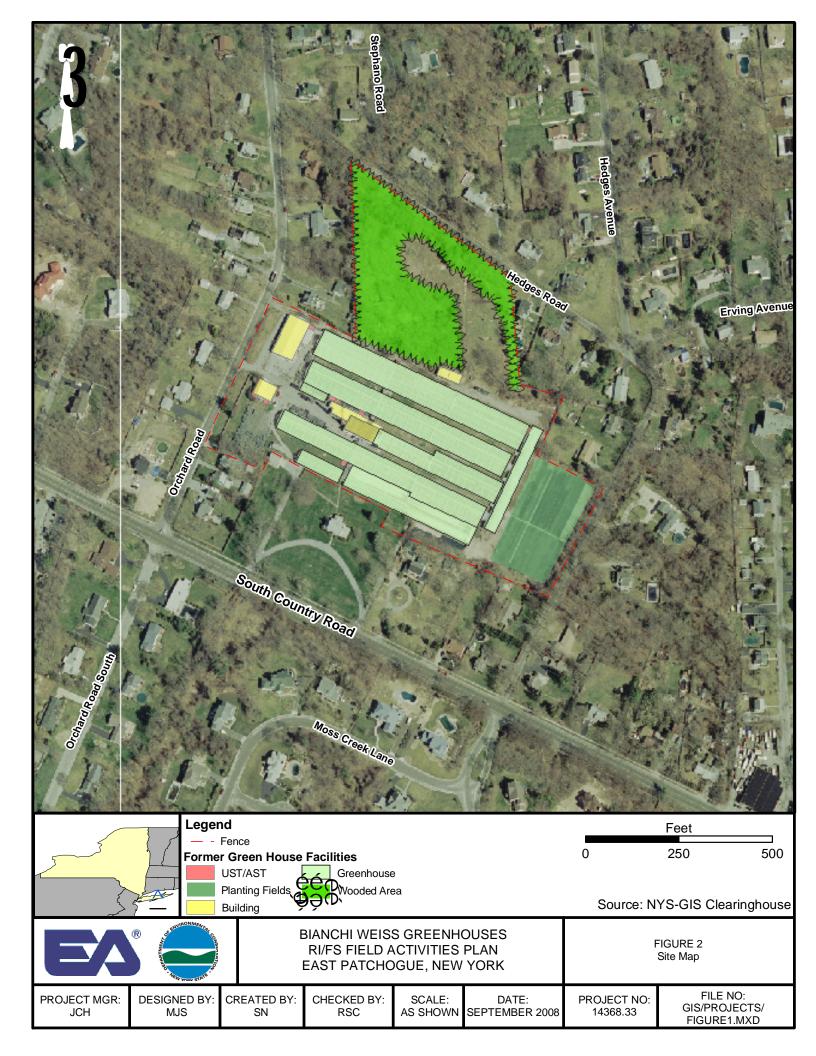
#### 12. SITE SURVEY AND BASE MAP PREPARATION

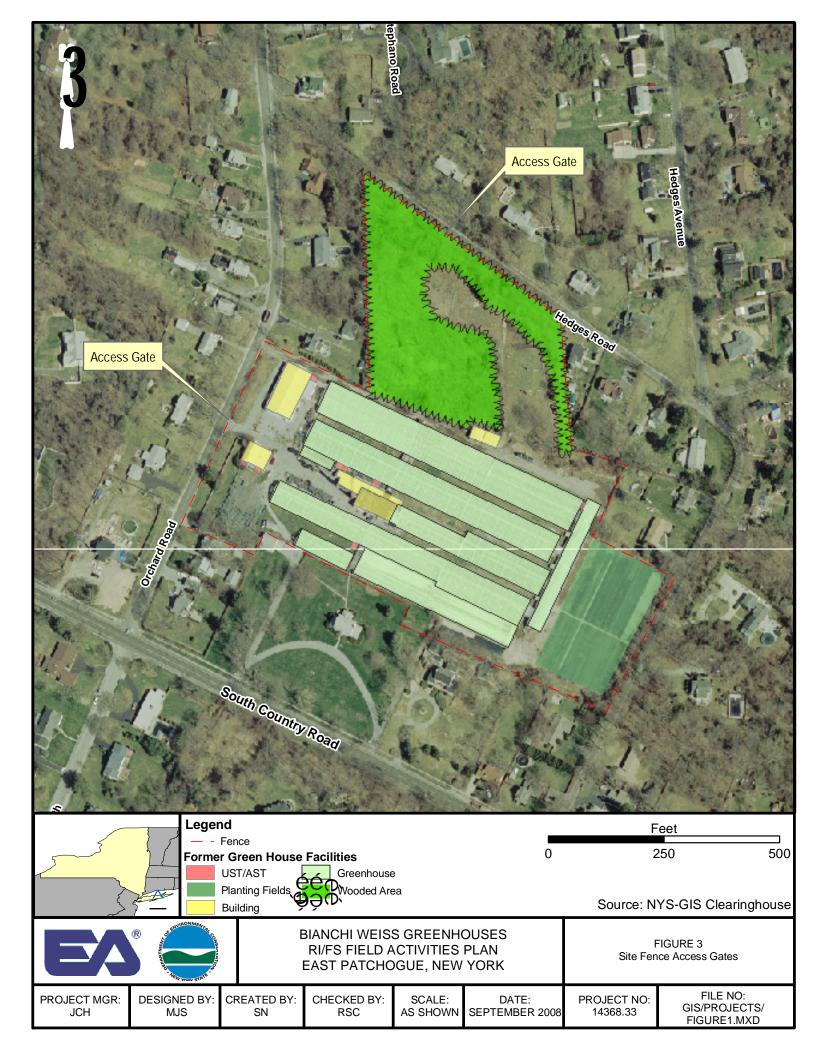
The locations of each sample point, monitoring well, and stream gauge shall be surveyed. The horizontal positions should be tied into the North American Datum of 1983 and UTM Zone 18N coordinate system. The vertical positions should be tied to the North American Vertical Datum of 1988. The measuring point associated with the monitoring wells and stream gauges shall be recorded to an accuracy level of 0.01 ft vertically. Three benchmarks shall be established on existing site features. The site survey information shall be provided on an aerial photograph that indicates current site features (i.e. roads, buildings, etc.) and can be utilized as a base map to illustrate site conditions.

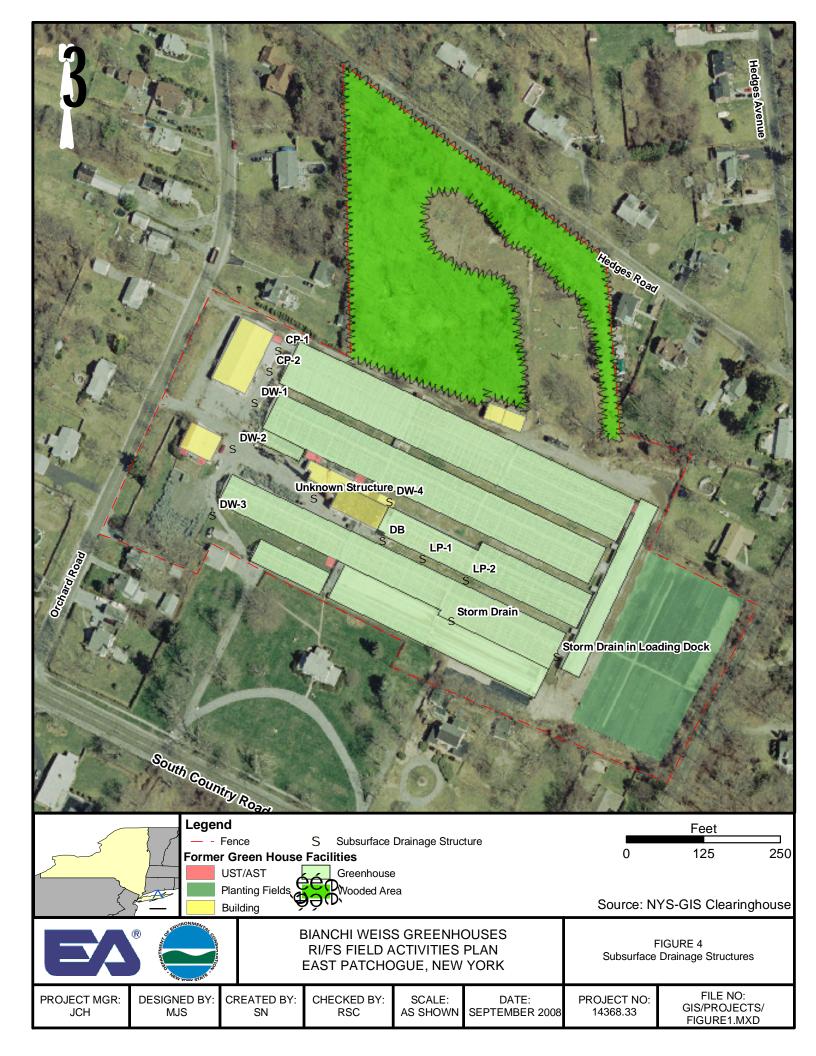
With respect to the site survey and base map preparation, the following assumptions have been made:

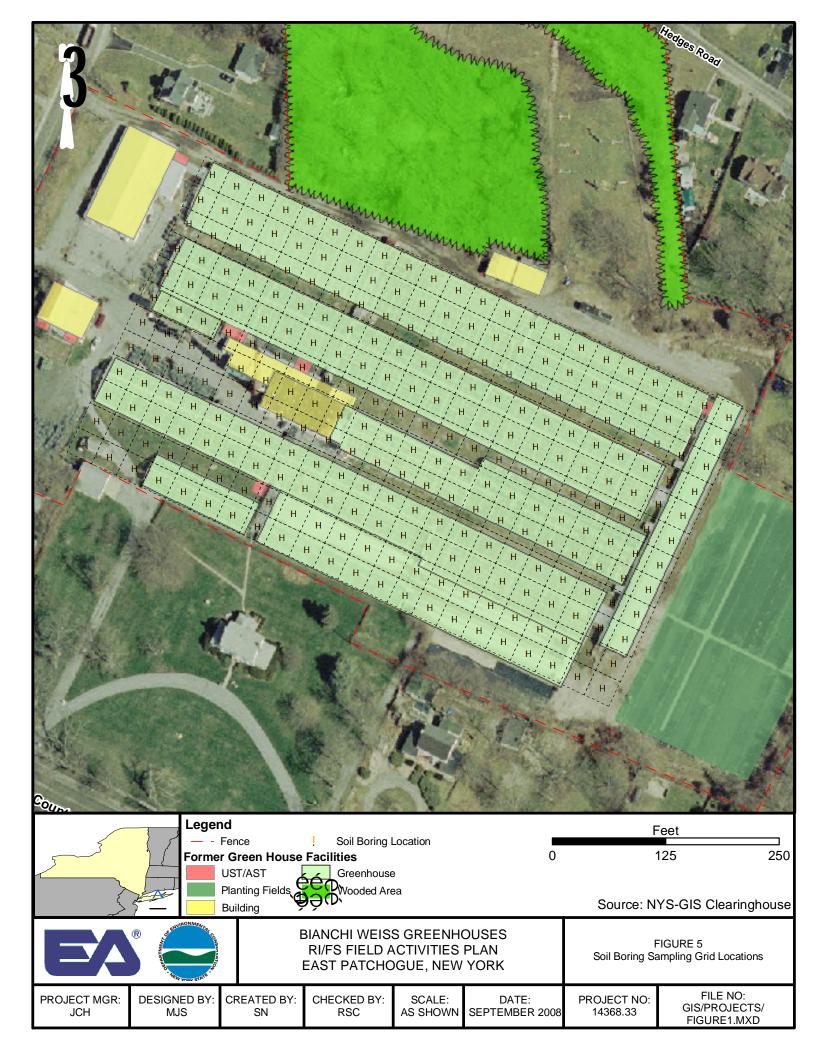
- The estimated survey area should include the whole site boundary. All elevations will be referenced to the North American Vertical Datum 88. All horizontal locations will be referenced to the North American Datum 83.
- Three blue line copies of the site base maps with topography (1-ft intervals) and three blue line copies of the site base map, without topography, will be submitted to NYSDEC.
- The site map must be provided in AutoCAD, Version 12 or higher and ArcMap™ 9.1.

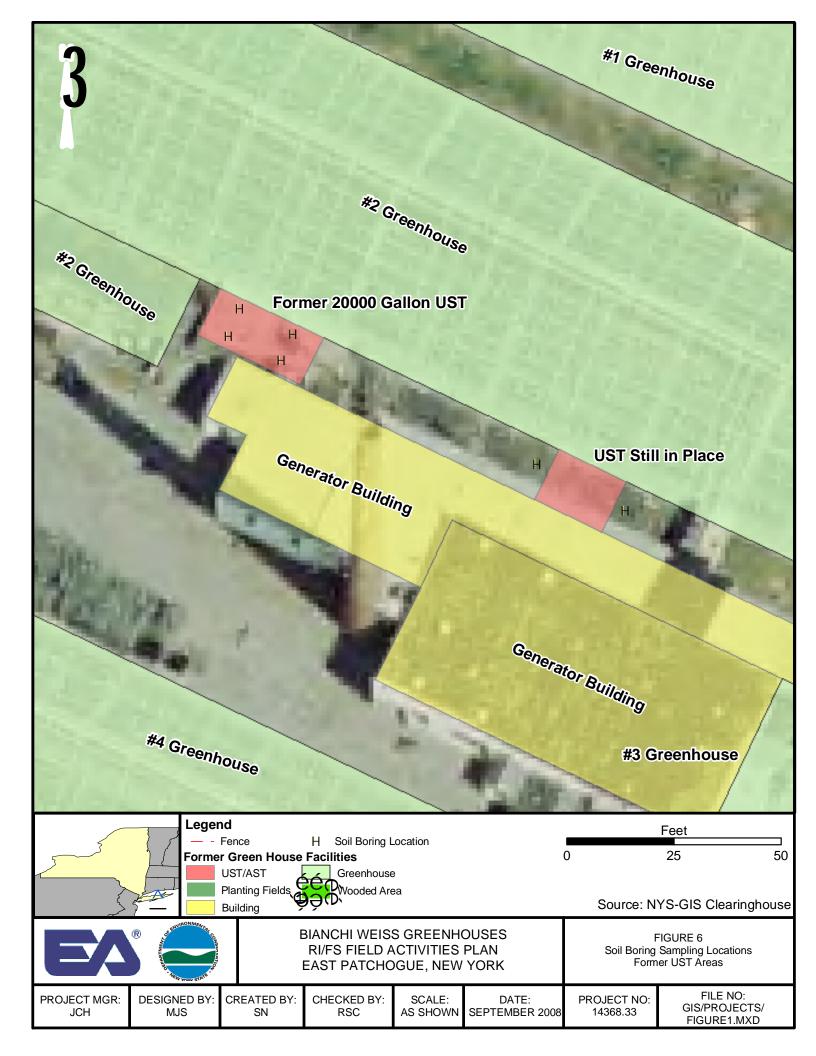


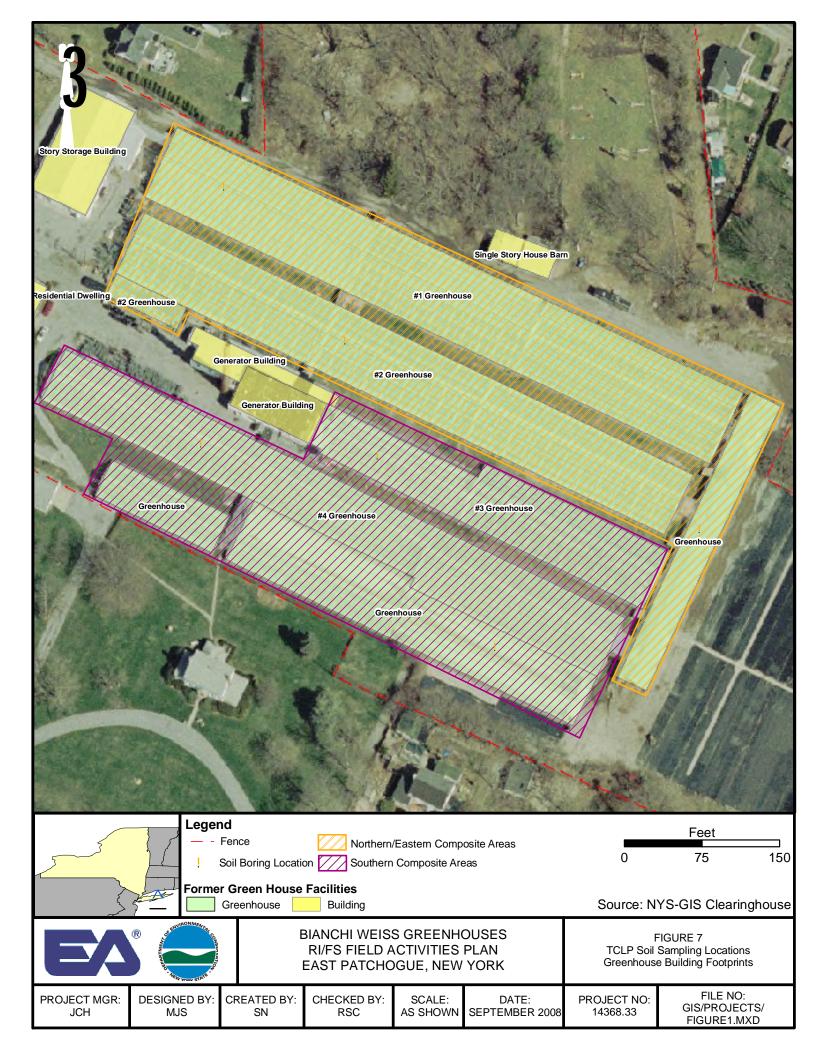


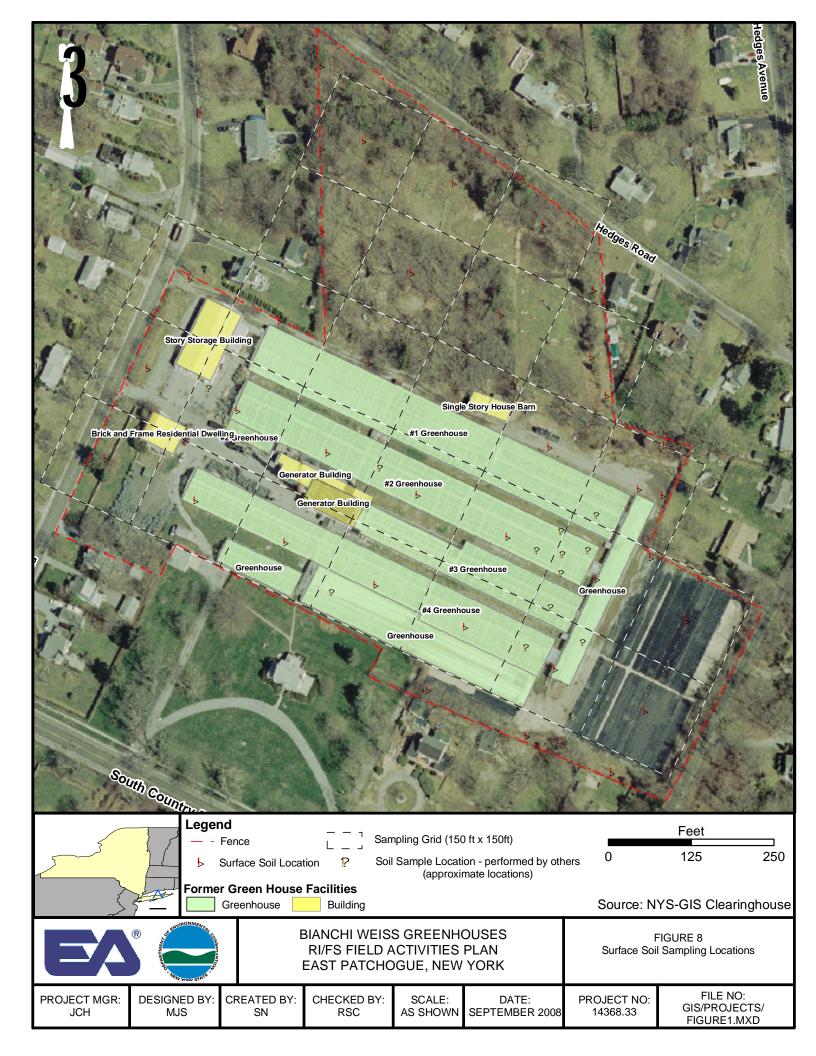


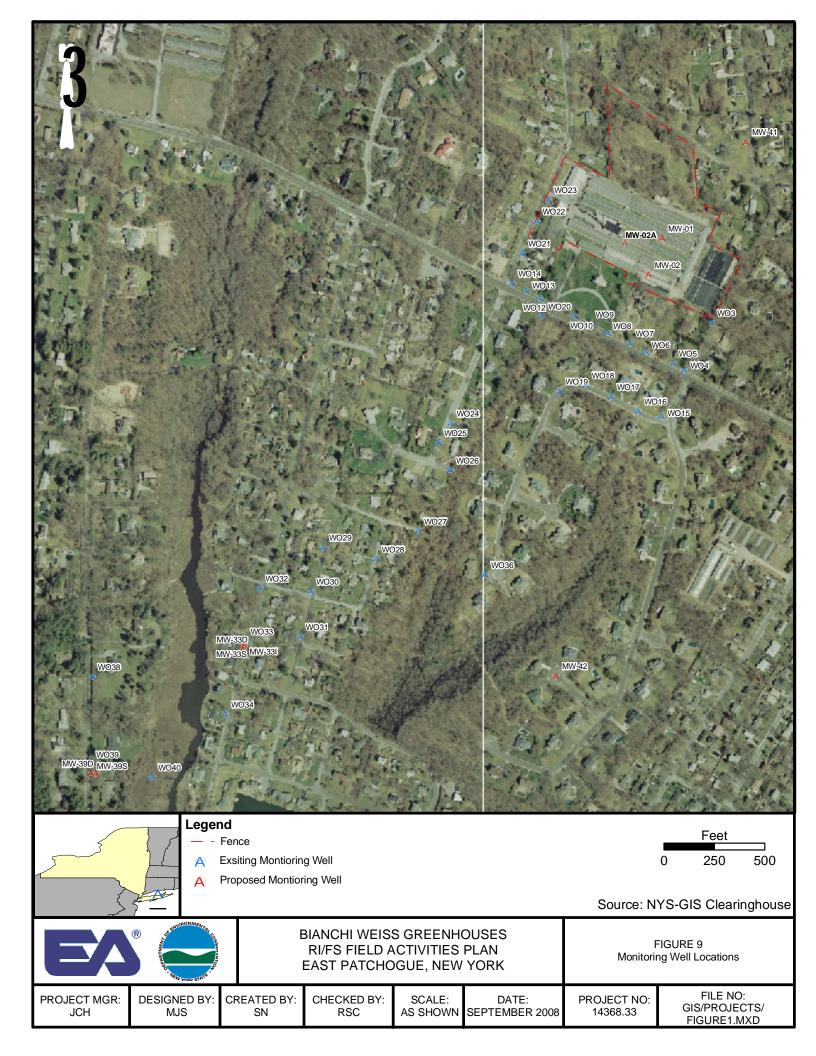


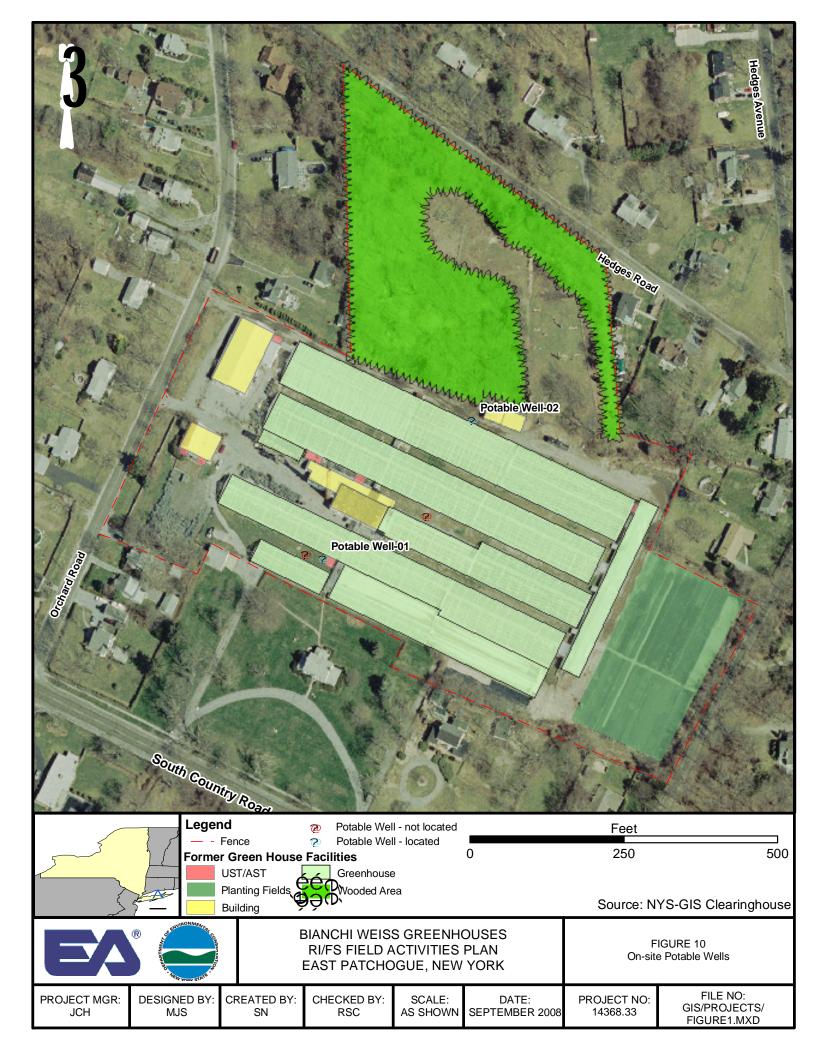


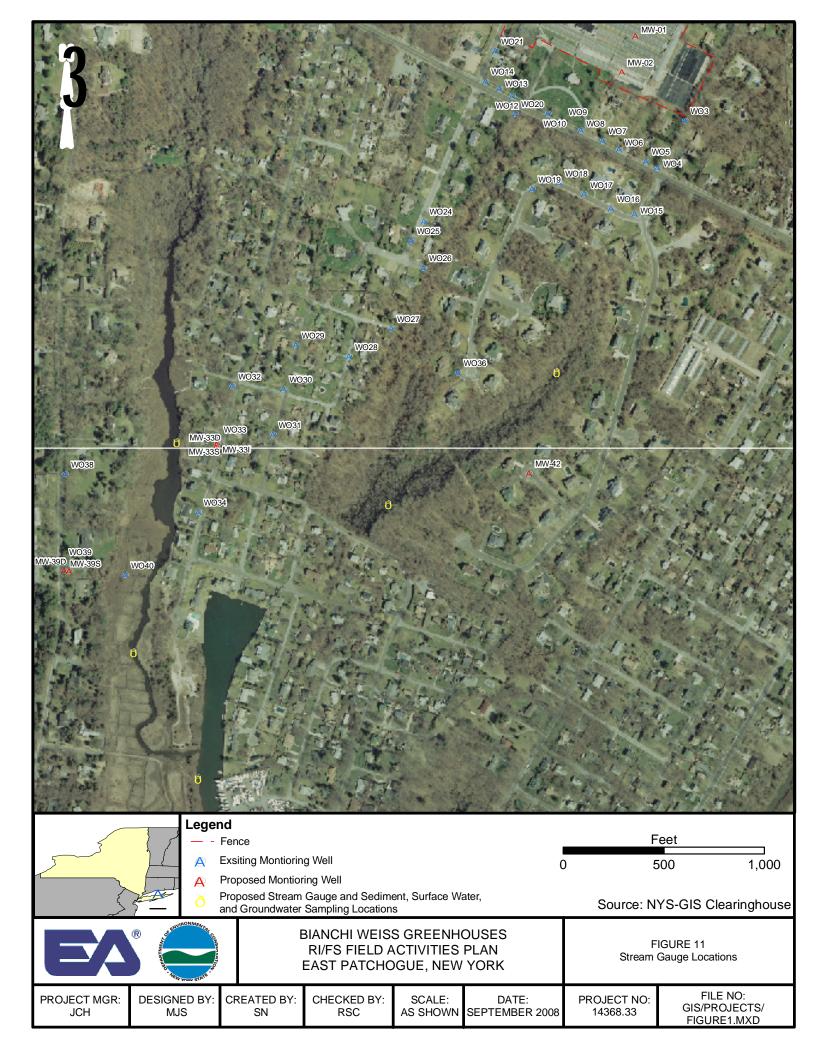












# **Attachment A**

# **Environmental Data Resources, Inc. Regulatory Review**

**Bianchi/Weiss Greenhouse** 

25 Orchard Road East Patchogue, NY 11772

Inquiry Number: 2225535.2s

May 21, 2008

# The EDR Radius Map™ Report with GeoCheck®



440 Wheelers Farms Road Milford, CT 06461 Toll Free: 800.352.0050 www.edrnet.com

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**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

25 ORCHARD ROAD EAST PATCHOGUE, NY 11772

#### **COORDINATES**

Latitude (North): 40.760800 - 40° 45' 38.9" Longitude (West): 72.971200 - 72° 58' 16.3"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 671250.5 UTM Y (Meters): 4513972.5

Elevation: 16 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 40072-G8 BELLPORT, NY

Most Recent Revision: 1967

South Map: 40072-F8 HOWELLS POINT, NY

Most Recent Revision: 1976

#### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
COMMERCIAL PROPERTY 25 ORCHARD ROAD EAST PATCHOGUE, NY	NY Spills Date Closed: / /	N/A
BIANCHI/WEISS GREENHOUSES ORCHARD ROAD FAST PATCHOGLIE NY 11772	SHWS Class Code: Significant threat to the public he	N/A ealth or environment - action required.

#### **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### **FEDERAL RECORDS**

Proposed NPL Proposed National Priority List Sites

Delisted NPL National Priority List Deletions

NPL LIENS Federal Superfund Liens

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

RCRA-LQG RCRA - Large Quantity Generators RCRA-SQG RCRA - Small Quantity Generators

RCRA-CESQG...... RCRA - Conditionally Exempt Small Quantity Generator

US ENG CONTROLS...... Engineering Controls Sites List US INST CONTROL...... Sites with Institutional Controls

ERNS..... Emergency Response Notification System

HMIRS..... Hazardous Materials Information Reporting System

ROD...... Records Of Decision UMTRA..... Uranium Mill Tailings Sites

**DEBRIS REGION 9**....... Torres Martinez Reservation Illegal Dump Site Locations

TRIS...... Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

SSTS..... Section 7 Tracking Systems

ICIS..... Integrated Compliance Information System

PADS PCB Activity Database System
MLTS Material Licensing Tracking System
RADINFO Radiation Information Database

#### STATE AND LOCAL RECORDS

HSWDS..... Hazardous Substance Waste Disposal Site Inventory

**DEL SHWS**..... Delisted Registry Sites

SWRCY...... Registered Recycling Facility List

SWTIRE...... Registered Waste Tire Storage & Facility List

CBS AST...... Chemical Bulk Storage Database
MOSF AST....... Major Oil Storage Facilities Database

NY Hist Spills ..... SPILLS Database

DRYCLEANERS...... Registered Drycleaners
BROWNFIELDS...... Brownfields Site List

NPDES...... State Pollutant Discharge Elimination System

AIRS..... Air Emissions Data

#### TRIBAL RECORDS

INDIAN RESERV...... Indian Reservations

INDIAN ODI\_\_\_\_\_\_ Report on the Status of Open Dumps on Indian Lands INDIAN LUST\_\_\_\_\_ Leaking Underground Storage Tanks on Indian Land

INDIAN UST...... Underground Storage Tanks on Indian Land

#### **EDR PROPRIETARY RECORDS**

Manufactured Gas Plants ... EDR Proprietary Manufactured Gas Plants

#### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

#### **FEDERAL RECORDS**

**RCRA-NonGen:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 03/06/2008 has revealed that there is

1 RCRA-NonGen site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
RED DOG AUTO & TRUCK REPAIR	645 S COUNTRY RD	1/8 - 1/4SSE	4	13

#### STATE AND LOCAL RECORDS

**SWF/LF:** The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the SWF/LF list, as provided by EDR, and dated 01/03/2008 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WARD'S USED AUTO PARTS	86 BARTHOLD AVE	1/4 - 1/2NE	16	38

**LTANKS:** Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the LTANKS list, as provided by EDR, and dated 02/05/2008 has revealed that there are 10 LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
RESIDENCE Date Closed: / /	153 ORCHARD ROAD	1/8 - 1/4N	5	15
<b>RESIDENCE</b> Date Closed: 10/09/97	40 PURITAN AVENUE	1/8 - 1/4ENE	8	18
SOUTH COUNTRY SCHOOL DIST  Date Closed: 06/06/88  Date Closed: 12/13/89	189 DUNTON AVENUE	1/4 - 1/2 ENE	9	21
PATRICIA HARPER RESIDENCE Date Closed: 11/01/91	454 WALKER AVENUE	1/4 - 1/2 NNE	10	26
VERN KRITZ ELEM SCHOOL Date Closed: 02/24/88	DUNTON AVENUE	1/4 - 1/2 ENE	12	29
MANKERS GREENHOUSE Date Closed: 05/16/88	355 SOUTH COUNTRY ROAD	1/4 - 1/2 W	13	32
RIGNOLA RESIDENCE Date Closed: 04/01/07	213 HEDGES AVENUE	1/4 - 1/2N	14	34
Lower Elevation	Address	Dist / Dir	Map ID	Page
FUOCO BUS Date Closed: 10/01/90	SOUTH COUNTRY ROAD	0 - 1/8 S	3	9
EVERS RESIDENCE Date Closed: 01/18/06	6 ANTHONY STREET	1/4 - 1/2SW	11	28
TEXACO S/S Date Closed: 04/19/89	700 SOUTH COUNTRY ROAD	1/4 - 1/2SE	15	36

**HIST LTANKS:** A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database.

A review of the HIST LTANKS list, as provided by EDR, and dated 01/01/2002 has revealed that there are 7 HIST LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
RESIDENCE	40 PURITAN AVENUE	1/8 - 1/4 ENE	8	18
SOUTH COUNTRY SCHOOL DIST	189 DUNTON AVENUE	1/4 - 1/2 ENE	9	21
PATRICIA HARPER RESIDENCE	454 WALKER AVENUE	1/4 - 1/2 NNE	10	26
VERN KRITZ ELEM SCHOOL	DUNTON AVENUE	1/4 - 1/2 ENE	12	29
MANKERS GREENHOUSE	355 SOUTH COUNTRY ROAD	1/4 - 1/2 W	13	32
Lower Elevation	Address	Dist / Dir	Map ID	Page
FUOCO BUS	SOUTH COUNTRY ROAD	0 - 1/8 S	3	9
TEXACO S/S	700 SOUTH COUNTRY ROAD	1/4 - 1/2SE	15	36

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the UST list, as provided by EDR, and dated 12/06/2007 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
LOUIS A FUOCO BUS SERVICE	645 SOUTH COUNTRY RD	1/8 - 1/4SE	B7	17

**AST:** The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the AST list, as provided by EDR, and dated 12/06/2007 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
LOUIS A FUOCO BUS SERVICE	645 SOUTH COUNTRY RD	1/8 - 1/4SE	B6	17

**MANIFEST:** Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

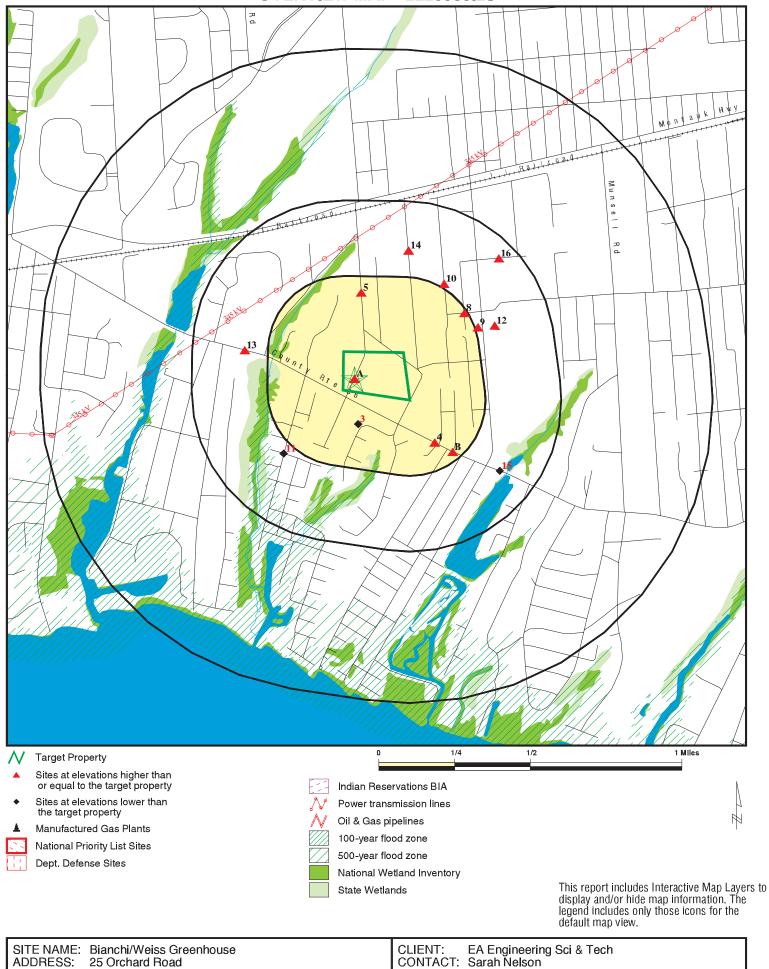
A review of the MANIFEST list, as provided by EDR, and dated 02/15/2008 has revealed that there is 1 MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
RED DOG AUTO & TRUCK REPAIR	645 S COUNTRY RD	1/8 - 1/4SSE	4	13

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
PEP BOYS #0564 CALDOR SUNOCO SERVICE STATION NYS DEC / FORMER USA STATION NISSAN 112 NYSDEC REG USA S/S NYSDOT BIN 1019280 DENICE FRENCH CLEANERS SUNWAVE FRENCH CLEANERS WHITE DOVE CLEANERS EAST PATCHOGUE CONTRACTING CORP. ALL AMERICAN AUTO WRECKERS KHYBER PETROLEUM INC COLONY CLEANERS CORP HESS S/S #32269 MEDFORD AVE ELEM SCHOOL HIGHWAY DRY CLEANERS GAS STATION S/S GAS STATION EAST MAIN ST AUTO S/S EAST END SERVICES/GULF STATION GOODYEAR (PATCHOGUE) NORTH FORK BANK PATCHOGUE POST OFFICE SHELL S/S SUFFOLK COUNTY SIXTH DISTRICT COUR PATCHOGUE MEDFORD LIBRARY GAS STATION S/S -OOB- PATCHOGUE MOTEL USA PETROLEUM CUNNINGHAMS AUTO SERVICE CENTER IN SEARLES GRAPHICS-OOB- ROBERTS ASPHALT FISH CASTLE RESTAURANT DENICE FERNCH DRY CLEANERS NESENGER CHEVROLET	CBS MANIFEST FINDS, MANIFEST, RCRA-NonGen MANIFEST, RCRA-NonGen MANIFEST MANIFEST RCRA-SQG, MANIFEST DRYCLEANERS DRYCLEANERS DRYCLEANERS SWF/LF SWF/LF UST, AST UST UST UST UST UST UST UST UST UST U
KING BEAR BARON HONDA EXCEL AUTOMOTIVE UNK	AST AST FINDS, RCRA-NonGen NY Spills, NY Hist Spills
	,

#### **OVERVIEW MAP - 2225535.2s**



May 21, 2008 2:06 pm Copyright © 2008 EDR, Inc. © 2007 Tele Atlas Rel. 07/2006.

2225535.2s

INQUIRY #:

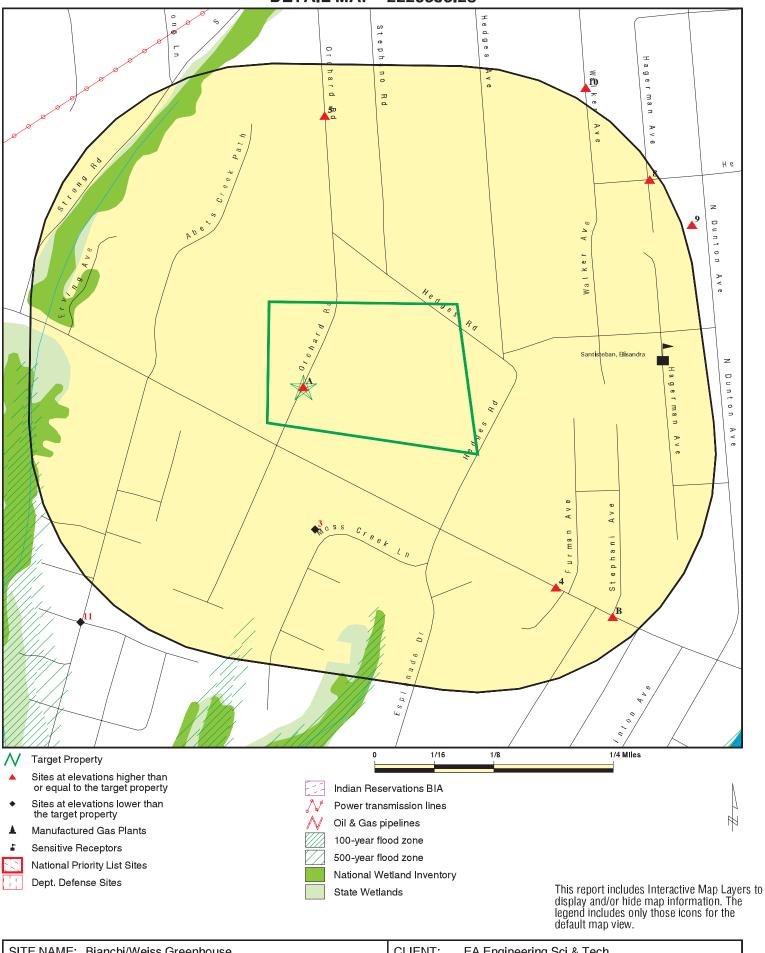
DATE:

East Patchogue NY 11772

40.7608 / 72.9712

LAT/LONG:

#### **DETAIL MAP - 2225535.2s**



SITE NAME: Bianchi/Weiss Greenhouse CLIENT: EA Engineering Sci & Tech
ADDRESS: 25 Orchard Road CONTACT: Sarah Nelson
East Patchogue NY 11772 INQUIRY #: 2225535.2s

East Patchogue NY 11772 INQUIRY #: 2225535.2s LAT/LONG: 40.7608 / 72.9712 DATE: May 21, 2008 2:06 pm

## **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL Proposed NPL Delisted NPL NPL LIENS CERCLIS CERC-NFRAP LIENS 2 CORRACTS RCRA-TSDF RCRA-LQG RCRA-SQG RCRA-SQG RCRA-CESQG RCRA-NonGen US ENG CONTROLS US INST CONTROL ERNS HMIRS DOT OPS US CDL US BROWNFIELDS DOD FUDS LUCIS CONSENT ROD UMTRA DEBRIS REGION 9 ODI MINES TRIS TSCA FTTS HIST FTTS SSTS ICIS PADS MLTS RADINFO FINDS RAATS		1.000 1.000 1.000 1.000 1.000 TP 0.500 0.500 TP 1.000 0.250 0.250 0.250 0.500 0.500 TP TP TP TP TP 0.500 1.000 1.000 0.500 0.500 0.500 0.500 0.500 0.500 TP	OOOROOROOOOOOORRRRROOOOOOOOORRRRRRRRRR	O O O R O O R O O O O O O O O O O O O O	O O O R O O R O O R R R R O O R R R R R	000 R R R R O R R R R R R R R R R R R O O R O O R	N N N N N N N N N N N N N N N N N N N	
STATE AND LOCAL RECOR	<u>DS</u>							
HSWDS SHWS DEL SHWS SWF/LF SWRCY	Х	0.500 1.000 1.000 0.500 0.500	0 0 0 0	0 0 0 0	0 0 0 1 0	NR 0 0 NR NR	NR NR NR NR	0 0 0 1

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	<u>1/2 - 1</u>	> 1	Total Plotted	
SWTIRE		0.500	0	0	0	NR	NR	0	
LTANKS		0.500	1	2	7	NR	NR	10	
HIST LTANKS		0.500	1	1	5	NR	NR	7	
UST		0.250	0	1	NR	NR	NR	1	
CBS UST		0.250	0	0	NR	NR	NR	0	
MOSF UST		0.500	0	0	0	NR	NR	0	
HIST UST		0.250	0	0	NR	NR	NR	0	
AST		0.250	0	1	NR	NR	NR	1	
HIST AST		TP	NR	NR	NR	NR	NR	0	
CBS AST		0.250	0	0	NR	NR	NR	0	
MOSF AST		0.500	0	0	0	NR	NR	0	
MANIFEST	.,	0.250	0	1	NR	NR	NR	1	
NY Spills	X	0.125	0	NR	NR	NR	NR	0	
NY Hist Spills		0.125	0	NR	NR	NR	NR	0	
ENG CONTROLS		0.500	0	0	0	NR	NR	0	
INST CONTROL VCP		0.500 0.500	0 0	0 0	0 0	NR NR	NR NR	0	
DRYCLEANERS		0.500	0	0	NR	NR NR	NR NR	0 0	
BROWNFIELDS		0.500	0	0	0	NR	NR	0	
NPDES		TP	NR	NR	NR	NR	NR	0	
AIRS		TP	NR	NR	NR	NR	NR	0	
RES DECL		0.180	0	0	NR	NR	NR	0	
E DESIGNATION		0.125	Ö	NR	NR	NR	NR	0	
MOSF		0.500	Ö	0	0	NR	NR	Ö	
CBS		0.250	0	Ö	NR	NR	NR	Ö	
			•	-				-	
TRIBAL RECORDS									
INDIAN RESERV		1.000	0	0	0	0	NR	0	
INDIAN ODI		0.500	0	0	0	NR	NR	0	
INDIAN LUST		0.500	0	0	0	NR	NR	0	
INDIAN UST		0.250	0	0	NR	NR	NR	0	
EDR PROPRIETARY RECORDS									
Manufactured Gas Plants		1.000	0	0	0	0	NR	0	

## NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Distance EDR ID Number
Elevation Site EDR ID Number

A1 COMMERCIAL PROPERTY NY Spills S107788827
Target 25 ORCHARD ROAD N/A

Target 25 ORCHARD ROAD Property EAST PATCHOGUE, NY

#### Site 1 of 2 in cluster A

Actual: 16 ft.

NY Spills: Site ID: 362292

Facility Addr2: Not reported
Facility ID: 0650037
Spill Number: 0650037
Facility Type: ER
SWIS: 5222
Region of Spill: 1

Investigator: DHRAYMON
Referred To: Not reported
Spill Date: 04/10/06
Reported to Dept: 04/10/06
CID: 01
Spill Cause: Other
Water Affected: Not reported

Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party

Cleanup Ceased: / /
Cleanup Meets Std: False
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Trust: False

Spill Class: Known release with minimal potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: //
Remediation Phase: 1
Date Entered In Computer: 04/10/06
Spill Record Last Update: 04/11/06
Spiller Name: Not reported

Spiller Company: HENRON DEVELOPMENT

Spiller Address: Not reported

Spiller City,St,Zip: NY Spiller Company: 999

Spiller Phone: Not reported
Contact Name: Not reported
Contact Phone: Not reported

DEC Region: 1
Program Number: 0650037

DER Facility ID: 312524 Site ID: 362292 Operable Unit ID: 1120394 Operable Unit: 01 Material ID: 2109890 Material Code: 0002 Material Name: #4 Fuel Oil Not reported Case No.: Material FA: Petroleum Quantity: 0.00 Units: Gallons Recovered: 0.00 Resource Affected: Soil

Oxygenate: False DEC Memo: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

## **COMMERCIAL PROPERTY (Continued)**

S107788827

S108410688

N/A

SHWS

Remarks: Start CallerRemark - 0650037 20,000 gallon UST #4 oil. Tank removed 4/6/06.

Contaminated soils identified in tank grave. SCDOH required contractor to call in spill. Approximately 20 yds of contaminated soil currently stockpiled. Enviroscience on site today delineating aerial & vertical extent of residual contamination. Additional soil removal will take place later this week. END

CallerRemark - 0650037

A2 BIANCHI/WEISS GREENHOUSES

ORCHARD ROAD

Property EAST PATCHOGUE, NY 11772

Site 2 of 2 in cluster A

Actual: SHWS:

**Target** 

**16 ft.** Program: HW Site Code: 370908

Classification: SIGNIFICANT THREAT TO THE PUBLIC HEALTH OR ENVIRONMENT - ACTION

REQUIRED.

Region: 1

Acres: 14.000 HW Code: 152209

Record Add: 9/26/2006 3:14:00 PM Record Upd: 12/31/2007 12:23:00 PM

Updated By: WJPARISH

Site Description:

The subject property encompasses a total of 14 acres and is located in East Patchoque, Suffolk County, Six greenhouses are located on the property, which are presently at various stages of demolition. The property was previously owned by the Bianchi family and Bianchi Orchards from 1929 to 1992 at which time the property was purchased by several members of the Weiss family and Kirk Weiss Greenhouses. A review of historical property information and aerial photographs indicated that the majority of the property was used as a nursery or for commercial growing purposes. Recently, the property was purchased from the Weiss family by the Henron Development Corporation with the intent to develop a 12 home subdivision: Windwood Oaks. As thedemolition of three houses that occupy the property began, concerned neighbors, wary of the environmental risks involved in the demolition of greenhouses and the development of a property that was operated as a greenhouse/nursery for at least 80 years, complained to local legislators, who in turn contacted the proper local and county agencies. The Suffolk County Department of Health Services (SCDHS) investigated the property and collected samples of site soils and existing subsurface structures. Groundwater samples were collected in the vicinity of the property. The results of the samples collected by the SCDHS clearly demonstrated that the property's soil, subsurface drainage structures as well as local groundwater exhibited unacceptable levels of pesticides and metals as a result of historic site activities. Due to the extent of pesticides and metals contamination, the SCDHS referred the site to the NYSDEC

for consideration for inclusion on the Registry of Inactive HazardousWaste
Disposal Sites. PRPs have been identified and the Department has begun Consent
Order negotiations with the identified parties. An IRM consent order was sent
out for signature on July 24, 2007 and is current under review by RP's counsel.
Thepurpose of the IRM is to address concerns regarding the condition of the
property and the potential environmental impact the property may be having on
the surrounding area.

Environmental Problems:

The Suffolk County Department of Health Services (SCDHS) investigated the property and collected samples of site soils and existing subsurface structures. Groundwater samples were collected in the vicinity of the property. The results of the samplescollected by the SCDHS clearly demonstrated that the property's soil (Chlordane: 61.0 ppm, copper: 187.0 ppm), as well as local

Direction Distance Elevation

Site Database(s) **EPA ID Number** 

## **BIANCHI/WEISS GREENHOUSES (Continued)**

S108410688

**EDR ID Number** 

groundwater (Chlordane: 11.7 ppb, Imidacloprid: 407.0 ppb) exhibited unacceptable levels of pesticides and metals as a result of historic site activities.

Health Problems Assessment: On-site soil is contaminated with pesticides and metals, therefore, direct contact with on-site soils is a potential exposure pathway. On-site and off-site groundwater is contaminated pesticides and metals at levels above state public drinking water standards, therefore, ingestion of on-site groundwater is a potential exposure pathway. However, there are no current users of on-site groundwater. Two off-site wells (one used as a private water supply and one used for irrigation purposes) havebeen impacted by the contamination at levels below state drinking water standards. Therefore, ingestion of off-site contaminated groundwater is a current and potential exposure pathway.

Dump: **FALSE** Structure: **FALSE** Lagoon: **FALSE** Landfill: **FALSE** Pond: **FALSE** Disp Start: Not reported Disp Term: Not reported Lat/Long: 40:76'95" / 72:97'58"

Dell: **FALSE** Record Add: 9/26/2006 Record Upd: 9/26/2006 Updated By: mobarrie Own Op: 01 Sub Type: 01

Owner Name: HENRON DEVELOPMENT CORPORATION Owner Company: HENRON DEVELOPMENT CORPORATION

2150 SMITHTOWN AVENUE Owner Address:

Owner Addr2: Not reported

RONKONKOMA, NY 11779-7366 Owner City, St, Zip:

Owner Country: United States of America

HW Code: 152209 DDT Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 152209 **COPPER** Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported 152209 HW Code: Waste Type: **ARSENIC** Waste Quantity: **UNKNOWN** Waste Code: Not reported HW Code: 152209 Waste Type: **ENDOSULFAN** Waste Quantity: UNKNOWN Waste Code: Not reported 152209 HW Code:

HEPTACHLOR EPOXIDE Waste Type:

Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 152209 Waste Type: **LEAD** Waste Quantity: **UNKNOWN** Waste Code: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **BIANCHI/WEISS GREENHOUSES (Continued)**

S108410688

HW Code: 152209 Waste Type: CHLORDANE Waste Quantity: UNKNOWN Waste Code: Not reported Crossref ID: Not reported Cross Ref Type Code: Not reported Cross Ref Type: Not reported Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported

3 **FUOCO BUS LTANKS** S100172649 **SOUTH COUNTRY ROAD** South **HIST LTANKS** N/A

545 ft.

Actual:

10 ft.

< 1/8 **EAST PATCHOGUE, NY** 0.103 mi.

LTANKS: Relative: Lower

Site ID: 113467 Spill Date: 03/12/83 Facility Addr2: Not reported Facility ID: 8202088

Program Number: 8202088 SWIS: 5222 Region of Spill:

Investigator: **KJGOMEZ** Referred To: Not reported Reported to Dept: 03/14/83 CID: Not reported Spill Cause: Tank Test Failure Water Affected: Not reported Spill Source: Commercial/Industrial

Spill Notifier: Tank Tester Cleanup Ceased: 10/01/90 Cleanup Meets Standard: True

Last Inspection:

Recommended Penalty: Penalty Recommended

**UST Involvement:** True Spill Class: Not reported Spill Closed Dt: 10/01/90 Remediation Phase: Date Entered In Computer: 01/19/88 Spill Record Last Update: 06/30/05 Spille Namer: Not reported

Spiller Company: LOUIS A FUOCO BUS SVC INC

Spiller Phone: (516) 286-2320 Spiller Extention: Not reported

34 ARTHUR AVENUE Spiller Address: Spiller City, St, Zip: **BROOKHAVEN, NY 11719** 

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region:

Program Number: 8202088 DER Facility ID: 270819 Site ID: 113467 Operable Unit ID: 894009

Direction
Distance
Elevation

ation Site Database(s) EPA ID Number

#### **FUOCO BUS (Continued)**

S100172649

**EDR ID Number** 

Operable Unit: 01 484537 Material ID: Material Code: 8000 Material Name: Diesel Case No.: Not reported Material FA: Petroleum 0.00 Quantity: Units: Gallons Recovered: 0.00 Resource Affected: Groundwater

Oxygenate: False Site ID: 113467 Operable Unit ID: 894009 Operable Unit: Material ID: 484538 Material Code: 0009 Material Name: Gasoline Case No.: Not reported Material FA: Petroleum 0.00 Quantity: Units: Gallons Recovered: 225.00 Resource Affected: Groundwater Oxygenate: False Site ID: 113467 Spill Tank Test: 1529749 Tank Number: Not reported

 Tank Size:
 0

 Test Method:
 00

 Leak Rate:
 0.00

 Gross Fail:
 Not reported

 Modified By:
 Spills

 Last Modified:
 10/01/04

Test Method: Unknown
DEC Memo: Not reported
Remarks: Not reported

## HIST LTANKS:

Region of Spill:

Spill Number: 8202088 Investigator: **GOMEZ WELL** Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Not reported Notifier Name: Notifier Agency: Not reported Notifier Phone: Not reported Not reported Notifier Extension: 03/12/1983 Spill Date: Spill Time: 12:00 Reported to Department Date: 03/14/83 Reported to Department Time: 10:00 SWIS: 47

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FUOCO BUS (Continued) S100172649

Spiller Name: LOUIS A FUOCO BUS SVC INC

Spiller Address: 34 ARTHUR AVENUE Spiller City,St,Zip: BROOKHAVEN, NY 11719

Facility Contact:

Not reported
Facility Phone:

Facility Extention:

Spill Cause:

Resource Affectd:

Water Affected:

Not reported

Groundwater

Not reported

Not reported

Spill Source: Other Commercial/Industrial

Spill Notifier: Tank Tester
PBS Number: Not reported
Cleanup Ceased: 10/01/90
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Recommended

Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: True
Spill Class: Not reported
Spill Closed Dt: 10/01/90

Date Region Sent Summary to Central Office: 07/11/91
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 01/19/88

Date Spill Entered In Computer Data File: 01/19/88
Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 04/23/98
Is Updated: False
PBS Number: Not reported
Tank Number: Not reported

Tank Size:

Test Method: Not reported Leak Rate Failed Tank: 0.00

Gross Leak Rate: Not reported Material Class Type: Petroleum Quantity Spilled: 0

Unkonwn Quantity Spilled: False Units: Gallons Quantity Recovered: 225 Unkonwn Quantity Recovered: False Material: **GASOLINE** GASOLINE Class Type: Times Material Entry In File: 21329 CAS Number: Not reported 19940929 Last Date: Material Class Type: Petroleum Quantity Spilled: Unkonwn Quantity Spilled: False Units: Gallons Quantity Recovered: 0

Unkonwn Quantity Recovered: False
Material:
Class Type:
DIESEL
Times Material Entry In File:
CAS Number:
Not reported
Last Date:
19940728

DEC Remarks: //:WELLS ARE INSTALLED. NO NOTES FOUND ON THE INSTALLATION). //:TYREE

Map ID Direction Distance Elevation

#### MAP FINDINGS

Site Database(s) EPA ID Number

**FUOCO BUS (Continued)** 

S100172649

**EDR ID Number** 

IS AWARDED MONITORING FOR THIS SITE ON BID BASIS. WAS FUOCO ASKED?- CAN T FIND THE LETTER, BUT THERE SHOULD HAVE BEEN ONE. 03/12/83: G M DEGE P-T 2 1KDIE, 1 1K REG, 1 4K REG. ALL STEEL. ONE DIE FAILED AT -. 923, THE 1K REG FAILED AT -2.602. OWNER OF TANKS GIVEN AS LOUIS A. FUOCO BUS CO., 645 S COUNTRY RD, E PATCHOGUE. 03/14/83: G M DEGE CALLS DOT; THE DIE GIVEN 2086 AND THE GAS 2087. WHEN DEC NOTIFIED LATER THIS DATE, DIE WAS 2088 AND THE GAS 2089. 2087 REASSIGNED; STATUS OF 2086 UNK. 03/16/83: DOT SPEAKS TO MR. GERARD, MGR OF FUOCO AND EXPLAINS OPTIONS. HE WILL PROBABLY ABANDON TANKS. 03/17/83: DOT PETEREC) SENDS 30PTION LETTER TO GERARD. THE LETTER LISTS BOTH 2086 AND 2087). 03/21/83: GERARD CALLS- HE WILL ABANDON TANKS AND INSTALL WELLS. 03/25/83: DOT LAYS OUT 3 WELLS. 1 IS ON W, 3 IS ON E). 04/05/83: DOT SCHERRER; HE DID MOST, IF NOT ALL, THE MONITORING HERE) CHECKS WELLS: 1 CLEAN, 2 AND3 HAVE A TRACE. NO DEPTH TO WATER DTW) OR SKETCH GIVEN. 04/20/83: ALL THREE CLEAN. NO DTW OR SKETCH. 05/10/83: ALL THREE CLEAN. NO DTW OR SKETCH. 06/01/83: 1 AND 3 ARE CLEAN, 2 HAS 1/4. NO DTW/SKETCH. 07/07/83: 1 AND 3 CLEAN, 2 HAS 3/4.NO DTW/SKETCH. SPOKE TO OWNER...AND REQUESTED HIM TO BAIL WELL . 09/17/83: 1 IS CLEAN, 2 HAS 9 CLEAR PRODUCT, 3 HAS 12 CLEAR PRODUCT. NO DTW. HAS SKETCH. TOLD THE MGR?) TO BAIL DAILY. SUGGEST 2 OR 3 MORE WELLS: ONE TO EAST AND ONE TO SOUTH. 09/22/83: PETEREC SEND LETTER TO LOUIS FUOCO REQUESTING ITEMS OF 17SEPT. 09/30/83: 1 IS CLEAN, 2 HAS 10, 3 HAS 9. WELLS 4-6 BEING PUT IN: ODOR/SHEEN PRESENT. ALSO INSTALLED 7, TO E OF 6). NO DTW, BUT SKETCH. 10/11/83: 1 CLEAN, 2 5.75 ,3 9.25 , 4 TRACE, 5 CLEAN, 6 1/8 , 7 TRACE. SAYS 7 IS DUE S OF 3. MAY MEAN 6 IS DUE S OF 4. AS PER EARLIER SKETCH. NO DTW/SKETCH. 10/18/83: 1 CLEAN, 28.75, 39, 4 TRACE, 5 CLEAN, 61, 7 TRACE. WELLS 2 AND 3 RECHARGE 3 AFTER 10 MIN. BEING BAILED TWICE DAILY. WERE BAILED IN AM. FUOCO MAY PUMP WELLS. NO DTW/SKETCH. 11/18/83: 1 CLEAN, 22, 32.5, 4 TRACE, 51/8, 6 TRACE, 7 CLEAN. NO DTW/SKETCH. WELLS LAST BAILED 7:30AM. WELLS BAILED 4 TIMES A DAY. 200GAL RECOVERED TO DATE. WELLS PUMPED ABOUT 1 WEEK AGO. 11/18/83: ABOUT THREE DAYS AFTER VACCING? WELL READINGS APPEAR TO INCREASE DRAMATICALLY, THEN GOES DOWN . 01/07/84: 1-4 CLEAN, 5 CAN T CHECK, 6 CLEAN, 7 HAS A TRACE? NO DTW/SKETCH. 02/17/84: 1AND 4-7 CLEAN, 2 AND 3 HAVE TRACE? NO DTW/SKETCH, 03/29/84; ALL CLEAN, NO DTW/SKETCH. 04/30/84: ALL CLEAN. NO DTW/SKETCH. 06/14/84: ALL CLEAN. NO DTW/SKETCH. 08/20/84: 1 CLEAN, 2 1/4, 3 1/8, 4 TRACE, 5 CLEAN, 6 9, 7 TRACE. LEFT WORD TO RESUME BAILING. NO DTW/SKETCH. 09/12/84: 1 CLEAN, 2 AND 3 TRACE, 4 CLEAN, 5 TRACE, 66, 7 TRACE. NO DTW/SKETCH. 10/12/84: 1 CLEAN, 23/8, 32, 4 CLEAN, 51/16, 66.75, 7 CLEAN, NO DTW/SKETCH. WELLS BAILED DAILY. GERARD SO FAR HAS NOT BEEN VERY RECEPTIVE TO SUGGESTION OF HAVING WELLS VACUUMED OUT . 01/04/85: 1 CLEAN, 27, 33.25, 41/16, 5 1/8, 610.5, 7 TRACE. VARIOUS COLORS. WILL ASK FOR RECOVERY THIS NEVER DONE). NO DTW/SKETCH. DUE TO DISAPPEARANCE/REAPPEARANCE, WONDERS IF NEW LEAK. 01/04/85: GERARD CALLS SCHERRER. SCHERRER SAID TO VAC OUT THE WELLS; LETTER FOR RW TO BE SENT. WAS THIS SENT?- NOT IN FILE). 03/25/85: 1 CLEAN, 21.5, 3 TRACE, 4 AND 5 CLEAN, 6 TRACE, 7 CLEAN. NO DTW/SKETCH. 04/26/85: 1 CLEAN, 25, 33/8, 41/8, 5 CLEAN, 61.75, 7 CLEAN. NO DTW/SKETCH. NEW MAIL ADDRESS: 34 ARTHUR AVE, BROOKHAVEN NY. GERARD TO HAVE MPC VAC OUT WELLS. 07/03/85: 1 CLEAN, 2 1/4, 3 3/4, 4 AND 5 CLEAN, 6 TRACE, 7CLEAN. NO DTW/SKETCH. WELLS WITH PRODUCT ARE BAILED DAILY, ALL ARE CHECKED WEEKLY. 08/30/85: DEC ACAMPORA) CHECK SITE: 1 CLEAN DTW 14 1.75 . 2 2.75 PRODUCT, 34, 41.5, 51/8, 63.5, 7 CLEAN. NO OTHER DTW, BUT SKETCH CONFIRMS WELL 7 ISE OF 6. 10/21/85: DEC D RAYMOND AND O NEILL) CHECK SITE: 1 .5 DARK PRODUCT, 24.75 DARK, 34.75 LIGHT, 43 AND 3/8 LIGHT, 51/2 LIGHT, 6 6.5 MEDIUM, 7 CLEAN. NO DTW. 01/10/86: ACAMPORA CHECK SITE: 1 TRACE, 21.25 DARK, 32 LIGHT, 41/4 LIGHT, 51/2 LIGHT, 61/4 LIGHT, 7 CLEAN. NO DTW. 06/17/86: DEC O BRIEN) CHECK SITE: 1 AND 4-7 CLEAN, 2 3/4 DARK, 3 2.5 DARK, NO DTW, 01/02/87; DEC WALEK) CHECK SITE: 1 CLEAN, 2-5 HAVE 1/4, 6 AND 7 ARE CLEAN. DTW RANGES FROM 13 TO 13.5.04/23/87: WALEK

Direction Distance

**EDR ID Number** Elevation **EPA ID Number** Site Database(s)

#### **FUOCO BUS (Continued)**

S100172649

CHECK SITE: ALL CLEAN. DTW 12 7 TO 12 11 . 11/24/87: TYREE BEGINS WEEKLY MONITORING. 1 3/8, 2 1.25, 3 4AND1/8, 4 2AND3/8, 5 CLEAN. 6 AND 7 NOT CHECKED. DTW 13 9 TO 14 2. 12/21/87: AFTER REVIEWING DATA,O BRIEN SENDS LETTER ASKING FOR MORE WELLS. 01/19/88: O BRIEN, FUOCO, AND MPC MEET. WILL ADD ONE WELL DOWNGRADIENT OF 2 AND 3. 01/20/88: O BRIEN SEND LETTER TO TYREE, TELLING THEM TO STOP MONITORING AS OF 18JAN, AS FUOCO HAS HIRED ANOTHER CONTRACTOR. 02/12/88: MPC BEGINS MONITORING THE 7 WELLS FOR FUOCO. 03/10/88: NOW 8 WELLS. NO SKETCH WITH DATA. 03/12/88: OWNER OF LAND GIVEN AS LOUIS A. FUOCO REALTY CO., BOX 514, PATCHOGUE, NY. NOT CURRENTLY LISTED IN PHONE BOOK; THERE IS A LOUIS A. FUOCOJR. AGENCY INSUR.) 197 E MAIN PATCHOGUE 289-0751. 09/28/90: DEC GOMEZ) SENDS LETTER TO FUOCO: AFTER REVIEWING FILE, DEC HAS DECIDED TO CLOSE THIS CASE. NO FURTHER ACTION NEEDED AT THIS TIME. FUOCO

INSTRUCTED TO ABANDON THE WELLS, AS PER DEC SPECS.

Spill Cause: 1K GAS 1K DIE FAILED P-T AT -.923. \*\*\*NOTE: THE DIE TANK WAS ORIGINALLY GIVEN

82-2086 THE GAS 2087 VIA CALL TO DOT); WHEN DEC NOTIFIED, THE DIE WAS 2088 THE

GAS 2089. 2087 REASSIGNED.

**RED DOG AUTO & TRUCK REPAIR** 645 S COUNTRY RD

1/8-1/4 0.162 mi. 856 ft.

SSE

**EAST PATCHOGUE, NY 11772** 

**FINDS** 1001460245 **MANIFEST** NYR000067108

RCRA-NonGen

FINDS: Relative:

Other Pertinent Environmental Activity Identified at Site Higher

Actual: 20 ft.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

NY MANIFEST:

Document ID: NYC6497875 Manifest Status: Not reported Trans1 State ID: SCR000075150 Not reported Trans2 State ID: Generator Ship Date: 10/03/2001 Trans1 Recv Date: 10/03/2001 Trans2 Recy Date: Not reported TSD Site Recv Date: 10/03/2001 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYR000067108 Trans1 EPA ID: NYD000708198 Trans2 EPA ID: Not reported TSDF ID: **NYAT8306** 

Waste Code: D001 - NON-LISTED IGNITABLE WASTES

Quantity: 00013

Units: G - Gallons (liquids only)\* (8.3 pounds)

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: R Material recovery of more than 75 percent of the total material.

Specific Gravity: 01.00 01 Year:

Direction Distance

Elevation Site Database(s) EPA ID Number

## RED DOG AUTO & TRUCK REPAIR (Continued)

1001460245

**EDR ID Number** 

Manifest Tracking Num: Not reported Import Ind: Not reported Export Ind: Not reported Discr Quantity Ind: Not reported Discr Type Ind: Not reported Discr Residue Ind: Not reported Not reported Discr Partial Reject Ind: Discr Full Reject Ind: Not reported Manifest Ref Num: Not reported Alt Fac RCRA Id: Not reported Alt Fac Sign Date: Not reported Not reported Mgmt Method Type Code: EPA ID: NYR000067108

Facility Name: RED DOG AUTO & TRUCK Facility Address: 645 S COUNTRY RD Facility City: EAST PATCHOGUE

Facility Address 2: Not reported Country: USA

Mailing Name: RED DOG AUTO & TRUCK

Mailing Contact: R DAMANO

Mailing Address: 645 S COUNTRY RD

Mailing Address 2: Not reported Mailing City: PATCHOGUE

Mailing State: NY
Mailing Zip: 11772
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 631-447-6168

RCRA-NonGen:

Date form received by agency: 01/01/2006

Facility name: RED DOG AUTO & TRUCK REPAIR

Facility address: 645 S COUNTRY RD

EAST PATCHOGUE, NY 11772

EPA ID: NYR000067108
Mailing address: S COUNTRY RD

EAST PATCHOGUE, NY 11772

Contact: JAMES - MASON
Contact address: S COUNTRY RD

EAST PATCHOGUE, NY 11772

Contact country: US

Contact telephone: (516) 447-6168 Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: RED DOG TRUCK RPS INC Owner/operator address: 645 S COUNTRY RD

EAST PATCHOGUE, NY 11772

Owner/operator country: Not reported
Owner/operator telephone: (516) 447-6168
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **RED DOG AUTO & TRUCK REPAIR (Continued)**

1001460245

Owner/Op end date: Not reported

Handler accessibilty indicator: Transferred to the program or state equivalent.

Handler Activities Summary:

U.S. importer of hazardous waste: Unknown Mixed waste (haz. and radioactive): Unknown Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No Unknown On-site burner exemption: Unknown Furnace exemption: Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Off-site waste receiver: Commercial status unknown

Historical Generators:

Date form received by agency: 02/18/1999

**RED DOG AUTO & TRUCK REPAIR** Facility name:

Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

D018

Waste code: BENZENE Waste name:

Waste code: D039

Waste name: **TETRACHLOROETHYLENE** 

Waste code: D040

TRICHLOROETHYLENE Waste name:

Violation Status: No violations found

S107410365 **RESIDENCE** LTANKS N/A

North **153 ORCHARD ROAD** 1/8-1/4 **EAST PATCHOGUE, NY** 

0.196 mi. 1035 ft.

LTANKS: Relative:

Site ID: 351357 Higher

Spill Date: 08/19/05 Actual: Facility Addr2: Not reported

25 ft.

Direction Distance

Elevation Site Database(s) EPA ID Number

RESIDENCE (Continued) S107410365

 Facility ID:
 0506190

 Program Number:
 0506190

 SWIS:
 5222

 Region of Spill:
 1

Investigator: BXDONOVA
Referred To: Not reported
Reported to Dept: 08/19/05
CID: 01
To the First

Spill Cause: Tank Failure
Water Affected: Not reported
Spill Source: Private Dwelling

Spill Notifier: Other Cleanup Ceased: / / Cleanup Meets Standard: False Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False

Spill Class: Known release with minimal potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: / /
Remediation Phase: 1
Date Entered In Computer: 08/19/05
Spill Record Last Update: 08/22/05

Spille Namer: MICHAEL DELANEY
Spiller Company: RESIDENCE
Spiller Phone: (631) 475-0787
Spiller Extention: Not reported

Spiller Address: 153 ORCHARD ROAD

Spiller City,St,Zip: EAST PATCHOGUE, NY 11772

0506190

Spiller County: 001

Spiller Contact: MICHAEL DELANEY
Spiller Phone: (631) 475-0787
Spiller Extention: Not reported

DEC Region: 1

Program Number:

DER Facility ID: 298627 Site ID: 351357 Operable Unit ID: 1108877 Operable Unit: 01 2098852 Material ID: Material Code: 0001 Material Name: #2 Fuel Oil Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Gallons Units: Recovered: 0.00 Resource Affected: Soil Oxygenate: False Site ID: Not reported Not reported Spill Tank Test: Tank Number: Not reported Not reported Tank Size: Test Method: Not reported Leak Rate: Not reported Gross Fail: Not reported Modified By: Not reported

Direction Distance

Distance EDR ID Number EDevation Site EDR ID Number Database(s) EPA ID Number

RESIDENCE (Continued) S107410365

Last Modified: Not reported
Test Method: Not reported
DEC Memo: Not reported
Remarks: Not reported

B6 LOUIS A FUOCO BUS SERVICE AST U003535775
SE 645 SOUTH COUNTRY RD N/A

1/8-1/4 PATCHOGUE, NY 11772

0.222 mi.

1172 ft. Site 1 of 2 in cluster B

Relative: AST:

Higher Facility ID: 6481 Region: SUFFOLK

Actual: Owner Name: LOUIS A FUOCO BUS SERVICE

20 ft. Owner Address: 95 DURKEE LANE

Owner City,St,Zip: EAST PATCHOGUE, NY 11772

Tank ID: 5

Location: ABOVE, OUT

Installed: 75

Capacity: 0000000275
Content: WASTE OIL
Construction: STEEL
Dispenser: SUCTION
Fill Type: GRAVITY
Date Removed: 010186

Official Use: Removed Tank. 86
Permit to Operate: Not reported
Tank Key: 17842
Facility Reference #: 09880
Tank Count: 5

Township: BROOKHAVEN

Tax Map No: 0200

B7 LOUIS A FUOCO BUS SERVICE UST U003960849
SE 645 SOUTH COUNTRY RD N/A

1/8-1/4 PATCHOGUE, NY 11772

1172 ft.

0.222 mi.

Relative: UST:

Higher Facility ID: 6481
Facility Reference #: 09880

Site 2 of 2 in cluster B

Actual: Region: SUFFOLK
20 ft. Official Use: Abandone

Official Use: Abandoned, approved by plan review, awaiting construction for compliance inspection. 86

Tank Count:

Owner Name: LOUIS A FUOCO BUS SERVICE

Owner Address: 95 DURKEE LANE

Owner City, St, Zip: EAST PATCHOGUE, NY 11772

Permit to Operate: Not reported Township: BROOKHAVEN

Tax Map No: 0200 981.04 001 003.000

Tank ID:

Location: UNDER, OUT

Installed: 69

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## LOUIS A FUOCO BUS SERVICE (Continued)

U003960849

Capacity: 0000004000 Content: GASOLINE Construction: STEEL Dispenser: **SUBMERSIBLE** Fill Type: **GRAVITY** Date Removed: 010186 Tank Key: 17838

Tank ID:

UNDER, OUT Location:

Installed: 69

0000001000 Capacity: Content: **GASOLINE** Construction: **STEEL** SUBMERSIBLE Dispenser: Fill Type: **GRAVITY** Date Removed: 010186 Tank Key: 17839

Tank ID:

Location: UNDER, OUT Installed: 000001000 Capacity: Content: **DIESEL** Construction: STEEL Dispenser: **SUBMERSIBLE** 

Fill Type: **PUMPED** Date Removed: 010186 Tank Key: 17840

Tank ID:

UNDER, OUT Location:

Installed: 65

Capacity: 0000001000 Content: **GASOLINE** Construction: STEEL SUBMERSIBLE Dispenser: Fill Type: **GRAVITY** Date Removed: 010186

17841

**RESIDENCE 40 PURITAN AVENUE EAST PATCHOGUE, NY** 

Tank Key:

1/8-1/4 0.241 mi. 1271 ft.

8

**ENE** 

LTANKS: Relative:

Site ID: 166583 Higher Spill Date: 08/13/97

Actual: Facility Addr2: Not reported 24 ft. Facility ID: 9705802 Program Number: 9705802

SWIS: 5200 Region of Spill: 1

S102660074

N/A

**LTANKS** 

**HIST LTANKS** 

Direction Distance Elevation

Elevation Site Database(s) EPA ID Number

RESIDENCE (Continued) S102660074

Investigator: BPAUSTIN
Referred To: Not reported
Reported to Dept: 08/13/97
CID: 01
Spill Cause: Tank Failure

Spill Cause: Tank Failure
Water Affected: Not reported
Spill Source: Private Dwelling

Spill Notifier: Citizen
Cleanup Ceased: / /
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False

Spill Class: Known release that creates potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: 10/09/97
Remediation Phase: 0
Date Entered In Computer: 08/13/97
Spill Record Last Update: 10/09/97

Spille Namer: RICHARD MORRISON
Spiller Company: LOVEM SHELTER
Spiller Phone: ( ) 369-9083
Spiller Extention: Not reported
Spiller Address: Not reported
Spiller City, St, Zip: ZZ

Spiller City,St,Zip: ZZ Spiller County: 001

Spiller Contact: ANN SANDERS(TENANT)

Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region:

Program Number: 9705802 DER Facility ID: 140360 Site ID: 166583 Operable Unit ID: 1051981 Operable Unit: 01 Material ID: 331423 Material Code: 0001 Material Name: #2 Fuel Oil Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Gallons Units: Recovered: 0.00 Groundwater Resource Affected: Oxygenate: False

Site ID: Not reported Spill Tank Test: Not reported Tank Number: Not reported Tank Size: Not reported Test Method: Not reported Leak Rate: Not reported Gross Fail: Not reported Modified By: Not reported Last Modified: Not reported Test Method: Not reported DEC Memo: Not reported Remarks: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

RESIDENCE (Continued) S102660074

HIST LTANKS:

SWIS:

Region of Spill: 1

Spill Number: 9705802 Investigator: **AUSTIN** Caller Name: Not reported Not reported Caller Agency: Caller Phone: Not reported Caller Extension: Not reported Notifier Name: Not reported Notifier Agency: Not reported Notifier Phone: Not reported Notifier Extension: Not reported Spill Date: 08/13/1997 Spill Time: 09:00 Reported to Department Date: 08/13/97 Reported to Department Time: 09:24

Spiller Contact: ANN SANDERS(TENANT)

Spiller Phone: Not reported
Spiller Extention: Not reported
Spiller Name: LOVEM SHELTER
Spiller Address: Not reported
Spiller City, St, Zip: Not reported

Facility Contact: RICHARD MORRISON

Facility Phone:

Facility Phone:

Facility Extention:

Spill Cause:

Resource Affectd:

Water Affected:

Spill Source:

Not reported

Groundwater

Not reported

Private Dwelling

Spill Notifier: Citizen
PBS Number: Not reported
Cleanup Ceased: / /

Cleanup Meets Standard: True Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False

Spill Class: Known release that creates potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: 10/09/97
Date Region Sent Summary to Central Office: / /
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 08/13/97
Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 10/09/97 Is Updated: False PBS Number: Not reported Tank Number: Not reported Tank Size: Not reported Not reported Test Method: Not reported Leak Rate Failed Tank: Gross Leak Rate: Not reported Material Class Type: Petroleum Quantity Spilled: 0

Direction Distance

Elevation Site Database(s) EPA ID Number

RESIDENCE (Continued) S102660074

Unkonwn Quantity Spilled: True Units: Gallons Quantity Recovered: O Unkonwn Quantity Recovered: False Material: #2 FUEL OIL #2 FUEL OIL Class Type: 24464 Times Material Entry In File: CAS Number: Not reported 19941207 Last Date:

DEC Remarks: 9/3/97 AUSTIN ON SITE. TANK CONTAINS 25 OIL/NO WATER OR TRACE OF

WATER/ADVANCED AUGER TO WATER TABLE DIRECTLY ADJACENT TO TANK. NO OILY SOIL

FOUND.NO OIL SHEEN OR ODOR AT CAPILLARY FRINGE FOUND

Spill Cause: NEXT DOOR NEIGHBOR OF A RENTAL PROPERTY WAS TOLD BY THE TENANT THAT HER HEATING

OIL UST IS TAKING ON WATER. THEIR OIL COMPANY IS TAYLOR FUEL COMPANY. THE

NEIGHBOR HAS A PRIVATE WELL.

9 SOUTH COUNTRY SCHOOL DIST LTANKS \$100147374 ENE 189 DUNTON AVENUE HIST LTANKS N/A 1/4-1/2 EAST PATCHOGUE, NY

1/4-1/2 0.260 mi. 1373 ft.

Relative: LTANKS: Higher Site ID:

Spill Date: 10/28/88

Actual: Facility Addr2: Not reported

24 ft. Facility ID: 8806376

Program Number: 8806376

SWIS: 5222

Region of Spill: 1

Investigator: KDGOERTZ
Referred To: Not reported
Reported to Dept: 10/28/88
CID: Not reported
Spill Cause: Tank Test Failure
Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

227223

Spill Notifier: Tank Tester
Cleanup Ceased: 12/13/89
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False
Spill Class: Not reported
Spill Closed Dt: 12/13/89
Remediation Phase: 0
Date Entered In Computer: 11/01/88
Spill Record Last Update: 06/05/06
Spille Namer: Not reported

Spiller Company: SOUTH COUNTRY SCHOOL DIST

Spiller Phone: (516) 286-4322
Spiller Extention: Not reported
Spiller Address: Not reported

Spiller City,St,Zip: ZZ Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Direction Distance Elevation

ation Site Database(s) EPA ID Number

## SOUTH COUNTRY SCHOOL DIST (Continued)

S100147374

**EDR ID Number** 

DEC Region: 1

8806376 Program Number: DER Facility ID: 290539 Site ID: 227223 Operable Unit ID: 923201 Operable Unit: 01 Material ID: 454721 0001 Material Code: Material Name: #2 Fuel Oil Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Gallons Units: Recovered: 0.00 Resource Affected: Groundwater Oxygenate: False Site ID: 227223 Spill Tank Test: 1534832 Tank Number: Not reported

Tank Size: 0
Test Method: 00
Leak Rate: 0.00

Gross Fail:

Modified By:

Last Modified:

Test Method:

DEC Memo:

Remarks:

Not reported

Not reported

Not reported

 Site ID:
 227222

 Spill Date:
 11/17/87

 Facility Addr2:
 Not reported

 Facility ID:
 8707018

 Program Number:
 8707018

 SWIS:
 5222

 Region of Spill:
 1

Investigator: KDGOERTZ
Referred To: Not reported
Reported to Dept: 11/17/87
CID: Not reported
Spill Cause: Tank Test Failure
Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier: Tank Tester
Cleanup Ceased: 06/06/88
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False
Spill Class: Not reported
Spill Closed Dt: 06/06/88
Remediation Phase: 0
Date Entered In Computer: 11/18/87
Spill Record Last Update: 06/29/05
Spille Namer: Not reported

Spiller Company: SOUTH COUNTRY SCHOOL DIST

Spiller Phone: (516) 286-4300

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

#### SOUTH COUNTRY SCHOOL DIST (Continued)

S100147374

**EDR ID Number** 

Spiller Extention: Not reported

189 DUNTON AVENUE Spiller Address: Spiller City, St, Zip: EAST PATCHOGUE, NY

Spiller County:

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region:

Program Number: 8707018 DER Facility ID: 290539 Site ID: 227222 Operable Unit ID: 910898 Operable Unit: 01 Material ID: 465997 Material Code: 0001 #2 Fuel Oil Material Name: Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Units: Gallons Recovered: 0.00

Groundwater Resource Affected: Oxygenate: False Site ID: 227222 Spill Tank Test: 1532300 Tank Number: Not reported

Tank Size: Test Method: 00 Leak Rate: 0.00 Gross Fail: Not reported Modified By: Spills Last Modified: 10/01/04 Test Method: Unknown DEC Memo: Not reported Not reported

#### HIST LTANKS:

Remarks:

Region of Spill:

Spill Number: 8806376 Investigator: **GOERTZ** FD Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Not reported Caller Extension: Notifier Name: Not reported Notifier Agency: Not reported Notifier Phone: Not reported Notifier Extension: Not reported Spill Date: 10/28/1988 Spill Time: 16:15 Reported to Department Date: 10/28/88 Reported to Department Time: 16:45 SWIS: 47

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

Spiller Name: SOUTH COUNTRY SCHOOL DIST

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## SOUTH COUNTRY SCHOOL DIST (Continued)

S100147374

Spiller Address: Not reported Spiller City, St, Zip: Not reported Facility Contact: Not reported Facility Phone: (516) 286-4322 Facility Extention: Not reported Spill Cause: Tank Test Failure Resource Affectd: Groundwater Water Affected: Not reported

Spill Source: Other Non Commercial/Industrial

Spill Notifier: Tank Tester PBS Number: Not reported Cleanup Ceased: 12/13/89 Cleanup Meets Standard: True Last Inspection:

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Date: **Enforcement Date:** 11 Investigation Complete: // **UST Involvement:** False Not reported Spill Class: Spill Closed Dt: 12/13/89 Date Region Sent Summary to Central Office: / /

Corrective Action Plan Submitted: Date Spill Entered In Computer Data File: 11/01/88 Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 09/15/98 Is Updated: False PBS Number: Not reported Tank Number: Not reported

Tank Size: 0

Test Method: Not reported Leak Rate Failed Tank: 0.00

Gross Leak Rate: Not reported Material Class Type: Petroleum Quantity Spilled: 0 Unkonwn Quantity Spilled: False Units: Gallons Quantity Recovered: Unkonwn Quantity Recovered: False Material: #2 FUEL OIL Class Type: #2 FUEL OIL Times Material Entry In File: 24464

CAS Number: Not reported Last Date: 19941207

DEC Remarks: 12/13/89: THE MONITORING WELLS HAVE BEEN FREE FROM FLOATING /DISSOLVED PRODUCT

FOR OVER ONE YEAR.

Spill Cause: 4K FAILED AT -.304 GPH. ADMINISTRATION BLDG. BONAFIED TESTER. RETEST SCHEDULED

FOR 10/31

Region of Spill:

Spill Number: 8707018 Investigator: **GOERTZ** FD Not reported Caller Name: Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Notifier Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

## SOUTH COUNTRY SCHOOL DIST (Continued)

S100147374

**EDR ID Number** 

Notifier Agency: Not reported Notifier Phone: Not reported Notifier Extension: Not reported Spill Date: 11/17/1987 Spill Time: 13:35 Reported to Department Date: 11/17/87 Reported to Department Time: 14:15 SWIS: 47

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Spiller Name: SOUTH COUNTRY SCHOOL DIST

Spiller Address: 189 DUNTON AVENUE Spiller City,St,Zip: EAST PATCHOGUE, NY

Facility Contact:

Not reported
Facility Phone:

Facility Extention:

Spill Cause:

Resource Affectd:

Water Affected:

Not reported

Groundwater

Not reported

Not reported

Spill Source: Other Non Commercial/Industrial

Spill Notifier: Tank Tester
PBS Number: Not reported
Cleanup Ceased: 06/06/88
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Date: **Enforcement Date:** // Investigation Complete: / / UST Involvement: False Spill Class: Not reported Spill Closed Dt: 06/06/88 Date Region Sent Summary to Central Office: / / Corrective Action Plan Submitted: Date Spill Entered In Computer Data File: 11/18/87 Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 09/04/98
Is Updated: False
PBS Number: Not reported
Tank Number: Not reported

Tank Size: 0
Test Method: Not r

Units:

Test Method:
Leak Rate Failed Tank:
Gross Leak Rate:
Material Class Type:
Quantity Spilled:
Unkonwn Quantity Spilled:
Vot reported
Petroleum
O
False

Quantity Recovered: 0
Unkonwn Quantity Recovered: False
Material: #2 FUEL OIL
Class Type: #2 FUEL OIL
Times Material Entry In File: 24464
CAS Number: Not reported
Last Date: 19941207

Gallons

DEC Remarks: //: BAIN HEATING TESTER. 06/06/88: SYSTEM PASSED BY UN-CERTIFIED TANK

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

## SOUTH COUNTRY SCHOOL DIST (Continued)

S100147374

**EDR ID Number** 

TESTER. REFERRED TO SCHDS FOR FURTHER INVESTIGATION.

SYSTEM TEST FAILED AT -.548 1-4K Spill Cause:

PATRICIA HARPER RESIDENCE **LTANKS** S100153483 10 **454 WALKER AVENUE** NNE **HIST LTANKS** N/A

1/4-1/2 **EAST PATCHOGUE, NY** 

0.264 mi. 1395 ft.

LTANKS: Relative: Site ID: Higher

287140 Spill Date: 10/10/91 Actual: Facility Addr2: Not reported 28 ft. Facility ID: 9107443 Program Number: 9107443

5200 SWIS: Region of Spill:

Investigator: **KMYAGER** Referred To: Not reported Reported to Dept: 10/10/91 CID: Not reported Spill Cause: Tank Failure Water Affected: Not reported Spill Source: Private Dwelling Spill Notifier: Federal Government

Cleanup Ceased: 11/01/91 Cleanup Meets Standard: True Last Inspection:

Recommended Penalty: Penalty Not Recommended

**UST Involvement:** False Spill Class: Not reported 11/01/91 Spill Closed Dt: Remediation Phase: Date Entered In Computer: 10/11/91 Spill Record Last Update: 11/05/91 Spille Namer: Not reported

Spiller Company: PATRICIA HARPER RESIDENCE

Spiller Phone: (516) 475-5971 Spiller Extention: Not reported Spiller Address: Not reported

Spiller City, St, Zip: ZZ Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region:

Program Number: 9107443 DER Facility ID: 232591 287140 Site ID: Operable Unit ID: 961655 Operable Unit: 01 419649 Material ID: Material Code: 0001 Material Name: #2 Fuel Oil Case No.: Not reported Material FA: Petroleum 0.00 Quantity: Units: Gallons

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## PATRICIA HARPER RESIDENCE (Continued)

S100153483

Recovered: 0.00 Groundwater Resource Affected: Oxygenate: False Site ID: Not reported Spill Tank Test: Not reported Tank Number: Not reported Not reported Tank Size: Test Method: Not reported Leak Rate: Not reported Gross Fail: Not reported Modified By: Not reported Last Modified: Not reported Test Method: Not reported DEC Memo: Not reported Remarks: Not reported

HIST LTANKS:

Region of Spill:

9107443 Spill Number: **DEROSA** Investigator: Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Notifier Name: Not reported Notifier Agency: Not reported Not reported Notifier Phone: Notifier Extension: Not reported Spill Date: 10/10/1991 Spill Time: 12:00 Reported to Department Date: 10/10/91 Reported to Department Time: 19:43 SWIS:

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

Spiller Name: PATRICIA HARPER RESIDENCE

Spiller Address: Not reported Not reported Spiller City, St, Zip: Facility Contact: Not reported Facility Phone: (516) 475-5971 Facility Extention: Not reported Spill Cause: Tank Failure Resource Affectd: Groundwater Water Affected: Not reported Spill Source: Private Dwelling Spill Notifier: Federal Government PBS Number: Not reported

11/01/91 Cleanup Ceased: Cleanup Meets Standard: True Last Inspection:

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Date: **Enforcement Date:** 11 Investigation Complete: 11 **UST Involvement:** False Spill Class: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## PATRICIA HARPER RESIDENCE (Continued)

S100153483

Spill Closed Dt: 11/01/91 Date Region Sent Summary to Central Office: / / Corrective Action Plan Submitted: Date Spill Entered In Computer Data File: 10/11/91 Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 11/05/91 Is Updated: False PBS Number: Not reported Tank Number: Not reported Tank Size: Not reported Test Method: Not reported Not reported Leak Rate Failed Tank: Gross Leak Rate: Not reported Material Class Type: Petroleum Quantity Spilled: Unkonwn Quantity Spilled: False Gallons Units: Quantity Recovered: 0 Unkonwn Quantity Recovered: False Material: #2 FUEL OIL Class Type: #2 FUEL OIL Times Material Entry In File: 24464 Not reported CAS Number:

DEC Remarks: Not reported Spill Cause: Not reported

356385

19941207

**EVERS RESIDENCE** 11 SW **6 ANTHONY STREET** 1/4-1/2 **EAST PATCHOGUE, NY** 

Last Date:

0.286 mi. 1512 ft.

LTANKS: Relative: Site ID: Lower

Actual: 11 ft.

Spill Date: 12/05/05 Facility Addr2: Not reported Facility ID: 0510413 Program Number: 0510413 SWIS: 5222 Region of Spill: Investigator: ajho Referred To: Not reported Reported to Dept: 12/05/05 CID: 01

Spill Cause: Tank Failure Water Affected: Not reported Spill Source: **Private Dwelling** Responsible Party Spill Notifier:

Cleanup Ceased: / / Cleanup Meets Standard: False Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

**UST Involvement:** False

Spill Class: Known release with minimal potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: 01/18/06 Remediation Phase: 0

**LTANKS** 

S107489301

N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **EVERS RESIDENCE (Continued)**

S107489301

Date Entered In Computer: 12/05/05 Spill Record Last Update: 01/19/06

Spille Namer: ROBERT EVERS Spiller Company: **EVERS RESIDENCE** Spiller Phone: (631) 654-5118 Spiller Extention: Not reported

6 ANTHONY STREET Spiller Address: Spiller City,St,Zip: EAST PATCHOGUE, NY

Spiller County:

Spiller Contact: **ROBERT EVERS** Spiller Phone: (631) 654-5118 Spiller Extention: Not reported

DEC Region:

Program Number: 0510413 DER Facility ID: 306443 Site ID: 356385 Operable Unit ID: 1113691 Operable Unit: 01 Material ID: 2103757 Material Code: 0001 Material Name: #2 Fuel Oil Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Units: Gallons Recovered: 0.00 Resource Affected: Soil Oxygenate: False Site ID: Not reported Spill Tank Test: Not reported Not reported Tank Number: Tank Size: Not reported Test Method: Not reported Leak Rate: Not reported Not reported Gross Fail: Modified By: Not reported Last Modified: Not reported Test Method: Not reported

Not reported

Not reported

73775

**VERN KRITZ ELEM SCHOOL DUNTON AVENUE EAST PATCHOGUE, NY** 

DEC Memo:

Remarks:

**LTANKS** S100171955 **HIST LTANKS** N/A

1/4-1/2 0.315 mi. 1662 ft.

Actual:

25 ft.

12 **ENE** 

LTANKS: Relative: Site ID: Higher

Spill Date: 11/15/87 Facility Addr2: Not reported 8706952 Facility ID: Program Number: 8706952 5222

SWIS: Region of Spill:

**KDGOERTZ** Investigator: Referred To: Not reported Reported to Dept: 11/15/87

Distance

Elevation Site Database(s) EPA ID Number

#### **VERN KRITZ ELEM SCHOOL (Continued)**

S100171955

**EDR ID Number** 

CID: Not reported
Spill Cause: Tank Test Failure
Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier: Tank Tester
Cleanup Ceased: 02/24/88
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False
Spill Class: Not reported
Spill Closed Dt: 02/24/88
Remediation Phase: 0
Date Entered In Computer: 11/18/87
Spill Record Last Update: 06/29/05
Spille Namer: Not reported

Spiller Company: VERN KRITZ ELEM SCHOOL

Spiller Phone: (516) 286-4300 Spiller Extention: Not reported

Spiller Address: 189 NORTH DUNTON AVENUE
Spiller City,St,Zip: EAST PATCHOGUE, NY 11772

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 1

Program Number: 8706952 DER Facility ID: 69408 Site ID: 73775 Operable Unit ID: 912781 Operable Unit: 01 Material ID: 465936 Material Code: 0001 #2 Fuel Oil Material Name: Not reported Case No.: Petroleum Material FA: 0.00 Quantity: Units: Gallons Recovered: 0.00 Groundwater Resource Affected: Oxygenate: False Site ID: 73775 Spill Tank Test: 1532282

Tank Size: 0
Test Method: 00
Leak Rate: 0.00

Gross Fail:

Modified By:

Last Modified:

Test Method:

DEC Memo:

Remarks:

Not reported

Not reported

Not reported

Not reported

HIST LTANKS:

Tank Number:

Region of Spill: 1

Spill Number: 8706952

Direction Distance Elevation

Site Database(s) EPA ID Number

## **VERN KRITZ ELEM SCHOOL (Continued)**

S100171955

**EDR ID Number** 

Investigator: **GOERTZ** FD Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Not reported Notifier Name: Notifier Agency: Not reported Notifier Phone: Not reported Notifier Extension: Not reported Spill Date: 11/15/1987 Spill Time: 13:00 Reported to Department Date: 11/15/87 Reported to Department Time: 16:47

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Spiller Name: VERN KRITZ ELEM SCHOOL
Spiller Address: 189 NORTH DUNTON AVENUE
Spiller City,St,Zip: EAST PATCHOGUE, NY 11772

Facility Contact:

Facility Phone:

Facility Phone:

Facility Extention:

Spill Cause:

Resource Affectd:

Water Affected:

Not reported

Groundwater

Not reported

Not reported

Spill Source: Other Non Commercial/Industrial

Spill Notifier: Tank Tester
PBS Number: Not reported
Cleanup Ceased: 02/24/88
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Spill Class: Not reported
Spill Closed Dt: 02/24/88
Date Region Sent Summary to Central Office: / /
Corrective Action Plan Submitted: / /

Date Spill Entered In Computer Data File: 11/18/87
Time Spill Entered In Computer Data File: Not reported
Spill Record Last Update: 09/04/98

Is Updated: False PBS Number: Not reported Tank Number: Not reported Tank Size: Test Method: Not reported Leak Rate Failed Tank: 0.00 Gross Leak Rate: Not reported Material Class Type: Petroleum Quantity Spilled: Unkonwn Quantity Spilled: False Units: Gallons Quantity Recovered:

Unkonwn Quantity Recovered: False

TC2225535.2s Page 31

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

## **VERN KRITZ ELEM SCHOOL (Continued)**

S100171955

1001754034

N/A

**LTANKS** 

**HIST LTANKS** 

Material: #2 FUEL OIL
Class Type: #2 FUEL OIL
Times Material Entry In File: 24464
CAS Number: Not reported
Last Date: 19941207

DEC Remarks: //: BAIN HEATING WILL EXCAVATE AND RETEST. 02/24/88: BAIN PASSED TANK

ALONE.AFTER TIGHNTENING LOOSE ELBOW ON VENT LINE, BAIN RETESTED SYSTEM PASSED.

DEC NOT PRESENT DURTING RETEST.

Spill Cause: PETROTITE SYSTEM FAILURE AT -. 2LL GPH 10K TANK

\_\_\_\_

13 MANKERS GREENHOUSE West 355 SOUTH COUNTRY ROAD 1/4-1/2 EAST PATCHOGUE, NY

0.326 mi. 1722 ft.

Relative: LTANKS: Higher Site ID:

Spill Date: 02/23/88

Actual: Facility Addr2: Not reported
22 ft. Facility ID: 8709879
Program Number: 8709879
SWIS: 5222

SWIS: 522
Region of Spill: 1
Investigator: KD

Investigator: KDGOERTZ
Referred To: Not reported
Reported to Dept: 02/23/88
CID: 01

Spill Cause: Tank Test Failure
Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Tank Tester
Cleanup Ceased: 05/16/88
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

97656

UST Involvement: False
Spill Class: Not reported
Spill Closed Dt: 05/16/88
Remediation Phase: 0
Date Entered In Computer: 02/25/88
Spill Record Last Update: 07/06/06
Spille Namer: Not reported

Spiller Company: MANKERS GREENHOUSE

Spiller Phone: (516) 289-5294 Spiller Extention: Not reported

Spiller Address: 355 SOUTH COUNTRY ROAD Spiller City,St,Zip: EAST PATCHOGUE, NY

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 1

Program Number: 8709879
DER Facility ID: 86964
Site ID: 97656
Operable Unit ID: 914812
Operable Unit: 01

Direction Distance Elevation

evation Site Database(s) EPA ID Number

## MANKERS GREENHOUSE (Continued)

1001754034

**EDR ID Number** 

Material ID: 461672 0002 Material Code: Material Name: #4 Fuel Oil Case No.: Not reported Material FA: Petroleum Quantity: 0.00 Units: Gallons Recovered: 0.00 Resource Affected: Groundwater Oxygenate: False 97656 Site ID: Spill Tank Test: 1533297 Tank Number: Not reported Tank Size:

Test Method: 00 Leak Rate: 0.00 Gross Fail: Not reported Modified By: Spills 10/01/04 Last Modified: Test Method: Unknown DEC Memo: Not reported Remarks: Not reported

#### HIST LTANKS:

Region of Spill:

Spill Number: 8709879 Investigator: **GOERTZ** FD Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Notifier Name: Not reported Notifier Agency: Not reported Notifier Phone: Not reported Notifier Extension: Not reported Spill Date: 02/23/1988 Spill Time: 11:00 Reported to Department Date: 02/23/88 Reported to Department Time: 11:07 SWIS: 47

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Spiller Name: MANKERS GREENHOUSE
Spiller Address: 355 SOUTH COUNTRY ROAD
Spiller City,St,Zip: EAST PATCHOGUE, NY

Facility Contact:

Facility Phone:

Facility Phone:

Facility Extention:

Spill Cause:

Resource Affectd:

Water Affected:

Not reported

Tank Test Failure

Groundwater

Not reported

Spill Source: Other Commercial/Industrial

Spill Notifier: Tank Tester
PBS Number: Not reported
Cleanup Ceased: 05/16/88
Cleanup Meets Standard: True

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **MANKERS GREENHOUSE (Continued)**

1001754034

Last Inspection:

Penalty Not Recommended Recommended Penalty:

Spiller Cleanup Date: Enforcement Date: Investigation Complete: / / **UST Involvement:** False Spill Class: Not reported Spill Closed Dt: 05/16/88 Date Region Sent Summary to Central Office: / / Corrective Action Plan Submitted: Date Spill Entered In Computer Data File: 02/25/88 Not reported

Time Spill Entered In Computer Data File: Spill Record Last Update: 09/04/98 Is Updated: False PBS Number: Not reported Tank Number: Not reported

Tank Size:

Test Method: Not reported

Leak Rate Failed Tank: 0.00

Not reported Gross Leak Rate: Material Class Type: Petroleum Quantity Spilled: 0 Unkonwn Quantity Spilled: False Units: Gallons Quantity Recovered: Unkonwn Quantity Recovered: False Material: #4 FUEL OIL Class Type: #4 FUEL OIL

Times Material Entry In File: 1751 CAS Number: Not reported 19941205 Last Date:

DEC Remarks: 03/16/88: DEGE RETESTED SYSEM AFTER REPAIRING VENT LINE PASSED. DEC NOT PRESENT

DURING RETEST.

359074

Spill Cause: 20K UNTESTABLE-VENT LINE LEAKING, MANWAY TO BE MODIFIED FOR RETEST. G M DEGE TO

DO THE WORK

**RIGNOLA RESIDENCE 213 HEDGES AVENUE** North 1/4-1/2 **EAST PATCHOGUE, NY** 

0.337 mi. 1781 ft.

14

LTANKS: Relative:

Site ID: Higher

Spill Date: 02/01/06 Actual: Facility Addr2: Not reported 30 ft. Facility ID: 0512678 Program Number: 0512678 SWIS: 5222

> Region of Spill: 1 Investigator: **DHRAYMON** Referred To: Not reported Reported to Dept: 02/01/06

CID: 01

Spill Cause: Tank Failure Water Affected: Not reported Spill Source: Private Dwelling Spill Notifier: Responsible Party **LTANKS** 

S107523538

N/A

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

## **RIGNOLA RESIDENCE (Continued)**

S107523538

**EDR ID Number** 

Cleanup Ceased: / /
Cleanup Meets Standard: False
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: False

Spill Class: Known release with minimal potential for fire or hazard. DEC Response.

Willing Responsible Party. Corrective action taken.

Spill Closed Dt: 04/01/07 Remediation Phase: 0 Date Entered In Computer: 02/03/06 Spill Record Last Update: 04/02/07

Spille Namer: MICHEAL RIGNOLA Spiller Company: MIGNOLA RESIDENCE

Spiller Phone: (631) 654-9381
Spiller Extention: Not reported
Spiller Address: 213 HEDGES AVE
Spiller City,St,Zip: EAST PATCHOGUE, NY

Spiller County: 001

Spiller Contact: MICHEAL RIGNOLA
Spiller Phone: (631) 654-9381
Spiller Extention: Not reported

DEC Region: Program Number: 0512678 DER Facility ID: 309087 Site ID: 359074 Operable Unit ID: 1116298 Operable Unit: 01 Material ID: 2106442 Material Code: 0001 Material Name: #2 Fuel Oil Not reported Case No.: Material FA: Petroleum Quantity: 0.00 Units: Gallons 0.00 Recovered:

Resource Affected:

Oxygenate: Site ID:

Spill Tank Test:

Tank Number: Not reported Tank Size: Not reported Test Method: Not reported Leak Rate: Not reported Not reported Gross Fail: Modified By: Not reported Last Modified: Not reported Test Method: Not reported DEC Memo: Not reported Remarks: Not reported

Soil

False

Not reported

Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

15 TEXACO S/S LTANKS S104513910
SE 700 SOUTH COUNTRY ROAD HIST LTANKS N/A

1/4-1/2 0.378 mi. 1994 ft.

Relative: LTANKS:

Lower Site ID: 244060

**EAST PATCHOGUE, NY** 

SWIS: 5222
Region of Spill: 1
Investigator: AYLEUNG

Referred To: Not reported Reported to Dept: 04/18/89 CID: 01

Spill Cause: Tank Overfill
Water Affected: Not reported
Spill Source: Gasoline Station

Spill Notifier: DEC
Cleanup Ceased: 04/19/89
Cleanup Meets Standard: True
Last Inspection: / /

Recommended Penalty: Penalty Not Recommended

UST Involvement: True Spill Class: Not reported 04/19/89 Spill Closed Dt: Remediation Phase: Date Entered In Computer: 04/20/89 Spill Record Last Update: 04/24/06 Spille Namer: Not reported Spiller Company: **TEXACO** Spiller Phone: (516) 289-7360 Spiller Extention: Not reported Spiller Address: Not reported

Spiller City,St,Zip: ZZ Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 1

Program Number: 8900559 DER Facility ID: 200456 Site ID: 244060 Operable Unit ID: 926847 Operable Unit: 01 Material ID: 451901 0009 Material Code: Material Name: Gasoline Not reported Case No.: Material FA: Petroleum Quantity: 0.00 Units: Gallons Recovered: 0.00 Resource Affected: Soil Oxygenate: False Site ID: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FD

## **TEXACO S/S (Continued)**

S104513910

**EDR ID Number** 

Spill Tank Test: Not reported Not reported Tank Number: Not reported Tank Size: Test Method: Not reported Leak Rate: Not reported Not reported Gross Fail: Modified By: Not reported Last Modified: Not reported Test Method: Not reported DEC Memo: Not reported Not reported Remarks:

HIST LTANKS:

Region of Spill:

Spill Number: 8900559 **LEUNG** Investigator: Caller Name: Not reported Caller Agency: Not reported Caller Phone: Not reported Caller Extension: Not reported Notifier Name: Not reported Not reported Notifier Agency: Notifier Phone: Not reported Notifier Extension: Not reported 04/18/1989 Spill Date: Spill Time: 12:45 Reported to Department Date: 04/18/89 Reported to Department Time: 12:45 SWIS:

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported Spiller Name: **TEXACO** Spiller Address: Not reported Spiller City,St,Zip: Not reported Facility Contact: Not reported Facility Phone: (516) 289-7360 Facility Extention: Not reported Spill Cause: Tank Overfill On Land Resource Affectd: Water Affected: Not reported Spill Source: Gas Station Spill Notifier: DEC PBS Number: Not reported

Cleanup Meets Standard: True
Last Inspection: / /
Page 1997 and Page 199

Cleanup Ceased:

Recommended Penalty: Penalty Not Recommended

04/19/89

Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: True
Spill Class: Not reported
Spill Closed Dt: 04/19/89
Date Region Sent Summary to Central Office: / /

Date Region Sent Summary to Central Office: / /
Corrective Action Plan Submitted: / /

Date Spill Entered In Computer Data File: 04/20/89

Direction Distance

Elevation Site Database(s) EPA ID Number

TEXACO S/S (Continued) S104513910

Time Spill Entered In Computer Data File: Not reported

Spill Record Last Update: 09/23/98 Is Updated: False PBS Number: Not reported Tank Number: Not reported Not reported Tank Size: Test Method: Not reported Leak Rate Failed Tank: Not reported Not reported Gross Leak Rate: Material Class Type: Petroleum 0 Quantity Spilled: Unkonwn Quantity Spilled: False Gallons Units:

Quantity Recovered: 0
Unkonwn Quantity Recovered: False
Material: GASOLINE
Class Type: GASOLINE
Times Material Entry In File: 21329
CAS Number: Not reported
Last Date: 19940929

DEC Remarks: 04/18/89: CONT SOIL STOCKPILED.NO HOLE FOUND ON TANK. Spill Cause: CONTAMINATED SOIL FOUND DURING A TANK REMOVAL.

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16 WARD'S USED AUTO PARTS

NE 86 BARTHOLD AVE 1/4-1/2 EAST PATCHOGUE, NY 11772

0.443 mi. 2340 ft.

Relative: SWF/LF:

Higher Flag: ACTIVE Secondary Addr: Not reported

Actual: Region Code: 1 28 ft. Phone Number: 0

Owner Name: Not reported Owner Type: Not reported Owner Address: Not reported Owner Addr2: Not reported Owner City, St, Zip: Not reported Owner Email: Not reported Owner Phone: Not reported Contact Name: Not reported Contact Address: Not reported Not reported Contact Addr2:

Contact City, St, Zip: 0

Contact Email: Not reported

Contact Phone: 0

Activity Desc: Vehicle Dismantling

Activity Number: 52J61 Active: Yes East Coordinate: 672132 North Coordinate: 4514849 Accuracy Code: Not reported Regulatory Status: Not reported Waste Type: Not reported Authorization #: None Authorization Date: Not reported **Expiration Date:** Not reported SWF/LF

S108146196

N/A

#### ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EAST PATCHOGUE	A100195226	SEARLES GRAPHICS-OOB-	1544 RTE 27 A MONTAUK HWY EAST	11772	AST
EAST PATCHOGUE	A100195533	ROBERTS ASPHALT	RTE 27 A MONTAUK HWY EAST	11772	AST
EAST PATCHOGUE	A100196669	FISH CASTLE RESTAURANT	1432 RTE 27 A MONTAUK HWY	11772	AST
EAST PATCHOGUE	U003843702	KHYBER PETROLEUM INC	1365 RTE 27 A MONTAUK HWY MAIN	11772	UST, AST
EAST PATCHOGUE	S105841200	EAST PATCHOGUE CONTRACTING CORP.	BARTHOLD AVE.	11772	SWF/LF
EAST PATCHOGUE	1009231816	CALDOR	MONTAUK HIGHWAY	11772	MANIFEST
EAST PATCHOGUE	S108145649	ALL AMERICAN AUTO WRECKERS	1383A MONTAUK HIGHWAY	11772	SWF/LF
PATCHOGUE	1004756178	SUNOCO SERVICE STATION	626 RTE 112 & MEDFORD AVE	11772	FINDS, MANIFEST, RCRA-NonGen
PATCHOGUE	1004759533	EXCEL AUTOMOTIVE	169 RTE 112	11772	FINDS, RCRA-NonGen
PATCHOGUE	1007206035	NYS DEC / FORMER USA STATION	RTE 112 AND MONTAUK HIGHWAY	11772	MANIFEST, RCRA-NonGen
PATCHOGUE	1009232606	NISSAN 112	730 ROUTE 112	11772	MANIFEST
PATCHOGUE	A100195667	DENICE FRENCH DRY CLEANERS	699 RTE 112	11772	AST
PATCHOGUE	A100196869	NESENGER CHEVROLET	2096 RTE 112	11772	AST
PATCHOGUE	A100197318	KING BEAR	646 RTE 112	11772	AST
PATCHOGUE	U003534457	COLONY CLEANERS CORP	295 RTE 112 MEDFORD AVE	11772	UST
PATCHOGUE	U003535879	HESS S/S #32269	11307 RTE 112	11772	UST
PATCHOGUE	U003843770	MEDFORD AVE ELEM SCHOOL	RTE 112 MEDFORD AVE	11772	UST
PATCHOGUE	S106434955	DENICE FRENCH CLEANERS	699 ROUTE 112/MEDFORD AVE	11772	DRYCLEANERS
PATCHOGUE	1009235403	NYSDEC REG USA S/S	RT 112/MONTAUK HWY	11772	MANIFEST
PATCHOGUE	U003843252	HIGHWAY DRY CLEANERS	445 RTE 27 A MONTAUK HWY WEST	11772	UST, AST
PATCHOGUE	U003843669	GAS STATION S/S	471 RTE 27 A MONTAUK HWY MAIN	11772	UST
PATCHOGUE	U003843688	GAS STATION	145 RTE 27 A MONTAUK HWY	11772	UST
PATCHOGUE	U003843693	EAST MAIN ST AUTO S/S	357 RTE 27 A MONTAUK HWY EAST	11772	UST
PATCHOGUE	U003843715	EAST END SERVICES/GULF STATION	445 RTE 27 A MONTAUK HWY EAST	11772	UST
PATCHOGUE	U003843730	GOODYEAR (PATCHOGUE)	368 RTE 27 A MONTAUK HWY EAST	11772	UST, AST
PATCHOGUE	U003843792	NORTH FORK BANK	116 RTE 27 A MONTAUK HWY EAST	11772	UST
PATCHOGUE	U003843801	PATCHOGUE POST OFFICE	170 RTE 27 A MONTAUK HWY EAST	11772	UST
PATCHOGUE	U003843859	SHELL S/S	197 RTE 27 SUNRISE HWY	11772	UST, AST
PATCHOGUE	U003843888	SUFFOLK COUNTY SIXTH DISTRICT COUR	RTE 27 A MONTAUK HWY MAIN	11772	UST
PATCHOGUE	U003844665	PATCHOGUE MEDFORD LIBRARY	54-60 RTE 27 A MONTAUK HWY EAS	11772	UST
PATCHOGUE	U003960824	GAS STATION S/S -OOB-	RTE 27 SUNRISE HWY	11772	UST
PATCHOGUE	U003960855	PATCHOGUE OFFICE BLDG	254 RTE 27 A MONTAUK HWY	11772	UST
PATCHOGUE	U003961019	TIRES INC	284 RTE 27 A MONTAUK HWY EAST	11772	UST
PATCHOGUE	U003961254	PATCHOGUE MOTEL	190 RTE 27A	11772	UST
PATCHOGUE	1006931234	NYSDOT BIN 1019280	HOSPITAL RD OVER RTE 27	11772	RCRA-SQG, MANIFEST
PATCHOGUE	S104785064	UNK	LAKEWOOD ST / RTE 112	11772	NY Spills, NY Hist Spills
PATCHOGUE	U004075959	USA PETROLEUM	283 WEST MAIN STREET (ROUTE 27	11772	UST
PATCHOGUE	A100197499	BARON HONDA	17 A RTE 112 MEDFORD AVE	11772	AST
PATCHOGUE	U003843511	CUNNINGHAMS AUTO SERVICE CENTER IN	609 A RTE 112 MEDFORD AVE	11772	UST, AST
PATCHOGUE	S106434957	SUNWAVE FRENCH CLEANERS	400 W. SUNRISE HWY/S SRVICE RD	11772	DRYCLEANERS
PATCHOGUE	S106434960	WHITE DOVE CLEANERS	499-77 SUNRISE HWY/N.SERVC RD	11772	DRYCLEANERS
PATCHOGUE	S108410775	PEP BOYS #0564	425 SUNRISE HIGHWAY	11772	CBS

# **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

#### **FEDERAL RECORDS**

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/31/2008 Source: EPA
Date Data Arrived at EDR: 02/08/2008 Telephone: N/A

Date Made Active in Reports: 03/17/2008 Last EDR Contact: 04/28/2008

Number of Days to Update: 38 Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

#### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/31/2008 Source: EPA
Date Data Arrived at EDR: 02/04/2008 Telephone: N/A

Date Made Active in Reports: 03/17/2008 Last EDR Contact: 04/28/2008

Number of Days to Update: 42 Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

#### **DELISTED NPL:** National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/31/2008 Source: EPA
Date Data Arrived at EDR: 02/08/2008 Telephone: N/A

Date Made Active in Reports: 03/17/2008 Last EDR Contact: 04/28/2008

Number of Days to Update: 38 Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: No Update Planned

#### CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2008 Date Data Arrived at EDR: 02/05/2008 Date Made Active in Reports: 02/20/2008

Number of Days to Update: 15

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 04/25/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Quarterly

#### CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/03/2007 Date Data Arrived at EDR: 12/06/2007 Date Made Active in Reports: 02/20/2008

Number of Days to Update: 76

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 05/20/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Quarterly

#### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/08/2008 Date Data Arrived at EDR: 03/07/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

#### **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/26/2008 Date Data Arrived at EDR: 04/02/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 34

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 03/03/2008

Next Scheduled EDR Contact: 06/02/2008 Data Release Frequency: Quarterly

#### RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2008 Date Data Arrived at EDR: 03/06/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 43

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 05/21/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

#### RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2008 Date Data Arrived at EDR: 03/06/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 43

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 05/21/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

#### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2008 Date Data Arrived at EDR: 03/06/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 43

Source: Environmental Protection Agency Telephone: (212) 637-3660

Last EDR Contact: 05/21/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

#### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2008 Date Data Arrived at EDR: 03/06/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 43

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 05/21/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

#### RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2008 Date Data Arrived at EDR: 03/06/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 43

Source: Environmental Protection Agency Telephone: (212) 637-3660

Last EDR Contact: 05/21/2008

Next Scheduled EDR Contact: 08/18/2008

Data Release Frequency: Varies

#### **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 04/04/2008 Date Data Arrived at EDR: 04/17/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 28

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Varies

#### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 04/04/2008 Date Data Arrived at EDR: 04/17/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 28

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Varies

### ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 54

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 04/22/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: Annually

#### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 04/16/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 29

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 04/16/2008

Next Scheduled EDR Contact: 07/14/2008 Data Release Frequency: Annually

## DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 02/14/2008 Date Data Arrived at EDR: 02/27/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 22

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 02/27/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Varies

#### CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 12/28/2007

Number of Days to Update: 25

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 03/28/2008

Next Scheduled EDR Contact: 06/23/2008 Data Release Frequency: Quarterly

#### US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 01/03/2008 Date Data Arrived at EDR: 01/17/2008 Date Made Active in Reports: 02/20/2008

Number of Days to Update: 34

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 04/30/2008

Next Scheduled EDR Contact: 07/14/2008 Data Release Frequency: Semi-Annually

#### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS Telephone: 703-692-8801 Last EDR Contact: 05/09/2008

Next Scheduled EDR Contact: 08/04/2008 Data Release Frequency: Semi-Annually

#### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 08/31/2007 Date Made Active in Reports: 10/11/2007

Number of Days to Update: 41

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 04/03/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Varies

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/11/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 31

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 03/10/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/01/2007 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 12/28/2007

Number of Days to Update: 25

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 04/22/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 01/14/2008 Date Data Arrived at EDR: 01/22/2008 Date Made Active in Reports: 01/30/2008

Number of Days to Update: 8

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Annually

**UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 07/13/2007 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 03/17/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Varies

**DEBRIS REGION 9:** Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 03/25/2008 Date Data Arrived at EDR: 04/17/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 28

Source: EPA, Region 9 Telephone: 415-972-3336 Last EDR Contact: 03/24/2008

Next Scheduled EDR Contact: 06/23/2008 Data Release Frequency: Varies

**ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/07/2008 Date Data Arrived at EDR: 03/26/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 23

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 03/26/2008

Next Scheduled EDR Contact: 06/23/2008 Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 02/29/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

site.

Date of Government Version: 12/31/2002 Date Data Arrived at EDR: 04/14/2006 Date Made Active in Reports: 05/30/2006

Number of Days to Update: 46

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 04/28/2008

Next Scheduled EDR Contact: 07/14/2008 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/22/2008 Date Made Active in Reports: 01/30/2008

Number of Days to Update: 8

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 03/17/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/22/2008 Date Made Active in Reports: 01/30/2008

Number of Days to Update: 8

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 03/17/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 35

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 04/14/2008

Next Scheduled EDR Contact: 07/14/2008 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/28/2008 Date Data Arrived at EDR: 03/18/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 49

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 04/14/2008

Next Scheduled EDR Contact: 07/14/2008 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/04/2007 Date Data Arrived at EDR: 02/07/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 39

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 05/09/2008

Next Scheduled EDR Contact: 08/04/2008 Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 02/07/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 39

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Quarterly

**RADINFO: Radiation Information Database** 

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/29/2008 Date Data Arrived at EDR: 01/31/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 46

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 05/01/2008

Next Scheduled EDR Contact: 07/28/2008 Data Release Frequency: Quarterly

#### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/08/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 28

Source: EPA Telephone: (212) 637-3000 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Quarterly

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 03/03/2008

Next Scheduled EDR Contact: 06/02/2008 Data Release Frequency: No Update Planned

#### **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 03/06/2007 Date Made Active in Reports: 04/13/2007

Number of Days to Update: 38

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Biennially

### STATE AND LOCAL RECORDS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Annually

#### **HSWDS:** Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003 Date Data Arrived at EDR: 10/20/2006 Date Made Active in Reports: 11/30/2006

Number of Days to Update: 41

Source: Department of Environmental Conservation

Telephone: 518-402-9564 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: No Update Planned

**DEL SHWS:** Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Annually

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/03/2008 Date Data Arrived at EDR: 01/03/2008 Date Made Active in Reports: 02/05/2008

Number of Days to Update: 33

Source: Department of Environmental Conservation

Telephone: 518-457-2051 Last EDR Contact: 04/28/2008

Next Scheduled EDR Contact: 07/28/2008 Data Release Frequency: Semi-Annually

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 01/03/2008 Date Data Arrived at EDR: 01/03/2008 Date Made Active in Reports: 02/05/2008

Number of Days to Update: 33

Source: Department of Environmental Conservation

Telephone: 518-402-8705 Last EDR Contact: 04/28/2008

Next Scheduled EDR Contact: 07/28/2008 Data Release Frequency: Semi-Annually

**SWTIRE:** Registered Waste Tire Storage & Facility List
A listing of facilities registered to accept waste tires.

Date of Government Version: 08/01/2006 Date Data Arrived at EDR: 11/15/2006 Date Made Active in Reports: 11/30/2006

Number of Days to Update: 15

Source: Department of Environmental Conservation

Telephone: 518-402-8694 Last EDR Contact: 05/16/2008

Next Scheduled EDR Contact: 08/11/2008 Data Release Frequency: Annually

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 12/06/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 02/29/2008

Number of Days to Update: 37

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 04/23/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 10/24/2005

Next Scheduled EDR Contact: 01/23/2006 Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or

greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: Varies

HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007

Data Release Frequency: Varies

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 12/06/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 02/29/2008

Number of Days to Update: 37

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 04/23/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: No Update Planned

HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007 Data Release Frequency: No Update Planned

#### CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

#### MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

#### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/15/2008 Date Data Arrived at EDR: 02/28/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 41

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 02/28/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Annually

## SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Varies

#### HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

#### ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Quarterly

#### INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Quarterly

### VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9711 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Semi-Annually

#### **DRYCLEANERS:** Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 06/15/2004 Date Data Arrived at EDR: 06/15/2004 Date Made Active in Reports: 07/29/2004

Number of Days to Update: 44

Source: Department of Environmental Conservation

Telephone: 518-402-8403 Last EDR Contact: 05/21/2004 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### **BROWNFIELDS:** Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 03/13/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 518-402-9764 Last EDR Contact: 03/13/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Semi-Annually

#### SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 02/05/2008 Date Data Arrived at EDR: 02/05/2008 Date Made Active in Reports: 03/05/2008

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-402-8233 Last EDR Contact: 05/05/2008

Next Scheduled EDR Contact: 08/04/2008 Data Release Frequency: No Update Planned

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 09/05/2007 Date Made Active in Reports: 10/17/2007

Number of Days to Update: 42

Source: Department of Environmental Conservation

Telephone: 518-402-8452 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Annually

CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 12/06/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 03/05/2008

Number of Days to Update: 42

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 04/23/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: Quarterly

MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 12/06/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 03/05/2008

Number of Days to Update: 42

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 04/23/2008

Next Scheduled EDR Contact: 07/21/2008 Data Release Frequency: Quarterly

**RES DECL:** Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 12/31/1992 Date Data Arrived at EDR: 01/31/2007 Date Made Active in Reports: 04/19/2007

Number of Days to Update: 78

Source: NYC Department of City Planning

Telephone: 212-720-3401 Last EDR Contact: 04/15/2008

Next Scheduled EDR Contact: 07/16/2007 Data Release Frequency: No Update Planned

#### **E DESIGNATION:** E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 02/27/2008 Date Data Arrived at EDR: 03/25/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 15

Source: New York City Department of City Planning

Telephone: 718-595-6658 Last EDR Contact: 04/16/2008

Next Scheduled EDR Contact: 07/14/2008

Data Release Frequency: Varies

## TRIBAL RECORDS

#### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 05/09/2008

Next Scheduled EDR Contact: 08/04/2008 Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/20/2008 Date Data Arrived at EDR: 03/04/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 13

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2008 Date Data Arrived at EDR: 02/26/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 20

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/21/2008 Date Data Arrived at EDR: 02/26/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 23

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/17/2008 Date Data Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 40

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

 $\ensuremath{\mathsf{LUSTs}}$  on Indian land in New Mexico and Oklahoma.

Date of Government Version: 02/28/2008 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 17

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008

Data Release Frequency: Varies

**INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 03/17/2008 Date Data Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 40

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 6

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008

Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 06/01/2007 Date Data Arrived at EDR: 06/14/2007 Date Made Active in Reports: 07/05/2007

Number of Days to Update: 21

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 02/28/2008 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 17

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Semi-Annually

**INDIAN UST R1:** Underground Storage Tanks on Indian Land A listing of underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 6

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 02/20/2008 Date Data Arrived at EDR: 03/04/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 13

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 02/21/2008 Date Data Arrived at EDR: 02/26/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 23

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 02/25/2008 Date Data Arrived at EDR: 02/26/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 23

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 12/21/2007 Date Data Arrived at EDR: 12/21/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 34

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 03/17/2008 Date Data Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 40

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 05/19/2008

Next Scheduled EDR Contact: 08/18/2008 Data Release Frequency: Semi-Annually

## **EDR PROPRIETARY RECORDS**

#### Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Source: EDR. Inc.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A

Telephone: N/A
N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

### **COUNTY RECORDS**

#### **CORTLAND COUNTY:**

### **Cortland County Storage Tank Listing**

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 10/25/2007 Date Data Arrived at EDR: 01/08/2008 Date Made Active in Reports: 02/14/2008

Number of Days to Update: 37

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Quarterly

#### **Cortland County Storage Tank Listing**

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 10/25/2007 Date Data Arrived at EDR: 01/08/2008 Date Made Active in Reports: 02/14/2008

Number of Days to Update: 37

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Quarterly

#### **NASSAU COUNTY:**

#### **Registered Tank Database**

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 05/21/2003 Date Data Arrived at EDR: 05/27/2003 Date Made Active in Reports: 06/09/2003

Number of Days to Update: 13

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 04/30/2008

Next Scheduled EDR Contact: 07/28/2008 Data Release Frequency: No Update Planned

#### Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 08/20/2007 Date Data Arrived at EDR: 10/10/2007 Date Made Active in Reports: 11/19/2007

Number of Days to Update: 40

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 05/05/2008

Next Scheduled EDR Contact: 08/04/2008 Data Release Frequency: Varies

### **Registered Tank Database**

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 05/21/2003 Date Data Arrived at EDR: 05/27/2003 Date Made Active in Reports: 06/09/2003

Number of Days to Update: 13

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 04/30/2008

Next Scheduled EDR Contact: 07/28/2008 Data Release Frequency: No Update Planned

### **Storage Tank Database**

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 08/20/2007 Date Data Arrived at EDR: 10/10/2007 Date Made Active in Reports: 11/19/2007

Number of Days to Update: 40

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 05/05/2008

Next Scheduled EDR Contact: 08/04/2008

Data Release Frequency: Varies

### **ROCKLAND COUNTY:**

#### Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County.

Date of Government Version: 01/03/2008 Date Data Arrived at EDR: 01/11/2008 Date Made Active in Reports: 02/21/2008

Number of Days to Update: 41

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Quarterly

#### Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 01/03/2008 Date Data Arrived at EDR: 01/11/2008 Date Made Active in Reports: 02/21/2008

Number of Days to Update: 41

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 03/31/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Quarterly

#### SUFFOLK COUNTY:

#### Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 09/13/2006 Date Data Arrived at EDR: 01/11/2007 Date Made Active in Reports: 02/07/2007

Number of Days to Update: 27

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 03/12/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Annually

### Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 09/13/2006 Date Data Arrived at EDR: 01/11/2007 Date Made Active in Reports: 02/07/2007

Number of Days to Update: 27

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 03/12/2008

Next Scheduled EDR Contact: 05/26/2008 Data Release Frequency: Annually

#### WESTCHESTER COUNTY:

#### **Listing of Storage Tanks**

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 05/05/2005 Date Data Arrived at EDR: 05/31/2005 Date Made Active in Reports: 06/30/2005

Number of Days to Update: 30

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008

Data Release Frequency: Varies

#### **Listing of Storage Tanks**

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 05/05/2005 Date Data Arrived at EDR: 05/31/2005 Date Made Active in Reports: 06/30/2005

Number of Days to Update: 30

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 02/25/2008

Next Scheduled EDR Contact: 05/26/2008

Data Release Frequency: Varies

### **OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

#### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 06/15/2007 Date Made Active in Reports: 08/20/2007

Number of Days to Update: 66

Source: Department of Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 03/14/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Annually

**NJ MANIFEST:** Manifest Information Hazardous waste manifest information.

Date of Government Version: 09/30/2007 Date Data Arrived at EDR: 12/04/2007 Date Made Active in Reports: 12/31/2007

Number of Days to Update: 27

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 04/03/2008

Next Scheduled EDR Contact: 06/30/2008 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 12/21/2007 Date Made Active in Reports: 01/10/2008

Number of Days to Update: 20

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 03/10/2008

Next Scheduled EDR Contact: 06/09/2008 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 10/01/2007 Date Data Arrived at EDR: 11/09/2007 Date Made Active in Reports: 01/15/2008

Number of Days to Update: 67

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 03/17/2008

Next Scheduled EDR Contact: 06/16/2008 Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 03/17/2008 Date Data Arrived at EDR: 03/26/2008 Date Made Active in Reports: 04/09/2008

Number of Days to Update: 14

Source: Department of Environmental Conservation

Telephone: 802-241-3443 Last EDR Contact: 05/12/2008

Next Scheduled EDR Contact: 08/11/2008 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 04/27/2007 Date Made Active in Reports: 06/08/2007

Number of Days to Update: 42

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 04/07/2008

Next Scheduled EDR Contact: 07/07/2008 Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

#### **Electric Power Transmission Line Data**

Source: PennWell Corporation Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### **AHA Hospitals:**

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

#### **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

#### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

#### **Daycare Centers: Day Care Providers**

Source: Department of Health Telephone: 212-676-2444

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

#### State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

## Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

#### STREET AND ADDRESS INFORMATION

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# **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

BIANCHI/WEISS GREENHOUSE 25 ORCHARD ROAD EAST PATCHOGUE, NY 11772

#### **TARGET PROPERTY COORDINATES**

Latitude (North): 40.76080 - 40° 45' 38.9" Longitude (West): 72.9712 - 72° 58' 16.3"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 671250.5 UTM Y (Meters): 4513972.5

Elevation: 16 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map: 40072-G8 BELLPORT, NY

Most Recent Revision: 1967

South Map: 40072-F8 HOWELLS POINT, NY

Most Recent Revision: 1976

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

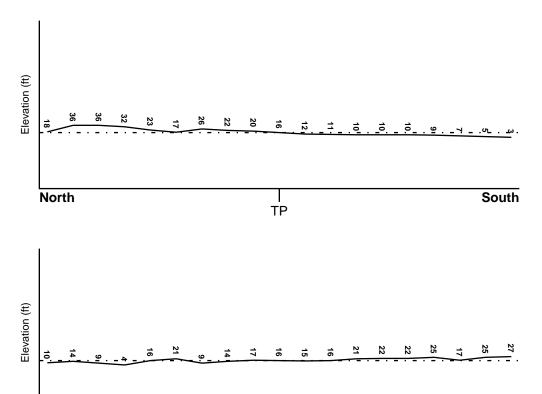
#### TARGET PROPERTY TOPOGRAPHY

West

General Topographic Gradient: General SSW

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES

Target Property Elevation: 16 ft.



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

1/2

TP

**East** 

1 Miles

#### **HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE** 

FEMA Flood

Target Property County
SUFFOLK, NY

Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

36103C0713G

Additional Panels in search area:

36103C0714G 36103C0926G

36103C0927G

NATIONAL WETLAND INVENTORY

**NWI Electronic** 

NWI Quad at Target Property

Data Coverage

**BELLPORT** 

YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## Site-Specific Hydrogeological Data\*:

Search Radius: 1.25 miles Status: Not found

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

<sup>\*©1996</sup> Site—specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

## **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

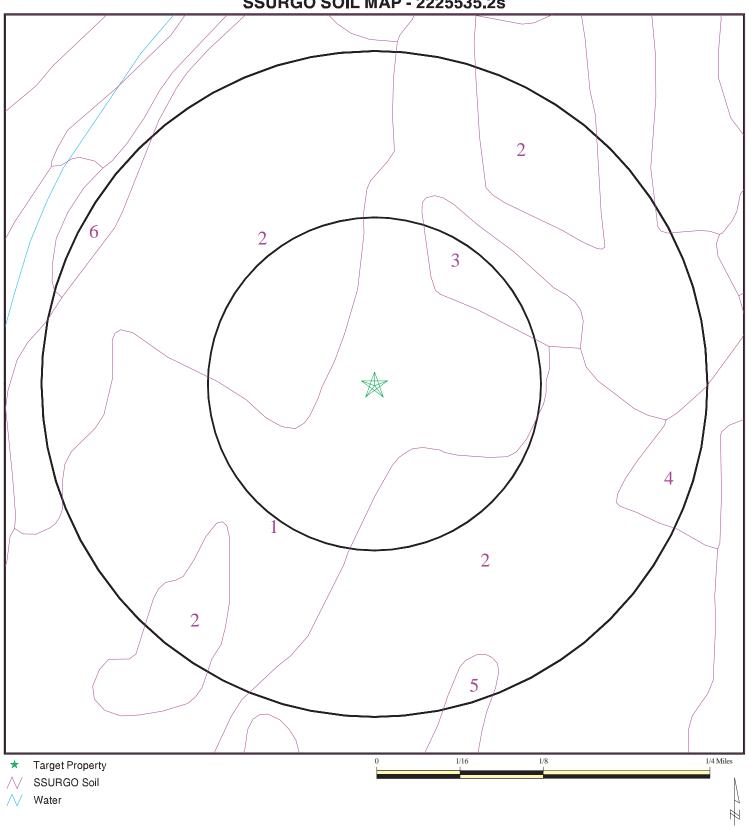
Era: Cenozoic Category: Stratifed Sequence

System: Quaternary Series: Pleistocene

Code: Qp (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# **SSURGO SOIL MAP - 2225535.2s**



SITE NAME: Bianchi/Weiss Greenhouse ADDRESS: 25 Orchard Road

East Patchogue NY 11772 40.7608 / 72.9712 LAT/LONG:

CLIENT: EA Engineering Sci & Tech CONTACT: Sarah Nelson INQUIRY#: 2225535.2s

DATE: May 21, 2008 2:07 pm

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Haven

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Laye	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5
2	11 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5
3	18 inches	27 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5

	Soil Layer Information									
	Boundary			Classification		Saturated hydraulic				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil					
4	27 inches	59 inches	stratified gravelly sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5			

## Soil Map ID: 2

Soil Component Name: Riverhead

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Layer	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 141	Max: 5.5 Min: 4.5
2	11 inches	27 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 141	Max: 5.5 Min: 4.5

			Soil Layer	Information			
	Bou	ındary	Soil Texture Class	Classi	fication	Saturated hydraulic	
Layer	Upper	Lower		AASHTO Group	Unified Soil	conductivity micro m/sec	
3	27 inches	35 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 141	Max: 5.5 Min: 4.5
4	35 inches	64 inches	stratified coarse sand to gravelly sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 141	Max: 5.5 Min: 4.5

## Soil Map ID: 3

Soil Component Name: Plymouth

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information										
	Воц	ındary		Classi	Classification					
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec	Soil Reaction (pH)			
1	0 inches	3 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6			

	Soil Layer Information										
	Bou	ındary		Classi	fication	Saturated hydraulic					
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)				
2	3 inches	27 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6				
3	27 inches	59 inches	gravelly coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6				

## Soil Map ID: 4

Soil Component Name: Haven

Soil Surface Texture: highly decomposed plant material

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information									
Boundary			(Tassification		Saturated hydraulic					
Layer	Upper	Lower	Soil Texture Class	AASHTO Group			Soil Reaction (pH)			
1	0 inches	1 inches	highly decomposed plant material	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5			

			Soil Layer	Information			
	Вои	ındary	Soil Texture Class	Classi	fication	Saturated hydraulic	Soil Reaction (pH)
Layer	Upper	Lower		AASHTO Group	Unified Soil	conductivity micro m/sec	
2	5 inches	18 inches	loam	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5
3	1 inches	5 inches	loam	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5
4	18 inches	27 inches	gravelly loam	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5
5	27 inches	59 inches	stratified gravelly sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 6 Min: 4.5

## Soil Map ID: 5

Soil Component Name: Berryland

Soil Surface Texture: slightly decomposed plant material

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be

drained and are classified.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 8 inches

			Soil Layer	Information			
	Воц	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	1 inches	slightly decomposed plant material	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5

# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

			Soil Laye	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
2	1 inches	9 inches	highly decomposed plant material	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5
3	9 inches	14 inches	mucky sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5
4	14 inches	20 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5
5	20 inches	29 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5
6	29 inches	40 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5
7	40 inches	59 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 5.5 Min: 4.5

Soil Map ID: 6

Soil Component Name: Plymouth

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Layer	r Information			
	Вои	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	3 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6
2	3 inches	27 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6
3	27 inches	59 inches	gravelly coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand.	Max: 141 Min: 141	Max: 5.5 Min: 3.6

## **LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

### FEDERAL USGS WELL INFORMATION

 MAP ID
 WELL ID
 FROM TP

 1
 USGS2095991
 1/4 - 1/2 Mile NW

 2
 USGS2095775
 1/4 - 1/2 Mile ENE

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID LOCATION FROM TP

No PWS System Found

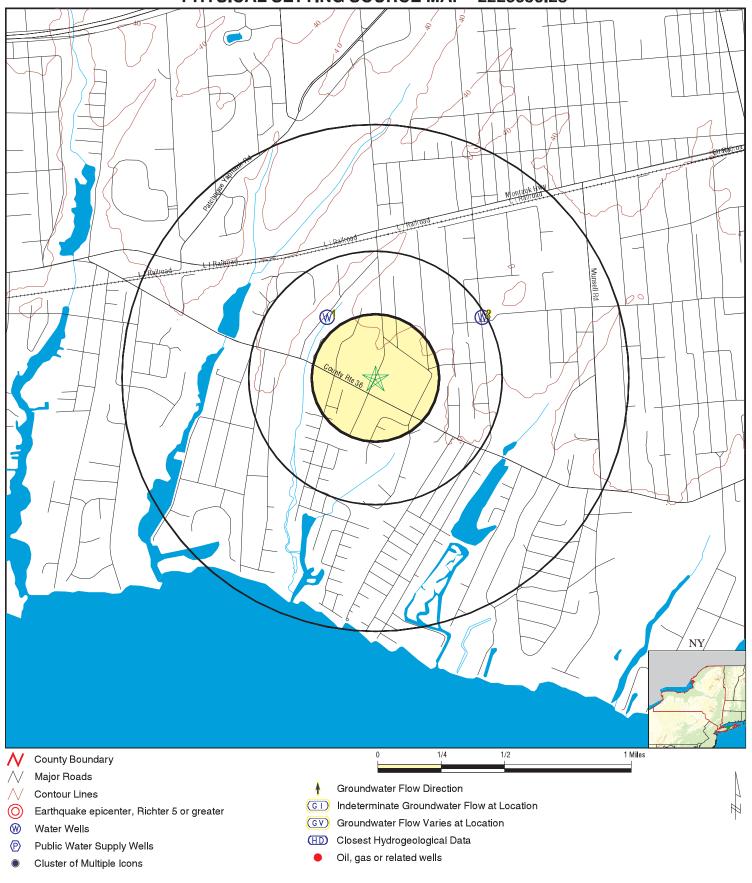
Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

MAP ID WELL ID FROM TP

No Wells Found

# PHYSICAL SETTING SOURCE MAP - 2225535.2s



SITE NAME: Bianchi/Weiss Greenhouse

ADDRESS: 25 Orchard Road

East Patchogue NY 11772 LAT/LONG: 40.7608 / 72.9712 CLIENT: EA Engineering Sci & Tech CONTACT: Sarah Nelson

INQUIRY#: 2225535.2s

DATE: May 21, 2008 2:07 pm

## **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance

Elevation Database EDR ID Number

NW **FED USGS** USGS2095991

1/4 - 1/2 Mile Lower

> Agency cd: **USGS** Site no: 404549072583401

88 Strong Rd., E. Patchogue Site name:

36

Latitude: 404551 40.76426503 Longitude: 0725831 Dec lat: Dec Ion: -72.97482932 Coor meth: G Coor accr: S Latlong datum: NAD27 Dec latlong datum: NAD83 District: 36

103 County: State: Not Reported Country: US Land net: Location map: Not Reported Map scale: Not Reported

Not Reported Altitude: Not Reported Altitude method: Altitude accuracy: Not Reported Altitude datum: Not Reported Hydrologic: Not Reported Topographic: Not Reported

Site type: Ground-water other than Spring Date construction: Not Reported

Date inventoried: Not Reported Mean greenwich time offset: EST

Local standard time flag:

Type of ground water site: Single well, other than collector or Ranney type

Not Reported Aquifer Type: Aquifer: Not Reported

Well depth: Not Reported Hole depth: Not Reported

Source of depth data: Not Reported Project number: 443600341

0 Daily flow data begin date: 0000-00-00 Real time data flag:

Daily flow data end date: 0000-00-00 Daily flow data count:

Peak flow data begin date: 0000-00-00 Peak flow data end date: 0000-00-00 Peak flow data count: Water quality data begin date: 2002-07-11

Water quality data end date:2002-07-11 Water quality data count:

Ground water data begin date: 0000-00-00 Ground water data end date: 0000-00-00

Ground water data count: 0

Ground-water levels, Number of Measurements: 0

**ENE FED USGS** USGS2095775 1/4 - 1/2 Mile

Higher

USGS 404551072574901 Agency cd: Site no:

S 74769.1 Site name: Latitude: 404551 Longitude: 0725749

40.76426507 Dec lat: Dec Ion: -72.96316227 Coor meth: М NAD27 Coor accr: S Latlong datum: NAD83 District: 36 Dec latlong datum: State: 36 County: 103

Country: US Land net: Not Reported SP1916 5 Location map: Map scale: Not Reported

## **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

Altitude: 27.0

Altitude method: Level or other surveying method

Altitude accuracy:

National Geodetic Vertical Datum of 1929 Altitude datum:

Hydrologic: Southern Long Island. New York. Area = 1660 sq.mi.

Topographic: Not Reported

Ground-water other than Spring Date construction: Site type: Not Reported

Date inventoried: Not Reported Mean greenwich time offset: **EST** 

Local standard time flag:

Type of ground water site: Single well, other than collector or Ranney type

Aquifer Type: Not Reported

Aquifer: GLACIAL AQUIFER, UPPER

Well depth: 25. Hole depth: Not Reported

Source of depth data: Not Reported

Project number: Not Reported

Daily flow data begin date: Real time data flag: 0 0000-00-00

Daily flow data end date: 0000-00-00 Daily flow data count:

Peak flow data begin date: 0000-00-00 Peak flow data end date: 0000-00-00 Peak flow data count: Water quality data begin date: 0000-00-00

Water quality data end date:0000-00-00 Water quality data count:

Ground water data begin date: 1983-04-28 Ground water data end date: 1983-04-28

Ground water data count:

Ground-water levels, Number of Measurements: 1

Feet below Feet to Date Surface Sealevel 1983-04-28 17.16

# GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

# AREA RADON INFORMATION

State Database: NY Radon

Radon Test Results

Zip	Num Sites	< 4 Pci/L	>= 4 Pci/L	>= 20 Pci/L	Avg > 4 Pci/L	Max Pci/L
_						
11772	4	4 (100%)	0 (0%)	0 (0%)	0.73	1.1

Federal EPA Radon Zone for SUFFOLK County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SUFFOLK COUNTY, NY

Number of sites tested: 183

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.670 pCi/L	100%	0%	0%
Basement	1.010 pCi/L	98%	2%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### **TOPOGRAPHIC INFORMATION**

# USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

# Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

# HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

#### State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

# HYDROGEOLOGIC INFORMATION

# AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

# **GEOLOGIC INFORMATION**

# Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

# SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# **LOCAL / REGIONAL WATER AGENCY RECORDS**

# **FEDERAL WATER WELLS**

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

#### **New York Public Water Wells**

Source: New York Department of Health

Telephone: 518-458-6731

# OTHER STATE DATABASE INFORMATION

# Oil and Gas Well Database

Department of Environmental Conservation

Telephone: 518-402-8056

These files contain records, in the database, of wells that have been drilled.

# **RADON**

State Database: NY Radon

Source: Department of Health Telephone: 518-402-7556 Radon Test Results

# Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

# **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

# **OTHER**

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# STREET AND ADDRESS INFORMATION

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# Attachment B Historical Documents

# **Bianchi/Weiss Greenhouse**

25 Orchard Road East Patchogue, NY 11772

Inquiry Number: 2225535.4

May 21, 2008

# The EDR Historical Topographic Map Report



440 Wheelers Farms Road Milford, CT 06461 800.352.0050 www.edrnet.com

# **EDR Historical Topographic Map Report**

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

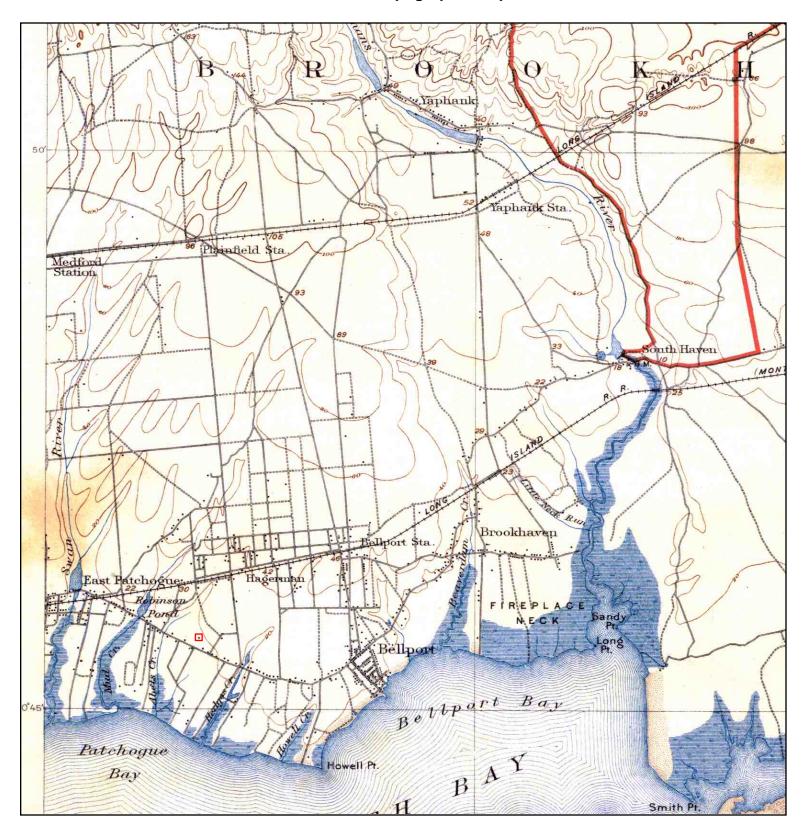
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# **Historical Topographic Map**





TARGET QUAD

NAME: MORICHES MAP YEAR: 1904

SERIES: 15 SCALE: 1:62500 SITE NAME: Bianchi/Weiss Greenhouse ADDRESS: 25 Orchard Road

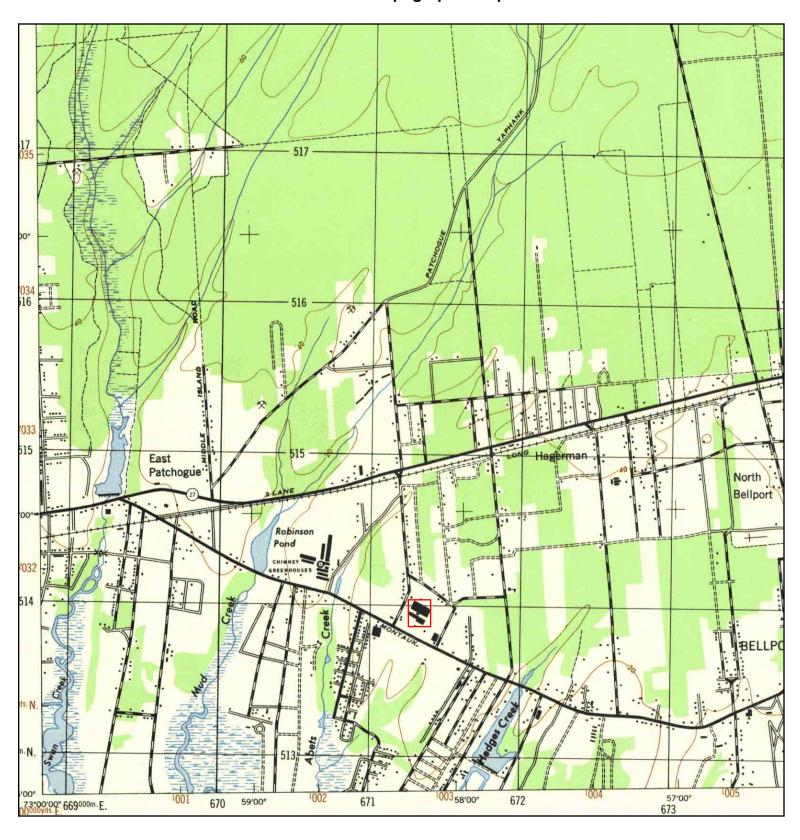
East Patchogue, NY 11772

LAT/LONG: 40.7608 / 72.9712

CLIENT: EA Engineering Sci & Tech

CONTACT: Sarah Nelson
INQUIRY#: 2225535.4
RESEARCH DATE: 05/21/2008

# **Historical Topographic Map**





TARGET QUAD

NAME: BELLPORT

MAP YEAR: 1947

SERIES: 7.5 SCALE: 1:25000 SITE NAME: Bianchi/Weiss Greenhouse

ADDRESS: 25 Orchard Road

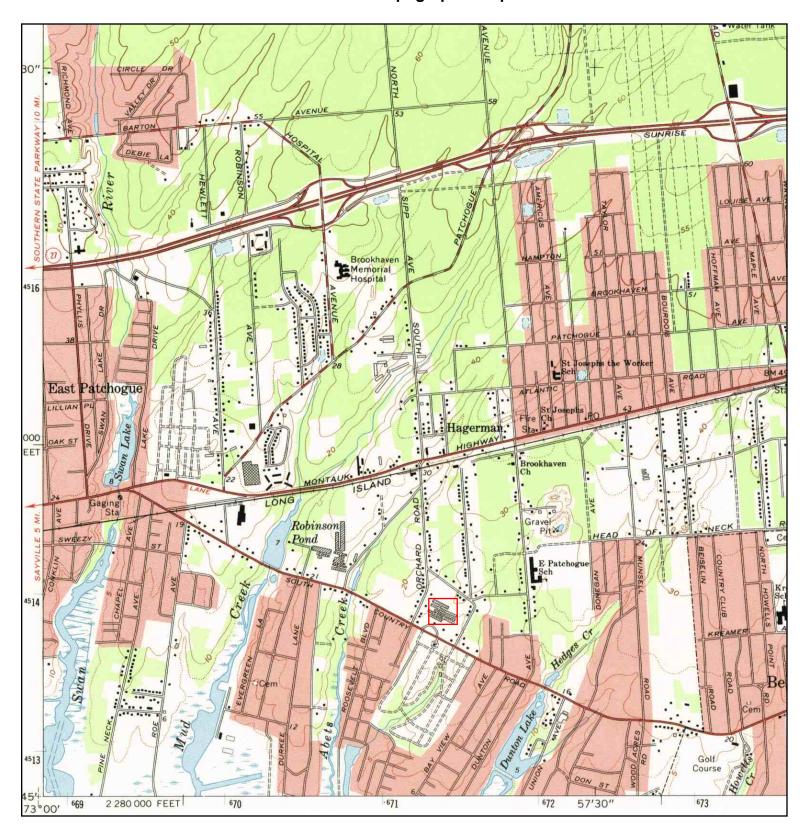
East Patchogue, NY 11772

LAT/LONG: 40.7608 / 72.9712

CLIENT: EA Engineering Sci & Tech

CONTACT: Sarah Nelson
INQUIRY#: 2225535.4
RESEARCH DATE: 05/21/2008

# **Historical Topographic Map**





TARGET QUAD

NAME: BELLPORT

MAP YEAR: 1967

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Bianchi/Weiss Greenhouse

ADDRESS: 25 Orchard Road

East Patchogue, NY 11772

LAT/LONG: 40.7608 / 72.9712

CLIENT: EA Engineering Sci & Tech

CONTACT: Sarah Nelson
INQUIRY#: 2225535.4
RESEARCH DATE: 05/21/2008

# Attachment C Field Sampling Forms

# FIELD BORING LOG FORM

<b>%</b>	У.	EA Engir	neering	g, P.C.		Job. No.	Client:	New York Sta			Loc	ation:
18	1	EA Scien			nology	Drilling Me	thod:		, , , , , , , , , , , , , , , , , , , ,		Soil Boring Number:	
		LOG OF SOIL B	ORING			Sampling Method:						
Coordi		LOG OF SOIL D	OKIIVG			Samping iv	ictilou.				Sheet	1 of
	Elevatio	n:									Dri	lling
Casing	Below Su	urface:				Water Lev.					Start	Finish
	ice Eleva					Time						
Referen	ice Descr	iption:										
	E t		PID	Depth		Surface Cor	ditional					
	Feet Drvn/Ft.	Well	(ppm)	in	USCS		iditions:					
	Recvrd	Diagram	HNu	Feet	Log	Temperatur	re:					
				0	J	<u> </u>						
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				14	-	1						
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				15								
				16		1						
						1						
				17		1						
				18		1						
						1						
				19		1						
									,			
				20								
Logged	by:					_	Date:			_		
Drilling	Contrac	tor:			<u>-</u>		Driller					

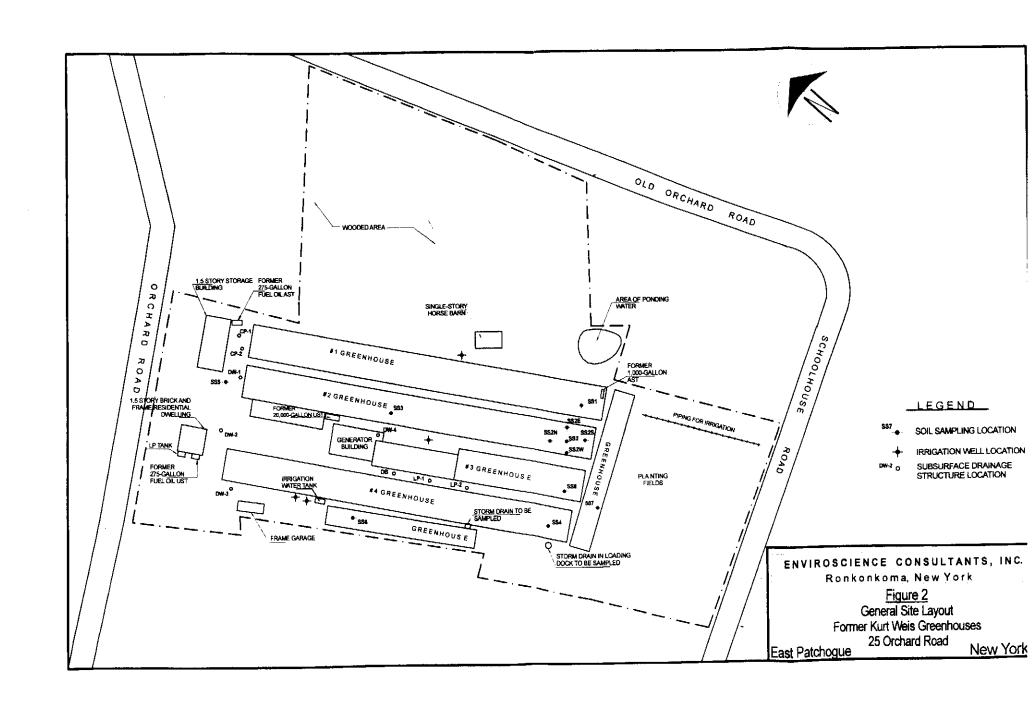


EA Engineering PC and its Affliate, EA Science and Technology

# GROUNDWATER SAMPLING PURGE FORM

Well I.D.:		EA Personnel:			Client:					
Location:			Well Condition:			Weather:	Weather:			
Sounding I	Method: WLI		Gauge Date	e:		Measureme	ent Ref:			
Stick Up/D			Gauge Tim	e:		Well Diame	ter (in):			
Purge Date	<b>)</b> :				Purge Tim	ne:				
Purge Meth	nod:				Field Tech	nnician:				
				14/- II 1						
			-		olume/					
A. Well De	pth (ft):		D. Well Vol	ume (ft):		Depth/Heig	ht of Top of F	PVC:		
B. Depth to	Water (ft):		E. Well Vol	ume (gal) C*	D):	Pump Type	:			
C. Liquid D	epth (ft) (A-E	3):	F. Five Wel	l Volumes (ç	gal) (E3):	Pump Desi	gnation:			
			W:	ater Qualit	v Parame	eters				
Time	DTW	Volume	Rate	рН	ORP		Conductivity	DO	Turbidity	
(hrs)	(ft btoc)	(liters)	(Lpm)	(pH units)	(mV)	(oC)	(uS/cm)	(ug/L)	(ntu)	
				<u> </u>					<u> </u>	
Total Quan Samplers:	itity of Water	Removed (	gal):		-	Sampling T Split Sampl				
Sampling [	Date:				-	Sample Typ				
COMMENT	S AND OBSE	ERVATIONS	:							

# Attachment D Previous Soil Sampling Locations



# Appendix B

Health and Safety Plan Addendum



# Health and Safety Plan Addendum Bianchi/Weiss Greenhouses Site (1-52-209) East Patchogue, New York

Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



Prepared by

EA Engineering, P.C., and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211 (315) 431-4610

and

Louis Berger and Associates, P.C. 412 Mount Kemble Avenue Morristown, New Jersey 07960 (973) 407-1000

# Health and Safety Plan Addendum Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

# Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



# *Prepared by*

EA Engineering, P.C. and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211-2158 (315) 431-4610

and

Louis Berger and Associates, P.C. 412 Mount Kemble Avenue Morristown, New Jersey 07960 (973) 407-1000

Clutch I fee	24 October 2008
Christopher J. Canonica, P.E., Program Manager	Date
EA Engineering, P.C.	
James C. Hayward	24 October 2008
James C. Hayward, P.E., Project Manager	Date
EA Engineering, P.C.	
Robert & Curry	24 October 2008
Robert Casey, Site Manager	Date
EA Science and Technology	
	0 1 2000

October 2008 Revision: FINAL EA Project No.: 14368.33

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EA Engineering, P.C. and its Affiliate EA Science and Technology

# LIST OF FIGURES

<u>Number</u> <u>Title</u>

1 Site location.

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# 1. INTRODUCTION

# 1.1 GENERAL

A Generic Health and Safety Plan (HASP) (EA, 2006)<sup>1</sup> was developed for field activities performed under the New York State Department of Environmental Conservation (NYSDEC) Standby Contract Nos. D004438 and D004441. This HASP Addendum is to supplement the Generic HASP with site-specific information to protect the health and safety of personnel while performing field activities to complete the implementation of the Remedial Investigation (RI)/ Feasibility Study (FS) for the Bianchi/Weiss Greenhouses site, Suffolk County, Patchogue, New York (NYSDEC Site No. 1-52-209).

This HASP Addendum describes the safety organization, procedures, and protective equipment that have been established based on an analysis of potential physical, chemical, and biological hazards. Specific hazard control methodologies have been evaluated and selected to minimize the potential for accidents or injuries to occur. One copy of the Generic HASP and this HASP Addendum will be maintained for use during the scheduled field investigation activities. The copies will be made available for site use and employee review at all times.

This HASP Addendum addresses regulations and guidance practices set forth in the Occupational Safety and Health Administration Standards for Construction Industry, 29 CFR 1926, including 29 CFR 1926.65, Hazardous Waste Operations and Emergency Response and 29 CFR 1926.59, Hazardous Communications.

The following are provided as attachments:

- Attachment A: Worker Training and Physical Examination Record
- Attachment B: Health and Safety Plan Addendum Review Record
- Attachment C: Site Entry and Exit Log
- Attachment D: Accident/Loss Report
- Attachment E: Emergency Telephone Numbers and Hospital Directions
- Attachment F: Emergency Equipment Available On-site
- Attachment G: Map to Hospital
- Attachment H: Personal Protective Equipment Activity Record
- Attachment I: Material Safety Data Sheets

NOTE: This site-specific HASP Addendum should be left open to display Attachment E (Emergency Telephone Numbers and Hospital Directions) and made available to all site personnel in a conspicuous location for the duration of field investigation activities in the event of an emergency.

<sup>1.</sup> EA Engineering, P.C. 2006. Generic Health and Safety Plan for Work Assignments under New York State Department of Environmental Conservation Contract Nos. D004438 and D004441. June.

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# 1.2 SITE AND FACILITY DESCRIPTION

The subject site is located at 25 Orchard Road, in East Patchogue, Suffolk County, New York. The property is a square-shaped parcel that has main access to the site on South Country Road, County Route 36. Second and third access roads are located on Orchard Road to the west of the property and on Hedges Road to the north of the property. Both entrances are blocked with gates and vegetation. Residential properties are located to the north, south, east, and west of the property.

# 1.3 SITE HISTORY

The subject site operated as a nursery and commercial greenhouses from 1929 until recently. It was owned by the Bianchi family and Bianchi Orchards from 1929 to 1992. The Weiss family and Kirk Weiss Greenhouses bought it in 1992. It was recently purchased by the Henron Development Corporation to be developed into an 11 home subdivision. Currently, site properties are in various stages of demolition. In 2005, the Town of Brookhaven Environmental Department required environmental sampling due to the historical use of the property. Surface and subsurface soil samples revealed elevated levels of pesticides and metals.

# 1.4 POLICY STATEMENT

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) will take every reasonable step to provide a safe and healthy work environment; and to eliminate or control hazards in order to minimize the possibility of injuries, illnesses, or accidents to site personnel. EA and EA subcontractor employees will be familiar with the Generic HASP and this HASP Addendum for the project activities they are involved in. Prior to entering the site, the Generic HASP and HASP Addendum will be reviewed and an agreement to comply with the requirements will be signed by EA personnel, subcontractors, and visitors (Attachment B).

Operational changes that could affect the health and safety of the site personnel, community, or environment will not be made without approval from the Project Manager and the Program Health and Safety Officer. This document will be periodically reviewed to ensure that it is current and technically correct. Any changes in site conditions and/or the scope of work will require a review and modification to the HASP Addendum. Such changes will be documented in the form of a revision to this addendum.

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# 2. KEY PERSONNEL

The following table contains information on key project personnel:

Title	Name	Telephone No.
Officer-in-Charge	Richard Waterman	508-485-2982
Program Health and Safety Officer	Peter Garger, CIH	732-404-9370
Program Manager	Christopher Canonica, P.E.	315-431-4610
Quality Assurance/Quality Control Officer	Thomas Porter, P.G.	315-431-4610
Project Manager	Jim Hayward, P.E.	315-431-4610
Quality Assurance/Quality Control Coordinator	Scott Graham, C.P.G.	315-431-4610
Site Manager/Site Health and Safety Officer	Robert Casey	315-431-4610
Site Geologist/Scientist	Sarah Nelson/Tavis Lloyd	315-431-4610
NYSDEC Project Manager	Brian Jankauskas	518-402-9620

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# 3. SCOPE OF WORK

This HASP Addendum was developed to designate and define site-specific health and safety protocols applicable to project activities to be implemented and followed during field activities and consulting work at the former Bianchi/Weiss Greenhouses site, Patchogue, New York. The scope of work covered by this HASP Addendum includes the following:

- Interim Remedial Measures (IRM)
- Evaluation of on-site Soil
- Evaluation of groundwater
- Hydrogeologic evaluation
- Sediment and surface water sampling
- Waste storage and disposal
- Fish and wildlife resource impact analysis.

Each of these activities is summarized below, and additional detail for each activity is provided in the Field Activities Plan.

# 3.1 INTERIM REMEDIAL MEASURES

EA/Berger will implement IRM to control site access, improve the existing on-site conditions, and limit the potential for off-site migration of soil and surface water runoff. Site safety and aesthetics issues related to historical site demolition and investigation activities will be addressed with the IRM.

# 3.2 EVALUATION OF ON-SITE SOIL

EA/Berger will implement an on-site soil sampling program as described in the Field Activities Plan (FAP) to delineate the nature and extent of impacts within the on-site soil, as well as evaluate the backfill material placed in the former location of the underground storage tanks (UST) and determine the toxicity of the on-site soil through field and laboratory analysis.

# 3.3 EVALUATION OF GROUNDWATER

As discussed in the FAP, EA/Berger will install monitoring wells and complete one groundwater sampling event at the site. A total of 10 new monitoring wells will be installed, and sampled, in addition to the sampling of 38 existing monitoring wells previously installed by the Suffolk County Department of Health Services. Figure 10 of the FAP shows the locations of the existing and proposed new monitoring well locations. Monitoring wells will be installed in accordance with the Division of Environmental Remediation Draft Technical Guidance for Site Investigation and Remediation (DER-10) dated December 2002. Each groundwater sample collected will be analyzed for pesticides. In addition, 9 of the 47 wells will also be tested for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, and polychlorinated biphenyls (PCBs).

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# 3.4 HYDROGEOLOGY EVAULATION

EA/Berger will complete two groundwater gauging events, slug testing at select monitoring wells, and observation of tidal influences on the local groundwater.

# 3.5 SEDIMENT AND SURFACE WATER SAMPLING PROGRAM

EA/Berger will conduct a sediment/surface water sampling program within Abets Creek, Moss Creek, and Patchogue Bay to determine possible pesticide contamination. Sediment/Surface water samples will be collected from five previously determined locations corresponding to stream gauge placement as indicated in Section 7.2 of the Field Activities Plan. In addition to the sediment/surface water samples collected at the stream gauge locations, one additional sediment/surface water sample will be collected from the northern portion of Abets Creek. The sediment/surface water sampling locations will be flagged after sampling to facilitate locating these sampling locations with a high precision global positioning system unit.

# 3.6 STORAGE AND DISPOSAL OF WASTE

EA/Berger is responsible for the proper storage, handling, and disposal of investigative-derived waste; including personal protective equipment, and solids and liquids generated during the direct-push/geoprobe program, monitoring well installation, and well sampling activities. All drummed materials will be clearly labeled as to their contents and origin. All investigative-derived waste will be managed in accordance with NYSDEC-Division of Environmental Remediation Technical and Administrative Guidance Memorandum 4032.

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# 4. POTENTIAL HAZARD ANALYSIS

Based on the field activities detailed in Section 3, the following potential hazard conditions may be anticipated:

- The use of mechanical and construction equipment such as geoprobes, drill rigs, front loaders, dump trucks, backhoes, and bobcats can create a potential for crushing and pinching hazards due to movement and positioning of the equipment. In addition the ambient noise levels around heavy equipment machinery can cause for disorientation and reduced awareness levels. Hard hats are required when working around this type of equipment.
- Personnel may be injured during physical lifting and handling of heavy equipment, construction materials, or containers. Additionally, personnel may encounter slip, trip, and fall hazards associated with sampling within the structures. Precautionary measures should be taken in accordance with the Generic HASP and this HASP Addendum.
- Field operations conducted during the winter months can impose excessive heat loss to
  personnel conducting strenuous activities during unseasonably cold weather days, and
  can impose cold-related illness symptoms during unseasonably cold weather days or
  when the wind chill is high. In addition, heavy rains, electrical storms, and high winds
  may create extremely dangerous situations for employees.
- Entry into a confined space in support of this project is forbidden. However, it is not
  anticipated that confined space entry will be required during the completion of the field
  activities.
- Field investigation activities intended to define potential sources of environmental contamination often require employees to be in direct proximity or contact with hazardous substances. Employees may be exposed through inhalation of toxic dusts, vapors, or gases. Normal dust particulates from surficial soil may have adsorbed or absorbed toxic solvents, petroleum compounds, or toxic metal salts or metal particulates. Air monitoring equipment will be used to monitor airborne organic vapors and particulates. Toxic materials contained in dusts or particulates can be ingested if eating, smoking, drinking, and gum chewing are permitted prior to personnel washing their hands and face or removing contaminated work clothing and personal protective equipment. Some chemicals may be absorbed directly through the skin. Personal protective equipment, properly designed for the chemicals of concern, will always be provided and worn when a potential for skin contact is present.

The potential chemicals of concern that may be present at the site include, but are not limited to, chlordane and other pesticides. Material safety data sheets for these chemicals are provided in Attachment I.

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# 5. PERSONAL PROTECTIVE EQUIPMENT

Based upon currently available information, it is anticipated that Level D personal protective equipment will be required for currently anticipated conditions and activities. If, at any time, the sustained level of total organic vapors in the worker breathing zone exceeds 5 ppm above background, site workers will evacuate the area and the condition will be brought to the attention of the Site Health and Safety Officer. Efforts will be undertaken to mitigate the source of the vapors. Once the sustained level of total organic vapors decreases to below 5 ppm above background, site workers will be allowed to continue activities at the direction of the Site Health and Safety Officer. If dust level exceed the OSHA Permissible Exposure Limit (PEL) levels dust mask will be worn by all on-site personnel until water methods reduce the levels. The OSHA PEL action levels are detailed in the Community Air Monitoring Plan provided as Appendix D to the RI/FS Work Plan.

The personal protective equipment components for use during this project are detailed in the Generic HASP. The components of Level D personal protective equipment are summarized below.

Level D will be worn for initial entry on-site and initially for all activities and will consist of the following:

- Coveralls or appropriate work clothing
- Steel-toe, steel-shank safety boots/shoes
- Hard hats (when overhead hazards are present or as required by the Site Health and Safety Officer)
- Chemical resistant gloves (nitrile/neoprene) when contact with potentially contaminated soil or water is expected
- Safety glasses with side shields
- Hearing protectors (during operations producing excessive noise)
- Boot covers (optional unless in contact with visually contaminated soil or water).

Insulated clothing, hats, etc. must be worn when temperatures or wind chill fall below 40°F.

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# 6. SITE CONTROL AND SECURITY

Only authorized personnel will be permitted to conduct field activities. Authorized personnel include those who have completed hazardous waste operations initial training, as defined under Occupational Safety and Health Administration Regulation 29 CFR 1910.120/29 CFR 1926.65, have completed their training or refresher training within the past 12 months, and have been certified by a physician as fit for hazardous waste operations.

# 6.1 SAFE WORK PRACTICES

Safe work practices that will be followed by site workers include, but are not limited to, the following rules:

- Working before or after daylight hours without special permission is prohibited.
- Do not enter restricted or posted areas without permission from the Site Health and Safety Officer.
- Smoking is limited to designated areas.
- Possessing, using, purchasing, distributing, or having controlled substances in their system throughout the day or during meal breaks is prohibited.
- Consuming or possessing alcoholic beverages is prohibited.
- Good housekeeping employees will be instructed about housekeeping throughout field activities.
- Sitting or kneeling in areas of obvious contamination is prohibited.
- Avoid overgrown vegetation and tall grass areas.

# 6.2 DAILY STARTUP AND SHUTDOWN PROCEDURES

The following protocols will be followed daily prior to start of work activities:

- The Site Health and Safety Officer will review site conditions to determine if modification of work and safety plans is needed.
- Personnel will be briefed and updated on new safety procedures as appropriate.

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- Safety equipment will be checked for proper function.
- The Site Health and Safety Officer will ensure that the first aid kit is adequately stocked and readily available.
- On-site equipment and supplies will be locked and secure.



# **Attachment A**

Worker Training and Physical Examination Record

# **ATTACHMENT A**

# WORKER TRAINING AND PHYSICAL EXAMINATION RECORD

SITE: Bianchi/Weiss Greenhouses, East Patchogue, New York							
	OSHA 40-Hour Hazardous Waste Operations Training		OSHA Hazardous Waste Supervisor	CPR (date of	First Aid (date of	Date of Last Physical	
Name	Initial	Annual	Training	expiration)	expiration)	Examination	
EA PERSONNEL							
Chris Canonica, P.E.	10/28/94	11/8/07				1/3/02	
Robert Casey	11/1/01	8/28/09	8/28/09	7/8/07	7/8/08	11/2/05	
Kris Charney	3/17/06	8/28/09	9/8/06	3/16/07	3/16/09	3/1/06	
Scott Graham, C.P.G.	4/15/94	8/28/09	9/1/94			5/25/05	
James Hayward, P.E.	1/28/94	8/28/09	7/01/94	7/8/06	7/8/08	3/30/04	
Sarah Nelson	6/10/05	5/4/09					
Thomas Porter, P.G.	2/3/89	3/22/01	3/3/89			6/12/01	
Joe Von Uderitz	5/27/99	8/28/09		5/30/07	5/30/09	9/27/05	
Richard Waterman	8/88	1998	2/94	3/04	3/05		
BERGER PERSONNEL	-						
Sean McGonigal, P.E.	11/8/91	10/9/08	8/1/96	6/16/03	7/30/02	3/26/08	
Tavis Lloyd	5/4/04	10/9/08	5/11/06	5/11/08	5/11/08	7/16/08	
John Lacanlale	12/2/99	10/3/08		5/11/08	5/11/08	7/18/08	
Joseph Nelson	9/06	9/25/08				2/22/08	
Vignesh Rajagopalan	4/19/08					4/11/08	
SUBCONTRACTOR OR A	DDITIONAL	PERSONNE	L				

NOTE: Prior to performing work at the site, this Health and Safety Plan Addendum must be reviewed and an agreement to comply with the requirements must be signed by all personnel, including contractors, subcontractors, and visitors. Contractors and subcontractors are ultimately responsible for ensuring that their own personnel are adequately protected. In signing this agreement, the contractors and subcontractors acknowledge their responsibility for the implementation of the Health and Safety Plan Addendum requirements. All personnel onsite shall be informed of the site emergency response procedures and any potential safety or health hazards of the operations.

# Attachment B Health and Safety Plan Addendum Review Record

# ATTACHMENT B

# HEALTH AND SAFETY PLAN ADDENDUM REVIEW RECORD

I have read the Health and Safety Plan Addendum for this site and have been briefed on the nature, level, and degree of exposure likely as a result of participation in this project. I agree to conform to all the requirements of this Plan.

SITE: Bianchi/Weiss Greenhouses, East Patchogue, New York								
Name	Signature	Affiliation	Date					

# Attachment C Site Entry and Exit Log

# ATTACHMENT C

# SITE ENTRY AND EXIT LOG

SITE: Bianchi/Weiss Greenhouses, East Patchogue, New York							
Name	Date	Time of Entry	Time of Exit	Initials			
Name	Date	Entry	Exit	Illitials			
		_					

# Attachment D Accident/Loss Report



#### ACCIDENT/LOSS REPORT

THIS REPORT MUST BE COMPLETED BY THE INJURED EMPLOYEE OR SUPERVISOR AND FAXED TO EA CORPORATE HUMAN RESOURCES WITHIN 24 HOURS OF ANY ACCIDENT. THE FAX NUMBER IS (410) 771-1780.

**NOTE:** WHENEVER AN EMPLOYEE IS SENT FOR MEDICAL TREATMENT FOR A WORK RELATED INJURY OR ILLNESS, PAGE 4 OF THIS REPORT MUST ACCOMPANY THAT INDIVIDUAL TO ENSURE THAT ALL INVOICES/BILLS/CORRESPONDENCE ARE SENT TO HUMAN RESOURCES FOR TIMELY RESPONSE.

#### A. DEMOGRAPHIC INFORMATION:

NAME OF INJURED EMPLOYEE:	
HOME ADDRESS:	
HOME PHONE:	DATE OF BIRTH:
MARITAL STATUS:	SEX: M F NAME OF SPOUSE (if applicable):
SOCIAL SECONT I NOMBER.	DATE OF TIRE
NUMBER OF DEPENDENTS:	
EMPLOYEES JOB TITLE:	
DEPT. REGULARLY EMPLOYED:	
WAS THE EMPLOYEE INJURED ON	NTHE JOB: Y N
PRIMARY LANGUAGE OF THE EM	PLOYEE:
B. ACCIDENT/INCIDENT INFORM	MATION:
DATE OF ACCIDENT:	TIME OF ACCIDENT:
REPORTED TO WHOM:	TIME OF ACCIDENT:NAME OF SUPERVISOR:
<b>EXACT LOCATION WHERE ACCID</b>	ENT OCCURRED (including street, city, state and
County):	
	de what the employee was doing at the time of the
accident and how the accident occurred	):
	SPECIFIC PART OF THE BODY AFFECTED (i.e.,

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OBJECT OR SUBSTANCE THAT DIRECTLY INJURED EMPLOYEE:
NUMBER OF DAYS AND HOURS EMPLOYEE USUALLY WORKS PER WEEK:  IS THE EMPLOYEE EXPECTED TO LOSE AT LEAST ONE FULL DAY OF WORK?  DOES THE EMPLOYEE HAVE A PREVIOUS CLAIM? Y N If yes, STATUS Open Closed  WAS THE EMPLOYEE ASSIGNED TO RESTRICTED DUTY?
C. ACCIDENT INVESTIGATION INFORMATION
WAS SAFETY EQUIPMENT PROVIDED? Y N If yes, was it used? Y N WAS AN UNSAFE ACT BEING FORMED? Y N If yes, describe
WAS THE ACCIDENT/INCIDENT WITNESSED? Y N
If yes, list name, address, and phone number:
D. PROVIDER INFORMATION  WAS FIRST AID GIVEN ONSITE? Y N  If yes, what type of medical treatment was given
PHYSICIAN INFORMATION (if medical attention was administered)  NAME:
ADDRESS (include city, state, and zip):PHONE:
HOSPITAL ADDRESS (include name, address, city, state, zip code, and phone)
WAS THE EMPLOYEE HOSPITALIZED? Y N If yes, on what date
WAS THE EMPLOYEE TREATED AS AN OUTPATIENT, RECEIVE EMERGENCY TREATMENT OR AMBULANCE SERVICE?
PLEASE ATTACH THE PHYSICIANS WRITTEN RETURN TO WORK SLIP
NOTE: A PHYSICIAN'S RETURN TO WORK SLIP IS REQUIRED PRIOR TO ALLOWING THE WORKER TO RETURN TO WORK.
E. AUTOMOBILE ACCIDENT INFORMATION (complete if applicable)
AUTHORITY CONTACTED AND REPORT #EA EMPLOYEE VEHICLE YEAR, MAKE AND MODEL

June 2008 Page 2 of 4

V.I.NPLATE/TAG#	
OWNER'S NAME AND ADDRESS:	
DDIVED'S NAME AND ADDRESS.	
DRIVER'S NAME AND ADDRESS:	
RELATION TO INSURED: DRIVER'S LICENSE #	
DESCRIBE DAMAGE TO YOUR PROPERTY:	
DESCRIBE DAMAGE TO OTHER VEHICLE OR PROPERTY:	
OTHER DRIVER'S NAME AND ADDRESS:	
OTHER DRIVER'S PHONE:	
OTHER DRIVER'S INSURANCE COMPANY AND PHONE:	
LOCATION OF OTHER VEHICLE.	
LOCATION OF OTHER VEHICLE:NAME, ADDRESS, AND PHONE OF OTHER INJURED PARTIES:	
NAME, ADDRESS, AND FHONE OF OTHER INJURED FARTIES.	
WITNESSES	
NAME:PHONE:	
ADDRESS:	
STATEMENT:	
SIGNATURE:	
NAME: PHONE:	
ADDRESS:THORE	
STATEMENT:	
SIGNATURE:	
F. ACKNOWLEDGEMENT	
NAME OF SUPERVISOR:	
DATE OF THIS REPORT:REPORT PREPARED BY:	
I have read this report and the contents as to how the accident/loss occurred are accurate to the best of my knowledge.	
Signature: Date:	
Injured Employee	

June 2008 Page 3 of 4



I am seeking medical treatment for a work related injury/illness.

Please forward all bills/invoices/correspondence to:

### EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. 11019 McCORMICK ROAD HUNT VALLEY, MD 21031

ATTENTION: Michele Bailey HUMAN RESOURCES

(410) 584-7000

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## **Attachment E**

## **Emergency Telephone Numbers** and **Hospital Directions**

#### ATTACHMENT E

#### EMERGENCY TELEPHONE NUMBERS AND HOSPITAL DIRECTIONS

SITE: Bianchi/Weiss Greenhouses, East Patchogue, New York	
Police: Suffolk County Police Department	9-1-1
Fire: Patchogue Fire Department	9-1-1
Ambulance: Patchogue Ambulance Company	9-1-1
Hospital: Brookhaven Memorial Hospital	(631) 654-7100
New York Regional Poison Control Center: 259 1st St, Mineola,	(516) 542-2323
NY	800-222-1222 (emergency)
Directions to Brookhaven Memorial Hospital, 101 Hospital Road,	Patchogue, New York
Starting at 24 Orchard Road, travel northeast toward Hedges Road. T Highway. Turn right at CR-101/Sills Road. Turn left at Hospital Road 0.3 mile to Brookhaven Memorial Hospital (101 Hospital Road). Trip approximately 6 minutes.	d. Continue on Hospital Road for
Program Safety and Health Officer:	(410) 771-4950
Kris Hoiem	
Program Manager:	(315) 431-4610
Christopher Canonica, P.E.	
EA Project Manager	(315) 431-4610
James Hayward, P.E.	
In case of spill, contact James Hayward, P.E.	(315) 431-4610
EA Medical Services	(800) 229-3674
EMR	
4360 Chamblee Dunwoody Road, Suite 202	
Atlanta, Georgia 30341	
Contact: Dr. Elayne F. Theriault	(215) 421 4610
Field Manager/Site Health and Safety Officer:	(315) 431-4610
Robert S. Casey (EA)	(315) 430-7429
Site Geologist/Scientist:	(315) 431-4610
Sarah Nelson (EA)/ Tavis Lloyd (Berger)	(973) 407-1390
In case of accident or exposure incident, contact Corporate Health	
and Safety Officer  Peter Garger, CIH	(410) 584-7000
Teler Garger, CITI	(410) 384-7000

# Attachment F Emergency Equipment Available Onsite

#### ATTACHMENT F

## EMERGENCY EQUIPMENT AVAILABLE ONSITE

Type of Equipment	Location
<b>Communications Equipment</b>	
Mobile Telephone	In EA vehicle
Medical Support Equipment	
First Aid Kits	In EA vehicle
Eye Wash Station	In EA vehicle
Firefighting Equipment	
Fire Extinguishers	In EA vehicle

**Attachment G** 

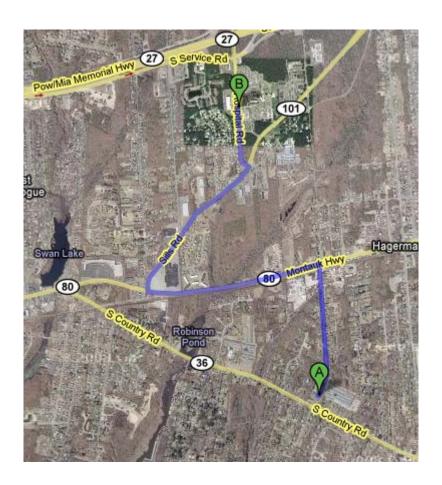
Map to Hospital

#### **ATTACHMENT G**

#### MAP TO HOSPITAL

#### **Directions to Brookhaven Memorial Hospital:**

Starting at 24 Orchard Road, travel northeast toward Hedges Road. Turn left at CR-80/Montauk Highway. Turn right at CR-101/Sills Road. Turn left at Hospital Road. Continue on Hospital Road for 0.3 mile to Brookhaven Memorial Hospital (101 Hospital Road). Trip is 2.4 miles. Travel time is approximately 6 minutes.



## **Attachment H**

## Personal Protective Equipment Activity Record

#### ATTACHMENT H

## PERSONAL PROTECTIVE EQUIPMENT ACTIVITY RECORD

SITE: Bianchi/Weiss Greenhouses, East Patchogue, New York				
Weather Condition:		Onsite Hours: From		
		То		
Changes in Personal Protective				
Equipment Levels <sup>(a)</sup>	Work Operations	Reasons for Change		
Site Health and Safety Plan	Corrective Action	Corrective Action		
Violations	Specified	Taken (yes/no)		
Observations and Comments:				
Completed by:				
Site Health and Safety Officer		Date		
	icer may change personal	protective equipment levels, using only		
criteria specified in the Health and S	Safety Plan Addendum.	proceed to equipment levels, using only		

# Attachment I Material Safety Data Sheets

## **International Chemical Safety Cards**

ARSENIC ICSC: 0013

ARSENIC Grey arsenic Metallic arsenic As Atomic mass: 74.9

CAS # 7440-38-2 RTECS # CG0525000 ICSC # 0013 UN # 1558 EC # 033-001-00-X

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZ SYMPTO		PREVENTION		FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Gives or toxic fumes (or ga fire.		NO open flames. NO conta with strong oxidizers. NO contact with hot surfaces.	ct	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Risk of fire and expl slight if in the form of powder or dust when hot surfaces or flame	of fine n exposed to	Prevent deposition of dust; closed system, dust explosi proof electrical equipment lighting.	on-	
EXPOSURE			AVOID ALL CONTACT!		IN ALL CASES CONSULT A DOCTOR!
• INHALATION	Cough. Diarrhoea. S breath. Sore throat. Weakness. Grey skin	Vomiting.	Closed system and ventilati	ion.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
• SKIN	Redness.		Protective gloves. Protective clothing.	re	Remove contaminated clothes. Rinse skin with plenty of water or shower.
• EYES	Redness.		or eye protection in combin with breathing protection if powder.		First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
• INGESTION	Diarrhoea. Nausea. S Unconsciousness. V (further see Inhalatio	omiting	Do not eat, drink, or smoke during work. Wash hands beating.		Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.
SPILLAGE	DISPOSAL		STORAGE		PACKAGING & LABELLING

Evacuate danger area! Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment (extra personal protection: complete protective clothing including self-contained breathing apparatus).  Provision to contain effluent from fire extinguishing. Separated from strong oxidants, acids, halogens, food and feedstuffs. Well closed. Keep in a well-ventilated room.  To not transport with food and feedstuffs. T symbol R: 23/25 S: (1/2-)20/21-28-45 UN Hazard Class: 6.1 UN Packing Group: II Marine pollutant.	SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
	substance into sealable containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment (extra personal protection: complete protective clothing including self-	extinguishing. Separated from strong oxidants, acids, halogens, food and feedstuffs. Well closed. Keep in a well-ventilated room.	feedstuffs. T symbol R: 23/25 S: (1/2-)20/21-28-45 UN Hazard Class: 6.1 UN Packing Group: II

#### SEE IMPORTANT INFORMATION ON BACK

ICSC: 0013 Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities © IPCS CEC 1993

## **International Chemical Safety Cards**

ARSENIC ICSC: 0013

ARBEITIC		
I	PHYSICAL STATE; APPEARANCE: ODOURLESS, BRITTLE, GREY, METALLIC-LOOKING CRYSTALS.	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.
M	PHYSICAL DANGERS:	
P	CHEMICAL DANCEDS.	INHALATION RISK: Evaporation at 20°C is negligible; a harmful
О	CHEMICAL DANGERS: Upon heating, toxic fumes are formed. Reacts violently with strong oxidants and halogens	concentration of airborne particles can, however, be reached quickly.
R	causing fire and explosion hazard. Reacts with	EFFECTS OF SHORT-TERM EXPOSURE:
T	mitric acid, hot sulfuric acid. Toxic arsine gas may be formed in contact with acid or acidic	The substance irritates the eyes, the skin and the respiratory tract. The substance may cause
A	substances and certain metals, such as galvanized or light metals.	effects on the circulatory system, nervous system, kidneys and gastrointestinal tract,
N	OCCUPATIONAL EXPOSURE LIMITS (OELs):	resulting in convulsions, kidney impairment, severe hemorrhage, losses of fluids, and electrolytes, shock and death. Exposure may
Т	TLV: ppm; 0.01 mg/m <sup>3</sup> (as TWA) A1 (ACGIH 1994-1995).	
D		EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: Repeated or prolonged contact with skin may
A		cause dermatitis. Repeated or prolonged contact may cause skin sensitization. The substance
T		may have effects on the mucous membranes, skin, kidneys, liver, resulting in neuropathy,
A		pigmentation disorders, perforation of nasal septum and tissue lesions. This substance is carcinogenic to humans.
PHYSICAL PROPERTIES	Sublimation point: 613°C Relative density (water = 1): 5.7	Solubility in water: none
ENVIRONMENTAL DATA	The substance is toxic to aquatic organisms. It is into the environment because it persists in the en	
	NOTES	
medical examination is	ustible but no flash point is available in literature. indicated. Do NOT take working clothes home. In pentoxide (ICSC # 0377), Arsenic trichloride (	Refer also to cards for specific arsenic
	ADDITIONAL INFORMA	TION
ICSC: 0013	IL	ARSENIC
   	© IPCS, CEC, 1993	

IMPORTANT LEGAL NOTICE: Neither the CEC or the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use.

## **International Chemical Safety Cards**

CHLORDANE ICSC: 0740

#### **CHLORDANE**

1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene  $\rm C_{10}H_6Cl_8$ 

Molecular mass: 409.8

CAS # 57-74-9 RTECS # PB9800000

ICSC # 0740 UN # 2996

EC # 602-047-00-8

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZ		PREVENTION		FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Liquic formulations contain solvents may be flar Gives off irritating of fumes (or gases) in a	ning organic nmable. or toxic	NO open flames.		Alcohol-resistant foam, powder, carbon dioxide.
EXPLOSION	Above 56°C explosive vapour/air mixtures may be formed. Explosion hazard will depend on the solvent used or on the characteristics of the dust.		Above 56°C closed system, ventilation.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE			PREVENT GENERATION MISTS! STRICT HYGIEN		
• INHALATION	(see Ingestion).		Breathing protection.		Fresh air, rest. Refer for medical attention.
• SKIN	MAY BE ABSORBED!		Protective gloves. Protective clothing.		Remove contaminated clothes. Rinse and then wash skin with water and soap.
• EYES	Redness.		Safety goggles or face shie eye protection in combinat with breathing protection.		First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
• INGESTION	Convulsions. Nause	a. Vomiting.	Do not eat, drink, or smoke during work.	2	Do NOT induce vomiting. Rest. Refer for medical attention.
SPILLAGE	DISPOSAL		STORAGE		PACKAGING & LABELLING
Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer (extra personal protection:		om food and feedstuffs, . Cool. Dry.	Do not transport with food and feedstuffs. Xn symbol R: 21/22-40 S: 36/37		

complete protective clothing including

self-contained breathing apparatus).

UN Hazard Class: 6.1

UN Packing Group: III Severe marine pollutant.

#### SEE IMPORTANT INFORMATION ON BACK

ICSC: 0740

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities © IPCS CEC 1993

## **International Chemical Safety Cards**

CHLORDANE ICSC: 0740

I	PHYSICAL STATE; APPEARANCE: LIGHT YELLOW TO AMBER VISCOUS LIQUID. PHYSICAL DANGERS:	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of dusts from powder concentrates, through the skin especially from liquid formulations, and by ingestion.		
CHEMICAL DANGERS:  The substance decomposes on heating and/or on burning and on contact with bases producing toxic fumes: chlorine fumes, hydrogen chloride, phosgene. Attacks plastic, rubber and coating.  CCUPATIONAL EXPOSURE LIMITS  (OELs):  A TLV: ppm; 0.5 mg/m³ (as TWA) (skin) (ACGIH 1991-1992).  PDK: 0.01 mg/m³ C (USSR 1977).				
		REPEATED EXPOSURE: This substance is possibly carcinogenic to humans.		
PHYSICAL PROPERTIES	Boiling point at 1.33 kPa: 175°C Relative density (water = 1): 1.59-1.63 Solubility in water: None	Vapour pressure, Pa at 25°C: 0.0013 Octanol/water partition coefficient as log Pow: 2.78		
ENVIRONMENTAL DATA	Henvironment, checial attention choilid be given to tich in tropical areas. It is strongly advised not - if			
	NOTES			
The commercial product (technical chlordane) is a mixture containing 60 to 75% of the pure compound and 25 to 40% of related compounds. The chlorine content is 64-67%. Other melting points: cis-isomer: 106-107°C; trans-isomer: 104-105°C. All uses of this substance are increasingly restricted. Safe and equally effective alternatives should be prepared. Carrier solvents used in commercial formulations may change physical and toxicological properties. Do NOT take working clothes home. Aspon Chlordane, Belt, Corodane, Niran, Velsicol 1068, Toxichlor, Octachlor, Ortho-klor, Synklor, Topiclor, Toxichlor are trade names. Also consult ICSC # 0743 on heptachlor.  Transport Emergency Card: TEC (R)-61G57c				
	ADDITIONAL INFORMATION			
ICSC: 0740	© IPCS, CEC, 1993	CHLORDANE		

Neither the CEC or the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the

http://www2.hazard.com/msds/mf/cards/file/0740.html

**IMPORTANT** 

<b>LEGAL</b>
NOTICE:

IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use.

LEAD METAL Page 1 of 8

MSDS Number: **L2347** \* \* \* \* \* Effective Date: **07/05/07** \* \* \* \* \* Supercedes: **05/07/07** 



From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865





24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300

National Response in Canada CANUTEC: 613-996-6666

Outside U.S. and Canada Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

## LEAD METAL

#### 1. Product Identification

Synonyms: Granular lead, pigment metal; C.I. 77575

**CAS No.:** 7439-92-1

Molecular Weight: 207.19 **Chemical Formula: Pb** 

**Product Codes:** 

J.T. Baker: 2256, 2266 Mallinckrodt: 5668

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Lead	7439-92-1	95 - 100%	Yes

### 3. Hazards Identification

**Emergency Overview** 

LEAD METAL Page 2 of 8

POISON! DANGER! MAY BE FATAL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. NEUROTOXIN. AFFECTS THE GUM TISSUE, CENTRAL NERVOUS SYSTEM, KIDNEYS, BLOOD AND REPRODUCTIVE SYSTEM. POSSIBLE CANCER HAZARD. MAY CAUSE CANCER BASED ON ANIMAL DATA. Risk of cancer depends on duration and level of exposure.

**SAF-T-DATA**(tm) Ratings (Provided here for your convenience)

\_\_\_\_\_

Health Rating: 3 - Severe (Cancer Causing) Flammability Rating: 3 - Severe (Flammable)

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;

PROPER GLOVES

Storage Color Code: Red (Flammable)

\_\_\_\_\_

#### **Potential Health Effects**

-----

#### **Inhalation:**

Lead can be absorbed through the respiratory system. Local irritation of bronchia and lungs can occur and, in cases of acute exposure, symptoms such as metallic taste, chest and abdominal pain, and increased lead blood levels may follow. See also Ingestion.

#### **Ingestion:**

POISON! The symptoms of lead poisoning include abdominal pain and spasms, nausea, vomiting, headache. Acute poisoning can lead to muscle weakness, "lead line" on the gums, metallic taste, definite loss of appetite, insomnia, dizziness, high lead levels in blood and urine with shock, coma and death in extreme cases.

#### **Skin Contact:**

Lead and lead compounds may be absorbed through the skin on prolonged exposure; the symptoms of lead poisoning described for ingestion exposure may occur. Contact over short periods may cause local irritation, redness and pain.

#### **Eye Contact:**

Absorption can occur through eye tissues but the more common hazards are local irritation or abrasion.

#### **Chronic Exposure:**

Lead is a cumulative poison and exposure even to small amounts can raise the body's content to toxic levels. The symptoms of chronic exposure are like those of ingestion poisoning; restlessness, irritability, visual disturbances, hypertension and gray facial color may also be noted.

#### **Aggravation of Pre-existing Conditions:**

Persons with pre-existing kidney, nerve or circulatory disorders or with skin or eye problems may be more susceptible to the effects of this substance.

LEAD METAL Page 3 of 8

#### 4. First Aid Measures

#### **Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### **Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

#### **Skin Contact:**

Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

#### **Eve Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## 5. Fire Fighting Measures

#### Fire:

Not considered to be a fire hazard. Powder/dust is flammable when heated or exposed to flame.

#### **Explosion:**

Not considered to be an explosion hazard.

#### **Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire. Do not allow water runoff to enter sewers or waterways.

#### **Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Can produce toxic lead fumes at elevated temperatures and also react with oxidizing materials.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

## 7. Handling and Storage

LEAD METAL Page 4 of 8

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Areas in which exposure to lead metal or lead compounds may occur should be identified by signs or appropriate means, and access to the area should be limited to authorized persons. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## 8. Exposure Controls/Personal Protection

#### **Airborne Exposure Limits:**

For lead, metal and inorganic dusts and fumes, as Pb:

-OSHA Permissible Exposure Limit (PEL): 0.05 mg/m3 (TWA)

For lead, elemental and inorganic compounds, as Pb:

-ACGIH Threshold Limit Value (TLV): 0.05 mg/m3 (TWA), A3 animal carcinogen ACGIH Biological Exposure Indices (BEI): 30 ug/100ml, notation B (see actual Indices for more information).

For lead, inorganic:

-NIOSH Recommended Exposure Limit (REL): 0.1 mg/m3 (TWA)

#### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation*, *A Manual of Recommended Practices*, most recent edition, for details.

#### **Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, a half-face high efficiency particulate respirator (NIOSH type N100 filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece high efficiency particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

#### **Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### **Eye Protection:**

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

#### **Other Control Measures:**

Eating, drinking, and smoking should not be permitted in areas where solids or liquids containing lead compounds are handled, processed, or stored. See OSHA substance-specific standard for more information on personal protective equipment, engineering and work practice controls, medical surveillance, record keeping, and reporting requirements. (29 CFR 1910.1025).

LEAD METAL Page 5 of 8

## 9. Physical and Chemical Properties

#### **Appearance:**

Small, white to blue-gray metallic shot or granules.

Odor:

Odorless.

**Solubility:** 

Insoluble in water.

**Density:** 

11.34

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

**Boiling Point:** 

1740C (3164F)

**Melting Point:** 

327.5C (622F)

**Vapor Density (Air=1):** 

No information found.

**Vapor Pressure (mm Hg):** 

1.77 @ 1000C (1832F)

**Evaporation Rate (BuAc=1):** 

No information found.

## 10. Stability and Reactivity

#### **Stability:**

Stable under ordinary conditions of use and storage.

#### **Hazardous Decomposition Products:**

Does not decompose but toxic lead or lead oxide fumes may form at elevated temperatures.

#### **Hazardous Polymerization:**

Will not occur.

#### **Incompatibilities:**

Ammonium nitrate, chlorine trifluoride, hydrogen peroxide, sodium azide, zirconium, disodium acetylide, sodium acetylide and oxidants.

#### **Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

## 11. Toxicological Information

#### **Toxicological Data:**

Investigated as a tumorigen, mutagen, reproductive effector.

LEAD METAL Page 6 of 8

#### **Reproductive Toxicity:**

Lead and other smelter emissions are human reproductive hazards. (Chemical Council on Environmental Quality; Chemical Hazards to Human Reproduction, 1981).

#### **Carcinogenicity:**

EPA / IRIS classification: Group B2 - Probable human carcinogen, sufficient animal evidence.

\Cancer Lists\			
	NTP	Carcinogen	
Ingredient	Known	Anticipated	IARC Category
Lead (7439-92-1)	No	No	2B

## 12. Ecological Information

#### **Environmental Fate:**

When released into the soil, this material is not expected to leach into groundwater. This material may bioaccumulate to some extent.

#### **Environmental Toxicity:**

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

\Chemical Inventory Status - Part 1\					
Ingredient	TSCA	EC	Japan	Australia	
Lead (7439-92-1)	Yes	Yes	Yes	Yes	

LEAD METAL Page 7 of 8

\Chemical Inventory Status - Part	2\			 ıada	
Ingredient			DSL	NDSL	Phil.
Lead (7439-92-1)				No	
\Federal, State & International Re					313
Ingredient					nical Catg.
Lead (7439-92-1)		No			
\Federal, State & International Re	gulati				
Ingredient		A 2	261.33	-	d)
Lead (7439-92-1)	10			No	
Chemical Weapons Convention: No TSCA 12 SARA 311/312: Acute: Yes Chronic: Yes Leactivity: No (Pure / Solid)					

#### **WARNING:**

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

Australian Hazchem Code: None allocated.

**Poison Schedule: S6** 

**WHMIS:** 

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: **3** Flammability: **1** Reactivity: **0** 

#### **Label Hazard Warning:**

POISON! DANGER! MAY BE FATAL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. NEUROTOXIN. AFFECTS THE GUM TISSUE, CENTRAL NERVOUS SYSTEM, KIDNEYS, BLOOD AND REPRODUCTIVE SYSTEM. POSSIBLE CANCER HAZARD. MAY CAUSE CANCER BASED ON ANIMAL DATA. Risk of cancer depends on duration and level of exposure.

#### **Label Precautions:**

Do not get in eyes, on skin, or on clothing.

Do not breathe dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

#### **Label First Aid:**

If swallowed, induce vomiting immediately as directed by medical personnel. Never give

LEAD METAL Page 8 of 8

anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

**Product Use:** 

Laboratory Reagent.

**Revision Information:** 

MSDS Section(s) changed since last revision of document include: 3.

Disclaimer:

\*

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\*

**Prepared by:** Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)

## **Appendix C**

## Quality Assurance Project Plan Addendum



## Quality Assurance Project Plan Addendum Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



*Prepared by* 

EA Engineering, P.C. and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211-2158 (315) 431-4610

and

Louis Berger and Associates, P.C. 412 Mount Kemble Avenue Morristown, New Jersey 07960 (973) 407-1000

> October 2008 Revision: FINAL EA Project No. 14368.33

## Quality Assurance Project Plan Addendum Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

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Clubb I fram	24 October 2008
Christopher J. Canonica, P.E., Program Manager	Date
EA Engineering, P.C.	
James C. Hayward	24 October 2008
James C. Hayward, P.E., Project Manager	Date
EA Engineering, P.C.	
Robert & Curry	24 October 2008
Robert Casey, Site Manager	Date
EA Science and Technology	
	0-4-12000

October 2008 Revision: FINAL EA Project No.: 14368.33

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1	Remedial investigation analytical program.
2	Sample containers, preservation, and holding times.

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#### 1. PURPOSE AND OBJECTIVES

#### 1.1 PURPOSE

A Generic Quality Assurance Project Plan (QAPP) (EA, 2006)<sup>1</sup> was developed for field activities performed under the New York State Department of Environmental Conservation (NYSDEC) Standby Contract Nos. D004438 and D004441. This QAPP Addendum is for the Remedial Investigation/Feasibility Study Work Assignment for the Bianchi/Weiss Greenhouses site in in East Patchogue, Suffolk County, New York (NYSDEC Site No. 1-52-209). This QAPP Addendum is to supplement the Generic QAPP with site-specific procedures for the collection, analysis, and evaluation of data that will be legally and scientifically defensible.

#### 1.2 QUALITY ASSURANCE PROJECT PLAN OBJECTIVES

This QAPP Addendum provides site-specific information and standard operating procedures applicable to all work performed at the site that is not included in the Generic QAPP. The information includes definitions and generic goals for data quality and required types and quantities of quality assurance/quality control (QA/QC) samples. The procedures address sampling and decontamination protocols; field documentation; sample handling, custody, and shipping; instrument calibration and maintenance; auditing; data reduction, validation, and reporting; corrective action requirements; and QA reporting. The Work Plan contains a site description and information on site field activities, such as sample locations, sampling procedures, analytical methods, and reporting limits.

EA Engineering, P.C. 2006. Generic Quality Assurance Project Plan for Work Assignments under NYSDEC Contract Nos. D004438 and D004441. October.

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#### 2. PROJECT ORGANIZATION AND RESPONSIBILITIES

While all personnel involved in an investigation and the generation of data are implicitly a part of the overall project management and QA/QC program, certain members of the Project Team have specifically designated responsibilities. Project personnel responsibilities are summarized below.

## 2.1 EA ENGINEERING, P.C. AND ITS AFFILIATE EA SCIENCE AND TECHNOLOGY

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) will provide oversight, coordination, health and safety, field support, and evaluation of analytical data. Field support will be provided during subsurface soil sampling. EA also will be responsible for evaluation of analytical test results, which will be submitted to NYSDEC. The EA staff involved in this project are as follows:

- *Tom Porter, Project Quality Assurance/Quality Control (QA/QC) Officer*—The QA/QC Officer will provide guidance on technical matters and review technical documents relating to the project. He will assess the effectiveness of the QA/QC program and recommend modifications when applicable. Additionally, the QA/QC Officer may delegate technical guidance to specially trained individuals under his direction.
- James Hayward, P.E., EA Project Manager—The Project Manager provides overall coordination and preparation of the project within EA. This includes coordination with NYSDEC and New York State Department of Health, budget control, subcontractor performance, implementation of the QAPP, and allocation of resources and staffing to implement both the QA/QC program and the site Health and Safety Plan.
- Scott Graham, C.P.G., EA Project QA/QC Coordinator—The Project QA/QC Coordinator is responsible for project-specific supervision and monitoring of the QA/QC program. He will ensure that field personnel are familiar with and adhere to proper sampling procedures, field measurement techniques, sample identification, and chain-of-custody procedures. He will coordinate with the analytical laboratory for the receipt of samples and reporting of analytical results, and will recommend actions to correct deficiencies in the analytical protocol or sampling. Additionally, he will prepare QA/QC reports for management review.
- Robert Casey, EA Site Manager
   —The Site Manager will serve as the on-site contact
  person for field investigations and tests. He will be responsible for coordinating the field
  activities, including inspecting and replacing equipment, preparing daily and interim
  reports, scheduling sampling, and coordinating shipment and receipt of samples and
  containers.

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The Program Health and Safety Officer is also an integral part of the project implementation team.

• Peter Garger, EA Program Health and Safety Officer—The Program Health and Safety Officer will be responsible for the development, final technical review, and approval of the Health and Safety Plan. In addition, he will provide authorization, if warranted, to modify personal protective equipment requirements based on field conditions. He will also provide final review of all safety and health monitoring records and personal protective equipment changes to ensure compliance with the provisions of the Health and Safety Plan.

#### 2.2 LABORATORY

Laboratory analyses for this project will be performed by Chemtech Consulting Group in Mountainside, New Jersey; and North Coast Laboratories, LTD, in Arcata, California under subcontract agreements with EA. Robert Casey will have sample analysis and review responsibilities on this project. The laboratories will have their own provisions for conducting an internal QA/QC review of the data before they are released to EA. The laboratories' contract supervisors will contact EA's Project Manager/Site Manager with any sample discrepancies or data concerns.

Hard copy and electronic data deliverable formatted QA/QC reports will be filed by the analytical laboratories when data are submitted to EA. Corrective actions will be reported to the EA Project Manager along with the QA/QC report (Section 9 of the Generic QAPP). The laboratories may be contacted directly by EA or NYSDEC personnel to discuss QA concerns. EA will act as laboratory coordinator on this project and all correspondence from the laboratories will be coordinated with EA's Project Manager.

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#### 3. SAMPLING RATIONALE, DESIGNATION, AND CONTAINERS

#### 3.1 SAMPLING RATIONALE

The sampling rationale is presented for each planned field activity and is detailed in the Field Activities Plan (Appendix A of the Work Plan). The rationale and frequency of the QC samples collected is discussed in the Generic QAPP. The remedial investigation laboratory program includes the number of samples for each sample location, as well as QA/QC samples (Table 1). The frequency of QA/QC samples is expressed as a percentage of the total number of samples collected for that matrix. The Generic QAPP also includes analytical methods and reporting limits.

#### 3.2 SAMPLE DESIGNATION

Field samples collected from the site will be assigned a unique sample tracking number. Sample/designation will be an alpha-numeric code, which will identify each sample by the site identification, matrix sampled, location number, sequential sample number (or depth of top-of-sample interval for excavation soil samples), and date of collection. Each sampling location will be identified with a 2-digit number. Sequential sample numbers at each location for samples will begin with 01 and increase accordingly. For soil borings, the top depth of the sample interval will be used as the sample number. The final portion of the sample tracking number will be the sample date.

The following terminology will be used for the sample identification:

#### Soil Samples

- SITE ID-SB-xx (for subsurface soil boring samples).
- SITE ID-SS-xx (for surface soil boring samples)

#### • Groundwater Samples

- SITE ID-MW-01 through XX (for new monitoring wells)
- SITE ID-WO-03 through 40 (for existing monitoring wells).

#### Sediment Samples

— SITE ID-SD-01 through 05

#### • Surface Water Samples

— SITE ID-SW-01 through 05

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#### • Waste Characterization Samples

- SITE ID-WCDP-01 through 06 (stockpiled debris/soil)
- SITE ID-WCEX-01 through 02 (subsurface drainage excavated material)
- SITE ID-WCGS-01 through 06 (greenhouse footprint composite samples)

#### 3.3 SAMPLE CONTAINERS

Table 2 outlines the types of sample containers and preservatives required for sample collection. Please note that liquid waste samples that exhibit an oily characteristic do not require acid preservation.

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#### 4. ANALYTICAL LABORATORY

The data collected during this investigation will be used to determine the presence and concentration of certain analytes in soil, groundwater, sediment, and surface water.

Surface water, groundwater, soil, and sediment samples collected during execution of the Generic QAPP and this QAPP Addendum will be submitted to Chemtech Consulting Group in Mountainside, New Jersey; and North Coast Laboratories, LTD, in Arcata, California. Chemtech is New York State Department of Health Environmental Laboratory Analytical Program-certified, meeting specifications for documentation, data reduction, and reporting. North Coast Laboratories, LTD is one of two specialized laboratories in the United States that performs the analysis of imidacloprid, details of their qualifications, method detection limits/reporting limits, and a summary of the high-pressure liquid chromatography (HPLC) methods have been provided in Attachment A. Preliminary analytical results will be provide within 14 days of sample receipt and full NYSDEC Analytical Services Protocol Category B deliverables will be provided within 30 days of sample receipt.

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#### 5. ANALYTICAL TEST PARAMETERS

This QAPP Addendum will require the analysis of aqueous samples using U.S. Environmental Protection Agency (USEPA) Method 8260B for volatile organic compounds (VOCs), USEPA Method 8270C for semivolatile organic compounds (SVOCs), USEPA Method 608 for pesticides, USEPA Method 8082 for polychlorinated biphenyls (PCBs), and USEPA Method 6010 for Target Analyte List (TAL) metals and USEPA Method 7470 for mercury, imidacloprid by HPLC, Toxicity Characteristics Leaching Procedures by USEPA Method 1311, corrosivity by USEPA Method 9045, ignitability by SW-846 CH 7.1, reactive cyanide by USEPA Method 7.3.3.2 REV3, and reactive sulfide by USEPA Method 7.3.4.2 REV3. Compound lists for each analytical method are included in the Generic QAPP. A summary of the method detection limits and reporting limits for the aqueous analytical methods is provided as Attachment A.

Non-aqueous samples will be analyzed using USEPA Method 8260B for VOCs, USEPA Method 8270C for SVOCs, USEPA Method 8081A for pesticides, USEPA Method 8082 for PCBs, USEPA Method 6010 for TAL metals and 7074 for mercury, imidacloprid by HPLC, Toxicity Characteristics and Leaching Procedures by USEPA Method 1311, corrosivity by USEPA Method 9045, ignitability by SW-846 CH 7.1, reactive cyanide by USEPA Method 7.3.3.2 REV3, and reactive sulfide by USEPA Method 7.3.4.2 REV3. Additionally, sediment samples will be analyzed using USEPA Method 415.1 for total organic carbon. Compound lists for each analytical method are included in the Generic QAPP. A summary of the method detection limits and reporting limits for the non-aqueous analytical methods is provided as Attachment A.

Analytical testing procedures for the chlordane field test kits provided by Strategic Diagnostic Inc. (SDI), is provided in Attachment B to this QAPP. In addition, two representatives, one from EA and one from Berger, will attend a certification and training program conducted by SDI prior to initiating the field sampling program. Certifications will be submitted to NYSDEC upon receipt.

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#### 6. ANALYTICAL DATA VALIDATION

The laboratory will review data prior to its release from the laboratory. Objectives for review are in accordance with the QA/QC objectives stated in the Generic QAPP. The laboratories are required to evaluate their ability to meet these objectives. Outlying data will be flagged in accordance with laboratory standard operating procedures and corrective action will be taken to rectify the problem.

In order to ensure the validity of analytical data generated by a project, it will be validated by ChemWorld Environmental, Inc., who is independent from the analysts and the project. The resumes of the personnel providing the data validation services will be submitted for approval under a separate cover. The Generic QAPP addresses implementation of independent validation.

Project No.: 14368.33 Revision: FINAL Table 1, Page 1 of 4 October 2008

#### TABLE 1 REMEDIAL INVESTIGATION ANALYTICAL PROGRAM

	G 1.34	TCI D(a)	MOG	GMOG	D (1.11	CL1 1	DCD	TAL	T 11 1 11		
	Sample Matrix	TCLP <sup>(a)</sup>	VOC	SVOC	Pesticides	Chlordane	PCB	Metals	Imidacloprid		
INTERIM REMEDIAL MEASURES – Stockpiled TCLP											
No. of Samples		6									
Field Duplicate											
Trip Blank	Soil/Debris										
Matrix Spike/Matrix Spike Duplicate											
Total No. of Analyses		6									
	INTERIM R	EMEDIAI	L MEASU	RES – Subs	surface Drai	nage Structu	res				
No. of Samples		2	12	12	12			12			
Field Duplicate			1	1	1			1			
Trip Blank	Soil										
Matrix Spike/Matrix Spike Duplicate			2	2	2			2			
Total No. of Analyses		2	15	15	15			15			
		SOII	L SAMPL	ING – 30 x	30 ft grid						
No. of Samples						580			10		
Field Duplicate						29			1		
Trip Blank	Soil										
Matrix Spike/Matrix Spike Duplicate						58			2		
Total No. of Analyses						667			13		

(a) TCLP analysis includes general chemistry analysis.

NOTE: VOC = Volatile organic compound by U.S. Environmental Protection Agency (USEPA) Method 8260B.

SVOC = Semivolatile organic compound by USEPA Method 8270 C.

PCB = Polychlorinated Biphynels by USEPA Method 8082.

Pesticides = Pesticides by USEPA Method 8081A (soil)/USEPA Method 608 (aqueous), methods will be the same for chlordane.

Imidacloprid = Imidacloprid by high-pressure liquid chromatography (HPLC).

TAL Metals = Target Analyte List metals by USEPA Method 6010 and mercury by USEPA Method 7470.

TCLP = Toxicity Characteristics and Leaching Procedures by USEPA Method 1311, corrosivity by USEPA Method 9045, ignitability by SW-846 CH 7.1, and reactive cyanide by USEPA Method 7.3.3.2 REV3, reactive sulfide by USEPA Method 7.3.4.2

REV3

Dashes (---) indicate no sample taken. Laboratory quality control samples will be collected at a rate of 1 per 20 samples, per matrix.

Project No.: 14368.33 Revision: FINAL Table 1, Page 2 of 4 October 2008

TABLE 1 REMEDIAL INVESTIGATION ANALYTICAL PROGRAM

	Sample Matrix	TCLP <sup>(a)</sup>	VOC	SVOC	Pesticides	Chlordane	PCB	TAL Metals	Imidacloprid		
SOIL SAMPLING – Former UST Location											
No. of Samples			6	6	6		6	6			
Field Duplicate			1	1	1		1	1			
Trip Blank	Soil/Debris										
Matrix Spike/Matrix Spike Duplicate			2	2	2		2	2			
Total No. of Analyses			9	9	9		9	9			
SOIL SAMPLING – Surface Soil											
No. of Samples			50	50	50		50	50	50		
Field Duplicate			3	3	3		3	3	3		
Trip Blank	Soil										
Matrix Spike/Matrix Spike Duplicate			6	6	6		6	6	6		
Total No. of Analyses			59	59	59		59	59	59		
	S	OIL SAMI	PLING – G	Freenhouse	Footprint T	CLP					
No. of Samples		6									
Field Duplicate											
Trip Blank	Soil										
Matrix Spike/Matrix Spike Duplicate											
Total No. of Analyses		6									

Project No.: 14368.33 Revision: FINAL Table 1, Page 3 of 4 October 2008

TABLE 1 REMEDIAL INVESTIGATION ANALYTICAL PROGRAM

								TAL	
	Sample Matrix	TCLP <sup>(a)</sup>	VOC	SVOC	Pesticides	Chlordane	PCB	Metals	Imidacloprid
	GROUNDWATER					l .		Wictais	Illidaciopila
	GROUNDWATER	SAMPLIN	1G – MOII	toring wei		On-site Pota	ible wells		
No. of Samples		2	24	24	86 <sup>(b)</sup>		10	24	62
Field Duplicate			1	1	4		1	1	3
Trip Blank	Aqueous								
Matrix Spike/Matrix			2	2	8		2	2	6
Spike Duplicate			2	2	0		2	2	
Total No. of Analyses		2	27	27	98		13	27	71
GROUNDWATER WATER SAMPLING - Piezometers									
No. of Samples					10 <sup>(c)</sup>			10 <sup>(c)</sup>	
Field Duplicate					2			2	
Trip Blank	Aqueous								
Matrix Spike/Matrix					4			4	
Spike Duplicate					4			4	
Total No. of Analyses					16			16	
		SUF	RFACE W	ATER SAN	MPLING				
No. of Samples					6				6
Field Duplicate					1				1
Trip Blank	Aqueous								
Matrix Spike/Matrix					2				2
Spike Duplicate									2
Total No. of Analyses					9				9

<sup>(</sup>b) Includes 10 filtered samples from monitoring wells and 14 filtered samples from potable wells.

<sup>(</sup>c) Includes 5 filtered and 5 unfiltered samples.

Project No.: 14368.33 Revision: FINAL Table 1, Page 4 of 4 October 2008

#### TABLE 1 REMEDIAL INVESTIGATION ANALYTICAL PROGRAM

	C 1 M	TICL D	WOO	GMOG	D 41.11	CLL	DCD	TAL	T '1 1 '1	
	Sample Matrix	TCLP	VOC	SVOC	Pesticides	Chlordane	PCB	Metals	Imidacloprid	
	SEDIMENT SAMPLING									
No. of Samples					6				6	
Field Duplicate		-	-	-	1			-	1	
Trip Blank	Sediment <sup>(d)</sup>									
Matrix Spike/Matrix					2				2	
Spike Duplicate					2				2	
Total No. of Analyses					9				9	
CHLORDANE IMMUNOASSAY SOIL SAMPLING										
Field Test Samples <sup>(e)</sup>	Soil					2,112				

<sup>(</sup>d) Sediment samples will also be collected for Total Organic Carbon and analyzed by USEPA Method 415.1 for sediment criterion normalization.

<sup>(</sup>e) Test kits to be provided by Strategic Diagnostic, Inc., 132 test kits will be provided, each test kit can process up to 16 samples.

#### TABLE 2 SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES

Parameter	Matrix	Container Type/Size	Sample Volume	Preservation	Maximum Holding Time from Verifiable Time of Sample Receipt
Target Compound List volatile organic compounds	Soil	One 125-mL wide- mouth glass vial with Teflon-lined cap	125 mL	Minimize headspace, cool 4°C	7 days
	Water	Two 40-mL glass vials with Teflon-lined Septa	80 mL	No headspace, cool 4°C HCl	7 days
Target Compound List semivolatile organic	Soil	One 8-oz amber glass	8 oz	Cool 4°C	14 days
compounds	Water	One 1-L amber glass with Teflon-lined cap	1 L	Cool 4°C	Extract within 5 days, analyze within 40 days following the start of extraction
Pesticides/Chlordane/ PCB			200g	Cool 4°C	Extract within 14 days, analyze within 40 days following the start of extraction
	Water	1-L glass with Teflon- lined cap	1L	Cool 4°C	Extract within 7 days, analyze within 40 days following the start of extraction
Metals	Soil	One 200 g wide mouth glass jar	200 g	Cool 4°C	6 months
	Water	One 250 mL plastic bottle	250 mL	HNO3 Cool 4°C	6 months from collection
Total Organic Carbon	Sediment	One 4-oz glass	4 oz	H2SO4	28 days
Ignitibility	Soil	One 8-oz plastic or glass	8 oz	Cool 4°C	none
Corrosivity	Soil	One 4-oz plastic jar	4 oz	Cool 4°C	Analyze immediately

# Attachment A Laboratory Method Detection Limits

		Dec. 07	
Commonwed		260	
Compound 1,1,1,2-Tetrachloroethane	Units ug/kg	RDL 5.0	MDL 0.85
1,1,1-Trichloroethane	ug/kg ug/kg	5.0	0.85
1,1,2,2-Tetrachloroethane	ug/kg	5.0	0.89
1,1,2-Trichloroethane	ug/kg	5.0	0.61
1,1,2-Trichlorotrifluoroethane	ug/kg	5.0	1.68
1,1-Dichloroethane 1,1-Dichloroethene	ug/kg	5.0	1.12
1,1-Dichloropropene	ug/kg ug/kg	5.0 5.0	1.00
1,2,3-Trichlorobenzene	ug/kg	5.0	0.85
1,2,3-Trichloropropane	ug/kg	5.0	0.79
1,2,4-Trichlorobenzene	ug/kg	5.0	0.66
1,2,4-Trimethylbenzene 1,2-Dibromo-3-Chloropropane	ug/kg ug/kg	5.0 5.0	0.78 1.02
1,2-Dibromoethane	ug/kg	5.0	0.82
1,2-Dichlorobenzene	ug/kg	5.0	0.86
1,2-Dichloroethane	ug/kg	5.0	0.63
1,2-Dichloropropane	ug/kg	5.0	0.94
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ug/kg	5.0 5.0	1.04 0.67
1,3-Dichloropropane	ug/kg ug/kg	5.0	0.07
1,4-Dichlorobenzene	ug/kg	5.0	0.77
2,2-Dichloropropane	ug/kg	5.0	0.90
2-Butanone	ug/kg	25.0	5.02
2-Chloroethyl vinyl ether	ug/kg	25.0	4.87
2-Chlorotoluene	ug/kg	5.0	0.91 4.37
2-Hexanone 4-Chlorotoluene	ug/kg ug/kg	25.0 5.0	0.92
4-Methyl-2-Pentanone	ug/kg ug/kg	25.0	3.82
Acetone	ug/kg	25.0	17.01
Acrolein	ug/kg	25.0	9.07
Acrylonitrile	ug/kg	25.0	7.16
Benzene Bromobenzene	ug/kg	5.0 5.0	0.72 0.92
Bromochloromethane	ug/kg ug/kg	5.0	1.02
Bromodichloromethane	ug/kg	5.0	0.70
Bromoform	ug/kg	5.0	0.81
Bromomethane	ug/kg	5.0	2.03
Carbon disulfide	ug/kg	5.0	1.08
Carbon Tetrachloride Chlorobenzene	ug/kg ug/kg	5.0 5.0	0.59 0.76
Chloroethane	ug/kg	5.0	1.85
Chloroform	ug/kg	5.0	0.89
Chloromethane	ug/kg	5.0	1.33
cis-1,2-Dichloroethene	ug/kg	5.0	1.29
cis-1,3-Dichloropropene Cyclohexane	ug/kg ug/kg	5.0 5.0	0.67 1.02
Dibromochloromethane	ug/kg	5.0	0.66
Dibromomethane	ug/kg	5.0	0.80
Dichlorodifluoromethane	ug/kg	5.0	1.92
Ethyl Acetate	ug/kg	5.0	0.87
Ethyl Benzene	ug/kg	5.0	0.80
Hexachlorobutadiene Isopropylacetate	ug/kg ug/kg	5.0	1.07
Isopropylbenzene	ug/kg	5.0	0.82
m/p-Xylenes	ug/kg	10.0	1.86
Methyl Acetate	ug/kg	5.0	1.69
Methyl tert-butyl Ether	ug/kg	5.0	0.89
Methyl cyclohexane Methylene Chloride	ug/kg	5.0	0.83 2.43
Naphthalene	ug/kg ug/kg	5.0 5.0	0.57
n-amyl acetate	ug/kg	5.0	0.94
n-Butylbenzene	ug/kg	5.0	0.94
N-propylbenzene	ug/kg	5.0	0.79
o-Xylene	ug/kg	5.0	0.76
p-Isopropyltoluene Sec-butylbenzene	ug/kg ug/kg	5.0 5.0	0.87 0.84
Styrene Styrene	ug/kg	5.0	0.62
t-1,3-Dichloropropene	ug/kg	5.0	0.84
Tert butyl alcohol	ug/kg	25.0	5.02
tert-Butylbenzene	ug/kg	5.0	0.72
Tetrachloroethene	ug/kg	5.0	1.24
Toluene trans-1,2-Dichloroethene	ug/kg	5.0 5.0	0.88 1.23
Trichloroethene	ug/kg ug/kg	5.0	0.73
Trichlorofluoromethane	ug/kg	5.0	1.19
Vinyl Acetate	ug/kg	25.0	4.08
Vinyl chloride	ug/kg	5.0	1.38

		Mar. 08		
	60	10B & 74	71	
Compound	RDL	MDL	Units	
Mercury	0.01	0.007	mg/Kg	
Aluminum	5.00	2.04	mg/Kg	
Antimony	2.50	1.24	mg/Kg	
Arsenic	1.00	0.57	mg/Kg	
Barium	5.00	1.46	mg/Kg	
Beryllium	0.30	0.03	mg/Kg	
Cadmium	0.30	0.10	mg/Kg	
Calcium	100.00	35.70	mg/Kg	
Chromium	0.50	0.16	mg/Kg	
Cobalt	1.50	0.43	mg/Kg	
Copper	1.00	0.35	mg/Kg	
Iron	5.00	2.80	mg/Kg	
Lead	0.60	0.44	mg/Kg	
Magnesium	100.00	33.85	mg/Kg	
Manganese	1.00	0.10	mg/Kg	
Nickel	2.00	0.51	mg/Kg	
Potassium	100.00	58.61	mg/Kg	
Selenium	1.00	0.82	mg/Kg	
Silver	0.50	0.21	mg/Kg	
Sodium	100.00	78.24	mg/Kg	
Thallium	2.00	0.99	mg/Kg	
Vanadium	2.00	0.47	mg/Kg	
Zinc	2.00	0.55	mg/Kg	
molybdenum	10.00	0.460	mg/Kg	
Titanium	1.00	0.530	mg/Kg	
Boron	5.00	0.550	mg/kg	
Silicon	10.00	3.760	mg/kg	
Tin	1.00	0.660	mg/kg	

		82	260	8260	)-low
		Aug-07		Feb07	
Compound	Units	RDL	MDL	RDL	MDL
1,1,1,2-Tetrachloroethane	ug/L	2.0	0.39	1.0	0.45
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	ug/L	2.0	0.39	1.0	0.46
1,1,2-Trichloroethane	ug/L ug/L	2.0	0.37	1.0	0.49
1,2-Trichlorotrifluoroethar	ug/L	2.0	0.61	1.0	0.35
1,1-Dichloroethane	ug/L	2.0	0.48	1.0	0.55
1,1-Dichloroethene	ug/L	2.0	0.67	1.0	0.55
1,1-Dichloropropene	ug/L	2.0	0.20	1.0	0.53
1,2,3-Trichlorobenzene	ug/L	2.0	0.36	1.0	0.43
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	ug/L ug/L	2.0	0.37	1.0	0.37
1,2,4-Trimethylbenzene	ug/L	2.0	0.32	1.0	0.46
2-Dibromo-3-Chloropropa	ug/L	2.0	0.58	1.0	0.45
1,2-Dibromoethane	ug/L	2.0	0.26	1.0	0.56
1,2-Dichlorobenzene	ug/L	2.0	0.40	1.0	0.48
1,2-Dichloroethane	ug/L	2.0	0.41	1.0	0.38
1,2-Dichloropropane 1,3,5-Trimethylbenzene	ug/L	2.0	0.46 0.18	1.0 1.0	0.46
1,3-Dichlorobenzene	ug/L ug/L	2.0	0.18	1.0	0.45
1,3-Dichloropropane	ug/L	2.0	0.23	1.0	0.54
1,4-Dichlorobenzene	ug/L	2.0	0.22	1.0	0.43
2,2-Dichloropropane	ug/L	2.0	0.62	1.0	0.41
2-Butanone	ug/L	10.0	1.94	5.0	4.64
2-Chloroethyl vinyl ether	ug/L	10.0	1.35	5.0	2.61
2-Chlorotoluene	ug/L	2.0	0.25 1.76	1.0 5.0	0.52 2.92
2-Hexanone 4-Chlorotoluene	ug/L ug/L	10.0 2.0	0.30	1.0	0.52
4-Methyl-2-Pentanone	ug/L ug/L	10.0	1.76	5.0	2.66
Acetone	ug/L	10.0	2.15	5.0	2.70
Acrolein	ug/L	10.0	2.24	5.0	2.48
Acrylonitrile	ug/L	10.0	1.48	5.0	2.68
Allyl Chloride	ug/L		0.05	4.0	0.50
Benzene	ug/L	2.0	0.35 0.24	1.0 1.0	0.52 0.48
Bromobenzene Bromochloromethane	ug/L ug/L	2.0	0.24	1.0	0.48
Bromodichloromethane	ug/L	2.0	0.23	1.0	0.59
Bromoform	ug/L	2.0	0.44	1.0	0.42
Bromomethane	ug/L	2.0	1.37	1.0	0.63
Carbon disulfide	ug/L	2.0	0.20	1.0	0.51
Carbon Tetrachloride	ug/L	2.0	0.27	1.0	0.49
Chlorobenzene 1-Chlorobutane	ug/L ug/L	2.0	0.28	1.0	0.50
Chloroethane	ug/L	2.0	0.80	1.0	0.49
Chloroform	ug/L	2.0	0.45	1.0	0.46
Chloromethane	ug/L	2.0	0.37	1.0	0.38
cis-1,2-Dichloroethene	ug/L	2.0	0.72	1.0	0.53
cis-1,3-Dichloropropene	ug/L	2.0	0.29	1.0	0.54
cyclohexane Dibromochloromethane	ug/L ug/L	2.0 2.0	0.57	1.0 1.0	0.37 0.45
Dibromomethane	ug/L	2.0	0.23	1.0	0.43
Dichlorodifluoromethane	ug/L	2.0	0.88	1.0	0.43
Diethyl Ether	ug/L				
Ethyl Acetate	ug/L				
Ethyl Benzene	ug/L	2.0	0.05	1.0	0.50
Ethyl Methacrylate	ug/L			1.0	0.53
Hexachloroethane Hexachlorobutadiene	ug/L ug/L	2.0	0.57	1.0	0.45
lodomethane	ug/L	2.0	0.57	1.0	0.43
Isopropylbenzene	ug/L	2.0	0.37	1.0	0.44
Isopropyl Ether	ug/L				
Isopropyl Acetate	ug/L				
m/p-Xylenes	ug/L	4.0	0.47	2.0	0.97
Methyl Acrylate	ug/L				
Methyl Acrylate Methyl Acetate	ug/L ug/L	2.0	0.45	1.0	0.92
Methyl Methacrylate	ug/L	,	5.15		3.72
Methyl tert-butyl Ether	ug/L	2.0	0.23	1.0	0.50
Methylcyclohexane	ug/L	2.0	0.47	1.0	0.43
Methylene Chloride	ug/L	2.0	0.38	1.0	0.52
Naphthalene	ug/L	2.0	0.29	1.0	0.41
n-amyl Acetate n-Butylbenzene	ug/L ug/L	2.0	0.29	1.0	0.42
N-propylbenzene	ug/L ug/L	2.0	0.29	1.0	0.42
o-Xylene	ug/L	2.0	0.16	1.0	0.51
pentachloroethane	ug/L				
p-Isopropyltoluene	ug/L	2.0	0.26	1.0	0.43
propionitrile	ug/L		0.24	4.0	0.45
Sec-butylbenzene	ug/L	2.0	0.26	1.0	0.45 0.48
Styrene t-1,3-Dichloropropene	ug/L ug/L	2.0	0.19	1.0	0.48
t-1,4-Dichloro-2-butene	ug/L ug/L	2.0	3.51	1.0	3.74
Tert butyl alcohol	ug/L	10.0	1.98	5.0	2.34
tert-Butylbenzene	ug/L	2.0	0.27	1.0	0.47
Tetrachloroethene	ug/L	2.0	0.97	1.0	0.68
Tetrahydrofuran	ug/L	0.0	0.16	1.0	0.54
Toluene trans-1,2-Dichloroethene	ug/L ug/L	2.0	0.16 0.44	1.0 1.0	0.51 0.57
Trichloroethene	ug/L ug/L	2.0	0.44	1.0	0.56
Trichlorofluoromethane	ug/L	2.0	0.53	1.0	0.40
Vinyl Acetate	ug/L	10.0	3.30	5.0	2.75
Vinyl chloride	ug/L	2.0	0.30	1.0	0.46
1,4-Dioxane	ug/L				

	Apr07								
	608 Water			8	082 WATE	R	8082 Soil		
Compound	RDL	MDL	Units	RDL	MDL	Units	RDL	MDL	Units
AROCLOR 1016	0.05	0.0080	ug/L	0.5	0.087	ug/L	17	3.9	ug/Kg
AROCLOR 1221	0.10	0.0610	ug/L	0.5	0.135	ug/L	17	3.7	ug/Kg
AROCLOR 1232	0.05	0.0120	ug/L	0.5	0.113	ug/L	34	17.0	ug/Kg
AROCLOR 1242	0.05	0.0290	ug/L	0.5	0.078	ug/L	17	2.4	ug/Kg
AROCLOR 1248	0.05	0.0120	ug/L	0.5	0.117	ug/L	17	4.5	ug/Kg
AROCLOR 1254	0.05	0.0200	ug/L	0.5	0.102	ug/L	17	5.5	ug/Kg
AROCLOR 1260	0.05	0.0120	ug/L	0.5	0.170	ug/L	17	5.6	ug/Kg

		8081 soil			608			8081 water	
Compound	RDL	MDL	Units	RDL	MDL	Units	RDL	MDL	Units
4,4'-DDD	1.7	0.5	ug/kg	0.005	0.00326	ug/L	0.050	0.01813	ug/L
4,4'-DDE	1.7	0.5	ug/kg	0.005	0.00335	ug/L	0.050	0.01585	ug/L
4,4'-DDT	1.7	0.3	ug/kg	0.005	0.00329	ug/L	0.2	0.01354	ug/L
Aldrin	1.7	0.5	ug/kg	0.005	0.00309	ug/L	0.050	0.01381	ug/L
alpha-BHC	1.7	0.4	ug/kg	0.005	0.00297	ug/L	0.050	0.0133	ug/L
alpha-Chlordane	1.7	0.5	ug/kg	0.005	0.00325	ug/L	0.050	0.01439	ug/L
beta-BHC	1.7	0.4	ug/kg	0.005	0.00359	ug/L	0.2	0.01536	ug/L
Chlordane	17	4.1	ug/kg	0.05	0.05000	ug/L	0.50	0.1914	ug/L
delta-BHC	1.7	0.4	ug/kg	0.005	0.00175	ug/L	0.050	0.01684	ug/L
Dieldrin	1.7	0.4	ug/kg	0.005	0.00330	ug/L	0.050	0.01455	ug/L
Endosulfan I	1.7	0.7	ug/kg	0.005	0.00337	ug/L	0.050	0.01642	ug/L
Endosulfan II	1.7	0.5	ug/kg	0.005	0.00325	ug/L	0.050	0.02078	ug/L
Endosulfan sulfate	1.7	0.4	ug/kg	0.005	0.00286	ug/L	0.050	0.01487	ug/L
Endrin	1.7	0.4	ug/kg	0.005	0.00375	ug/L	0.050	0.01374	ug/L
Endrin aldehyde	1.7	0.4	ug/kg	0.005	0.00280	ug/L	0.050	0.0145	ug/L
Endrin ketone	1.7	0.4	ug/kg	0.005	0.00330	ug/L	0.050	0.01469	ug/L
gamma-BHC (Lindane)	1.7	0.5	ug/kg	0.005	0.00306	ug/L	0.050	0.01302	ug/L
gamma-Chlordane	1.7	0.5	ug/kg	0.005	0.00333	ug/L	0.050	0.0153	ug/L
Heptachlor	1.7	0.5	ug/kg	0.005	0.00359	ug/L	0.050	0.0154	ug/L
Heptachlor epoxide	1.7	0.5	ug/kg	0.005	0.00332	ug/L	0.050	0.0133	ug/L
Methoxychlor	1.7	0.4	ug/kg	0.005	0.00357	ug/L	0.050	0.01351	ug/L
Toxaphene	17	3.6	ug/kg	0.05	0.05000	ug/L	0.50	0.242	ug/L

	Soils SVOC			WATER SVOC			Apr.07			
		8270				625			8270	
Compound	RDL	MDL	Units	Compound	RDL	MDL	Units	RDL	MDL	Units
1,1-Biphenyl	330	9.78	ug/Kg	1,1-Biphenyl	2	0.46	ug/L	10	0.32	ug/L
1,2,4-Trichlorobenzene	330 330	11.97 9.95	ug/Kg	1,2,4-Trichlorobenzene 1,2-Dichlorobenzene	2 2	0.29 0.42	ug/L	10	0.31	ug/L
1,3-Dichlorobenzene	330	7.04	ug/Kg ug/Kg	1,3-Dichlorobenzene	2	0.42	ug/L ug/L	10	0.31	ug/L ug/L
1,4-Dichlorobenzene	330	8.57	ug/Kg	1,4-Dichlorobenzene	2	0.34	ug/L ug/L	10	0.30	ug/L ug/L
2,2-oxybis(1-Chloropropane)	330	13.62	ug/Kg	2,2-oxybis(1-Chloropropane)	2	0.41	ug/L	10	0.27	ug/L
2,4,5-Trichlorophenol	330	9.80	ug/Kg	2,4,5-Trichlorophenol	2	0.65	ug/L	10	0.38	ug/L
2,4,6-Trichlorophenol	330	7.69	ug/Kg	2,4,6-Trichlorophenol	2	0.35	ug/L	10	0.35	ug/L
2,4-Dichlorophenol	330	7.85	ug/Kg	2,4-Dichlorophenol	2	0.44	ug/L	10	0.34	ug/L
2,4-Dimethylphenol	330	9.88	ug/Kg	2,4-Dimethylphenol	2	0.51	ug/L	10	0.76	ug/L
2,4-Dinitrophenol 2,4-Dinitrotoluene	330 330	17.61 10.95	ug/Kg ug/Kg	2,4-Dinitrophenol 2,4-Dinitrotoluene	5 2	0.76 0.44	ug/L ug/L	10	0.64	ug/L ug/L
2.6-Dinitrotoluene	330	11.81	ug/Kg ug/Kg	2.6-Dinitrotoluene	2	0.44	ug/L ug/L	10	0.34	ug/L ug/L
2-Chloronaphthalene	330	8.02	ug/Kg	2-Chloronaphthalene	2	0.43	ug/L	10	0.23	ug/L
2-Chlorophenol	330	8.97	ug/Kg	2-Chlorophenol	2	0.48	ug/L	10	0.33	ug/L
2-Methylnaphthalene	330	9.33	ug/Kg	2-Methylnaphthalene	2	0.42	ug/L	10	0.37	ug/L
2-Methylphenol	330	8.79	ug/Kg	2-Methylphenol	2	0.42	ug/L	10	0.36	ug/L
2-Nitroaniline	330	15.52	ug/Kg	2-Nitroaniline	2	0.35	ug/L	10	0.25	ug/L
2-Nitrophenol	330	12.12	ug/Kg	2-Nitrophenol	2	0.52	ug/L	10	0.28	ug/L
3,3-Dichlorobenzidine 3+4-Methylphenols	330 330	24.93 10.04	ug/Kg ug/Kg	3,3-Dichlorobenzidine 3+4-Methylphenols	2 2	0.91	ug/L ug/L	10	1.08 0.39	ug/L ug/L
3-Nitroaniline	330	21.96	ug/Kg ug/Kg	3-Nitroaniline	2	0.66	ug/L ug/L	10	0.35	ug/L ug/L
4,6-Dinitro-2-methylphenol	330	44.69	ug/Kg	4,6-Dinitro-2-methylphenol	5	0.69	ug/L	10	0.29	ug/L
4-Bromophenyl-phenylether	330	15.07	ug/Kg	4-Bromophenyl-phenylether	2	0.51	ug/L	10	1.40	ug/L
4-Chloro-3-methylphenol	330	9.71	ug/Kg	4-Chloro-3-methylphenol	2	0.50	ug/L	10	0.22	ug/L
4-Chloroaniline	330	21.76	ug/Kg	4-Chloroaniline	2	0.50	ug/L	10	0.92	ug/L
4-Chlorophenyl-phenylether	330	12.61	ug/Kg	4-Chlorophenyl-phenylether	2	0.52	ug/L	10	0.29	ug/L
4-Nitroaniline 4-Nitrophenol	330 330	26.03 19.41	ug/Kg ug/Kg	4-Nitroaniline 4-Nitrophenol	5	0.57	ug/L ug/L	10	0.36 1.73	ug/L ug/L
Acenaphthene	330	7.15	ug/Kg	Acenaphthene	2	0.33	ug/L ug/L	10	0.32	ug/L ug/L
Acenaphthylene	330	4.84	ug/Kg	Acenaphthylene	2	0.49	ug/L ug/L	10	0.35	ug/L ug/L
Acetophenone	330	9.85	ug/Kg	Acetophenone	2	0.50	ug/L	10	0.37	ug/L
Anthracene	330	11.12	ug/Kg	Aniline	2	0.50	ug/L	10	0.68	ug/L
Atrazine	330	23.34	ug/Kg	Anthracene	2	0.46	ug/L	10	1.42	ug/L
Aniline	330	39.23	ug/Kg	Atrazine	2	0.49	ug/L	10	0.37	ug/L
Azobenzene	330	11.49	ug/Kg	Azobenzene	2	0.46	ug/L	10	0.22	ug/L
Benzidine Benzo(a)anthracene	330 330	42.63 7.96	ug/Kg ug/Kg	Benzidine Benzo(a)anthracene	5 2	2.20 0.52	ug/L ug/L	10	1.27	ug/L ug/L
Benzo(a)pyrene	330	9.75	ug/Kg	Benzo(a)pyrene	2	0.47	ug/L ug/L	10	0.22	ug/L ug/L
Benzo(b)fluoranthene	330	23.82	ug/Kg	Benzo(b)fluoranthene	2	0.60	ug/L	10	0.43	ug/L
Benzo(g,h,i)perylene	330	23.94	ug/Kg	Benzo(g,h,i)perylene	5	0.62	ug/L	10	0.39	ug/L
Benzo(k)fluoranthene	330	15.17	ug/Kg	Benzo(k)fluoranthene	2	0.54	ug/L	10	0.30	ug/L
Benzoic acid	330	40.58	ug/Kg	Benzoic Acid	5	0.32	ug/L	10	1.50	ug/L
Benzyl Alcohol	330	23.32	ug/Kg	Benzyl Alcohol	2	0.43	ug/L	10	0.30	ug/L
Benzalaldehyde bis(2-Chloroethoxy)methane	330 330	7.60	ug/Kg ug/Kg	Benzylaldehyde bis(2-Chloroethoxy)methane	2 2	0.52	ug/L ug/L	10	0.27	ug/L ug/L
bis(2-Chloroethyl)ether	330	4.32	ug/Kg ug/Kg	bis(2-Chloroethyl)ether	2	0.54	ug/L ug/L	10	0.28	ug/L ug/L
bis(2-Ethylhexyl)phthalate	330	12.65	ug/Kg	bis(2-Ethylhexyl)phthalate	2	0.55	ug/L	10	1.30	ug/L
Butylbenzylphthalate	330	20.93	ug/Kg	Butylbenzylphthalate	2	0.61	ug/L	10	0.42	ug/L
Caprolactam	330	39.66	ug/Kg	Caprolactam	5	0.21	ug/L	10	1.48	ug/L
Carbazole	330	25.28	ug/Kg	Carbazole	2	0.85	ug/L	10	0.24	ug/L
Chrysene	330	6.15	ug/Kg	Chrysene	2	0.61	ug/L	10	0.26	ug/L
Dibenz(a,h)anthracene Dibenzofuran	330 330	24.29 10.24	ug/Kg	Dibenz(a,h)anthracene Dibenzofuran	5 2	0.83	ug/L	10	0.54 0.31	ug/L
Diethylphthalate	330	11.27	ug/Kg ug/Kg	Diethylphthalate	2	0.47	ug/L ug/L	10	0.31	ug/L ug/L
Dimethylphthalate	330	9.65	ug/Kg	Dimethylphthalate	2	0.40	ug/L ug/L	10	0.27	ug/L ug/L
Di-n-butylphthalate	330	15.53	ug/Kg	Di-n-butylphthalate	2	0.51	ug/L	10	5.86	ug/L
Di-n-octyl phthalate	330	11.60	ug/Kg	Di-n-octyl phthalate	2	0.27	ug/L	10	0.26	ug/L
Fluoranthene	330	8.02	ug/Kg	Fluoranthene	2	0.42	ug/L	10	0.20	ug/L
Fluorene	330	8.90	ug/Kg	Fluorene	2	0.40	ug/L	10	0.28	ug/L
Hexachlorobenzene  Hexachlorobutadiana	330 330	9.99	ug/Kg	Hexachlorobenzene	2 2	0.49	ug/L	10	0.27	ug/L
Hexachlorobutadiene Hexachlorocyclopentadiene	330	13.40 16.97	ug/Kg ug/Kg	Hexachlorobutadiene Hexachlorocyclopentadiene	2	0.31	ug/L ug/L	10	0.39 0.56	ug/L ug/L
Hexachloroethane	330	10.97	ug/Kg ug/Kg	Hexachloroethane	2	0.28	ug/L ug/L	10	0.36	ug/L ug/L
Indeno(1,2,3-cd)pyrene	330	8.37	ug/Kg	Indeno(1,2,3-cd)pyrene	5	0.49	ug/L ug/L	10	0.66	ug/L ug/L
Isophorone	330	10.83	ug/Kg	Isophorone	2	0.53	ug/L	10	0.26	ug/L
Naphthalene	330	7.98	ug/Kg	Naphthalene	2	0.41	ug/L	10	0.28	ug/L
Nitrobenzene	330	7.76	ug/Kg	Nitrobenzene	2	0.54	ug/L	10	0.33	ug/L
N-Nitroso-di-n-propylamine	330	11.98	ug/Kg	N-nitrosodimethylamine	5	0.96	ug/L	10	2.04	ug/L
N-Nitrosodiphenylamine	330	24.86	ug/Kg	N-Nitroso-di-n-propylamine	2 2	0.51	ug/L	10	0.34	ug/L
N-Nitrosodimethylamine Pentachlorophenol	330 330	39.46 37.49	ug/Kg ug/Kg	N-Nitrosodiphenylamine Pentachlorophenol	5	0.48	ug/L ug/L	10	0.35 0.52	ug/L ug/L
Phenanthrene	330	10.30	ug/Kg ug/Kg	Phenanthrene	2	0.69	ug/L ug/L	10	1.36	ug/L ug/L
Phenol	330	9.19	ug/Kg	Phenol	2	0.13	ug/L ug/L	10	0.55	ug/L ug/L
Pyridine	330	26.02	ug/Kg	Pyrene	2	0.59	ug/L	10	1.41	ug/L
Pyrene	330	7.21	ug/Kg	Pyridine	5	0.80	ug/L	10	1.46	ug/L

#### NORTH COAST LABORATORIES

## **Imidacloprid Analysis**

## **History**

When North Coast Laboratories (NCL) was founded in 1975, its primary function was to perform water quality analyses for the local timber and pulp industries. NCL gradually expanded into a full service environmental laboratory with a national client base and a reputation for expertise in the analysis of difficult and unusual pesticides and herbicides. This expertise allowed the laboratory to expand its capabilities in 1987 to include the analytical portion of agricultural chemistry studies.

#### **Corporate Mission**

NCL is committed to providing scientifically sound analytical results while maintaining a relatively small organization that can effectively respond to the needs of each client. The complex regulatory and technical requirements of environmental testing and agricultural chemistry studies demand the personal attention NCL offers.

#### Certification

North Coast Laboratories is certified in California by the California Department of Public Health Environmental Lab Accreditation Program (ELAP), ELAP no 1247.

## **Key Personnel**

North Coast Laboratories' staff consists of approximately thirty-five employees. Staff positions include the following: Laboratory Director, Laboratory Manager, Quality Assurance Officer, Sample Custodian, Organic Laboratory Supervisor, Inorganic Laboratory Supervisor, and numerous technical positions. These individuals are qualified and adequately trained in their respective duties. They are also cross-trained to the maximum practical extent. This minimizes workflow interruption in the event of illness or a particularly heavy sample load in one section of the laboratory.

#### **Jesse Chaney - Director/Method Development Chemist**

Mr. Chaney received an M.S. from Humboldt State University in Plant Physiology, a B.A. in Biology, Zoology, and Botany and an A.S. in Civil Engineering Technology from Monterey Peninsula Junior College. After receiving his M.S., he was selected as director of the Pacific Southwest Forest and Range Research Station's Redwood Sciences Laboratory in Arcata. He was responsible for all aspects of beginning operations and supervised the laboratory for five years. In September 1979, Mr. Chaney left the USFS Research Station to take the position as Director of North Coast Laboratories. During his tenure NCL has grown from a small, one-room facility to a full service commercial laboratory.

Mr. Chaney is responsible for all aspects of laboratory operation including:
1) all technical operations, 2) quality assurance, 3) the promotion of employees, 4) financial stability 5) capital investments. Method development chemists are directly supervised by Mr. Chaney who acts as the lead method development chemist in the FIFRA Studies Division.

In addition to extensive bench chemistry experience, Mr. Chaney has attended numerous classes on operation, maintenance, and data interpretation for AA, ICP, GC, HPLC, GCMS and LCMSMS. His professional affiliations include the American Chemical Society and the Association of Official Analytical Chemists.

#### **Roxanne Golich-Moore – Director of Operations**

Ms. Golich-Moore received a B.S. in Chemistry from Humboldt State University in Arcata, CA and has been employed at North Coast Laboratories since 1987. She has experience both as a bench chemist and operator of GC and HPLC instruments. Ms. Golich-Moore was promoted to supervisor of the organic laboratory in 1988. In this capacity she oversaw and reviewed laboratory operations. She was responsible for ensuring data quality and timeliness. In 1997 Ms. Golich-Moore was promoted to laboratory manager for both environmental and registration study operations. In this position she is responsible for overseeing and coordinating all aspects of the laboratory including analytical operations, client services, quality assurance and safety and health. In addition, she assists the director in making financial and business development decisions.

In 2008 Ms. Golich was promoted to Director of Operations where she continues to oversee all aspects of the laboratory operations.

#### Elizabeth Mondragon – Laboratory Manager

Ms. Mondragon received a B.S. in Biology from Humboldt State University in Arcata, CA. As an undergrad she obtained experience in environmental toxicology through working for the Marine Pollution Studies Lab run by UCSC, and later managed a marine microbial ecology research group out of UCSC under Dr. Jonathan Zehr. In her position there she co-authored 10 papers and managed and advised interns, undergrads, grad students, technicians and post-doctoral associates.

Ms. Mondragon joined NCL in 2008 with experience in business administration, management and customer service.

#### **Teri Sherman – Quality Assurance Officer**

Teri Sherman is the Quality Assurance Officer of North Coast Laboratories. She has B.A. degrees in Biology and Zoology and has been employed at North Coast Laboratories since 1989. Prior to moving into the quality assurance office Ms. Sherman worked as a chemist, operating a gas chromatograph and reviewing data for the organic laboratory. Ms. Sherman was also the Computer Validation Coordinator at NCL for 6 years. As Quality Assurance Officer Ms. Sherman maintains current knowledge of regulatory issues and is a member of the Society of Quality Assurance (SQA) and the Pacific Regional Chapter of the Society of Quality Assurance (PRCSQA). She has attended both training courses and professional meetings of the SQA.

#### Joanna Blackstone – Organic Lab Supervisor

Ms Blackstone received a B.S. in Molecular Biology from Humboldt State University. She began employment at NCL in June 2000. During her employment at NCL she has developed expertise in performing extractions for numerous EPA methods as well as for methods developed in-house. In addition, she has been the primary operator of the HPLC instruments. As such, she has experience with a variety of analytical methods. To supplement her experience, Ms. Blackstone has attended courses on analysis by HPLC chromatography. In January 2008, Ms. Blackstone was promoted to organic laboratory supervisor.

Ms. Blackstone is responsible for directing organic laboratory operations and ensuring data quality and timeliness. This involves coordinating sample extraction and analysis, reviewing data, and solving technical problems. Ms. Blackstone operates instruments and performs extractions as required.

#### Imadacloprid Reporting Limits

Analyte	MDL (μg/g)	RL (µg/g)
Imidacloprid	0.016	0.10

Analyte	MDL (µg/L)	RL (μg/L)
Imidacloprid	0.18	1.0

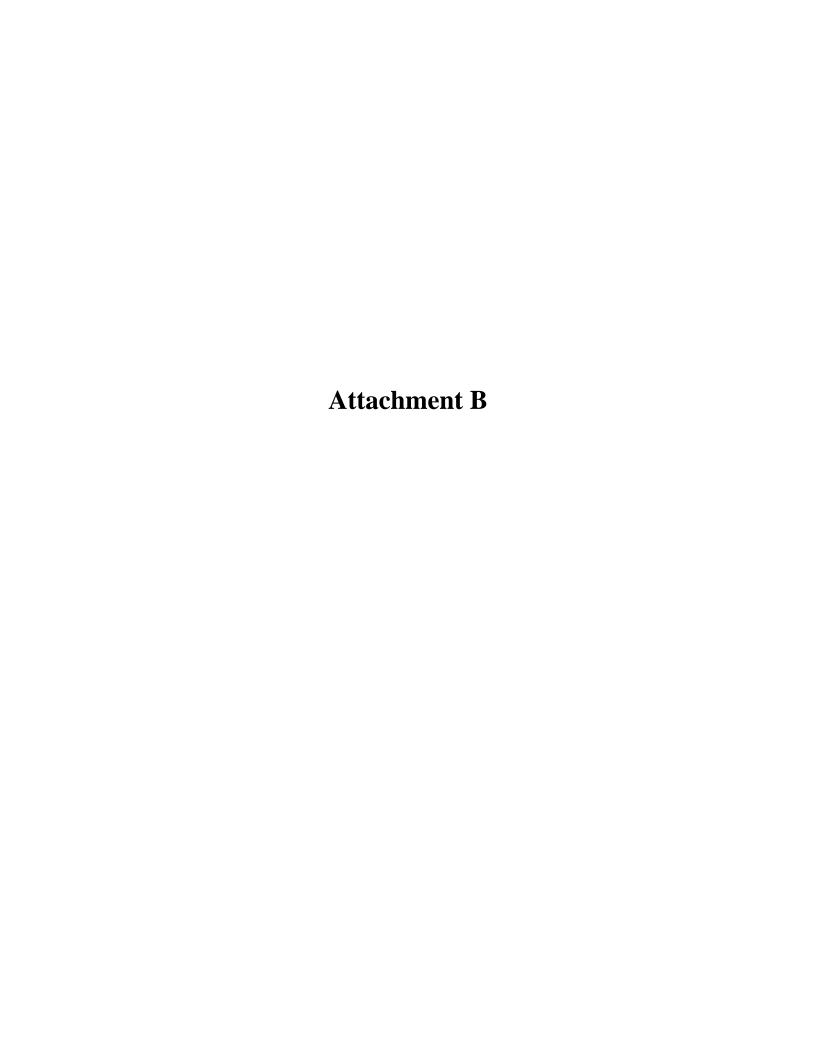
#### Method Summary:

#### Aqueous:

The aqueous samples are extracted using a C18 column and a solid phase extraction technique. The samples are analyzed by HPLC using UV detection. The instrument is calibrated with a three point calibration curve.

#### Soil:

Soil samples are extracted with aqueous acetonitrile. An aliquot of the extract is cleanup using a C18 column and a solid phase extraction technique. The extract is concentrated and analyzed by HPLC using UV detection. The instrument in calibrated with a five or six point calibration curve.



#### STRATEGIC DIAGNOSTICS INC.

# EnviroGard™ Chlordane in Soil Test Kit 7311000, EPA Method 4041

#### **Intended Use**

The EnviroGard Chlordane in Soil Test Kit is a semi-quantitative enzyme immunoassay for the detection of Chlordane in soil. The Envirogard Chlordane in Soil Test Kit allows reliable and rapid screening for Chlordane at 20, 100 and 600 parts per billion (ppb) in soil. Samples can be screened with a 95% confidence of no false negatives at the specified action level.

#### **Test Principles**

The EnviroGard Chlordane in Soil Test Kit is based on the use of polyclonal antibodies that bind either Chlordane or Chlordane-Enzyme Conjugate. These antibodies are immobilized on the walls of the test tubes. When Chlordane is present in the sample, it competes with the Chlordane-Enzyme Conjugate for a limited number of Chlordane binding sites on the immobilized antibodies.

- A sample containing Chlordane is added to a test tube containing Assay Diluent. Chlordane-Enzyme Conjugate is then added to the test tube. The Chlordane-Enzyme Conjugate competes with the Chlordane for the antibody binding sites.
- After the incubation, the unbound molecules are washed away.
- A clear solution of chromogenic Substrate is then added to the test tube. In the presence of bound Chlordane-Enzyme Conjugate, the clear Substrate is converted to a blue color. One enzyme molecule can convert many Substrate molecules.

Since every test tube has the same number of antibody binding sites and receives the same number of Chlordane-Enzyme Conjugate molecules, a sample that contains a low concentration of Chlordane allows the antibody to bind many Chlordane-Enzyme Conjugate molecules. Therefore, a low concentration of Chlordane produces a dark blue solution. Conversely, a high concentration of Chlordane allows fewer Chlordane-Enzyme Conjugate molecules to be bound by the antibodies, resulting in a lighter blue solution.

**NOTE:** Color development is inversely proportional to the Chlordane concentration.

Darker color = lower concentration Lighter color = higher concentration

The determination of the Chlordane level in an unknown sample is interpreted relative to the assay calibrator levels using visual comparison or by reading with a spectrophotometer.

#### **Performance Characteristics**

The EnviroGard Chlordane in Soil Test Kit will not differentiate between Chlordane and other structurally similar compounds, but will detect their presence to differing degrees. The following table shows a number of compounds and the approximate concentration of each required to yield a positive result at the low calibrator (Method Detection Limit or MDL). It also shows the concentration required to inhibit one-half of the color developed by the Negative Control (IC50). Concentration is in parts per billion (ppb) in soil.

Compound	MDL	IC50
Chlordane	20 ppb	100 ppb
Endrin	4.4 ppb	22 ppb
Endosulfan I	7.2 ppb	36 ppb
Endosulfan II	5.6 ppb	28 ppb
Dieldrin	8.4 ppb	42 ppb
Heptachlor	6.8 ppb	34 ppb
Aldrin	23.2 ppb	116 ppb
Toxaphene	560 ppb	2,800 ppb
Gamma-BHC *	920 ppb	4,600 ppb
Alpha- BHC	3,800 ppb	19,000 ppb
Delta-BHC	8,000 ppb	40,000 ppb

<sup>\*</sup>Gamma-BHC is Lindane

#### **Precautions**

- Treat Chlordane, solutions that contain Chlordane, and potentially contaminated soil samples as hazardous materials.
- Use gloves, proper protective clothing, and methods to contain and handle hazardous material where appropriate.
- Store all test kit components at 4°C to 8°C (39°F to 46°F) when not in use. Storage at ambient temperature (18°C to 27°C or 64°F to 81°F) on the day of use is acceptable.
- Do not freeze test kit components or expose them to temperatures greater than 37°C (99°F).
- Allow all reagents to reach ambient temperature (18°C to 27°C or 64°F to 81°F) before beginning the test.
  This typically requires at <u>least</u> 1 hour to warm from recommended storage conditions.
- Do not use test kit components after the expiration date.
- Do not use reagents or test tubes from one test kit with reagents or test tubes from a different test kit.
- Use approved methodologies to confirm any positive results.
- Soils obtained from areas adjacent to standing water, surface soils collected during or immediately after rain or snow, or any soils with relatively high amounts of water (≥ 30% by weight) should be dried before testing. Contact technical service for recommended methods.
- Distribution of Chlordane in soils may be highly variable. This variability can be minimized through use of a composite sampling technique. Adequate sample number and distribution are the responsibility of the analyst.
- Portable spectrophotometer battery must be fully charged prior to use. It will not run directly off of AC current.
- Do not expose substrate to direct sunlight.
- Do not dilute or adulterate test reagents or use samples not called for in the test procedure; this may give inaccurate results.

• Tightly recap the Chlordane calibrator vials to prevent evaporative loss.

#### **Materials Provided**

- 20 Antibody coated test tubes, 12 X 75 mm
- 1 vial of Assay Diluent
- 1 vial of Negative Control (Methanol)
- 1 vial of 20 ppb Chlordane Calibrator in methanol (actual concentration is 10 ppb)
- 1 vial of 100 ppb Chlordane Calibrator in methanol (actual concentration is 50 ppb)
- 1 vial of 600 ppb Chlordane Calibrator in methanol (actual concentration is 300 ppb)
- 1 vial of Chlordane-Enzyme Conjugate
- 1 vial of Substrate
- 1 vial of Stop Solution
- 1 20-Place test tube rack
- 22 Pink (50-250 μL) Gilson Microman® positive displacement pipette tips

**NOTE:** To determine the Chlordane concentration in soil, a dilution factor of **2** has been calculated in. This factor of **2** is derived from the extraction of the 10 grams of soil with 20 mL of solvent.

# **Materials Required and Ordered Separately**

See "Ordering Information" for the appropriate catalogue numbers.

#### **SDI Sample Extraction Kit**

Use this kit for the extraction of Chlordane from soil samples. This kit contains enough devices to process 12 samples:

- 12 Extraction jars with screw caps, (each bottle contains 3 stainless steel mixing beads)
- 12 Filter modules (tops and bottoms)
- 12 Ampule crackers
- 12 Wooden spatulas
- 12 Weigh Canoes
- 12 Disposable Transfer Pipettes
- 12 Ampules containing 20 mL each of 90% Methanol

#### Ensys/Envirogard Field Soil Lab (Accessory Kit)

Accessory equipment may be rented or purchased from Strategic Diagnostics. See "Ordering Information" for the appropriate catalogue numbers.

The accessory kit contains the following items:

- Gilson M-25 Microman Positive Displacement Pipettor
- Eppendorf<sup>TM</sup> Repeater<sup>®</sup> Pipettor
- Electronic timer
- Polystyrene test tubes, 12 x 75 mm (for blanking spectrophotometer)
- Portable balance capable of weighing 10 g
- Wash bottle
- 5.0 mL Combitips® for the Repeater pipettor -for 0.1 mL to 0.5 mL dispensing volumes (3)
- 12.5 mL Combitips<sup>®</sup> for the Repeater pipettor -for 0.25 mL to 1.250 mL dispensing volumes (6)
- 50.0 mL Combitip<sup>®</sup> for the Repeater pipettor (with adapter)-for 1.0 mL to 5.0 mL dispensing volumes (1)
- Thirty position foam racks (2)
- Artel differential photometer allows you to measure results in the form of optical density values. These values can be used for objective record keeping and quality assurance. It is included in the Ensys/Envirogard Field Soil Lab.

**NOTE:** Order replacement Combitips<sup>®</sup> and positive displacement tips separately. See the "Ordering Information" section.

## **Materials Required but Not Provided**

- Protective clothing (e.g., latex gloves)
- Absorbent paper for blotting test tubes
- Liquid and solid waste containers
- Tap or distilled water for test tube washes
- Marking pen
- Calculator (optional)

### **Suggestions for Pipettor Use**

- Practice using both pipettors (positive displacement and Repeater pipettor) with water and extra tips before you analyze your samples.
- Use a new tip each time you use the Repeater pipettor to pipette a different reagent to avoid reagent cross-contamination. Label three 12.5 mL tips "Diluent", "Substrate" and "Stop," and one 5.0 mL tip "Conjugate". Tips can be rinsed thoroughly in clean water and reused. By using the same tip to dispense the same reagent each time, you can avoid reagent cross contamination.
- Draw the desired reagent volume into the Repeater pipettor and dispense one portion of the reagent back into the container to properly engage the ratchet mechanism. If you do not do this, the first volume delivered may be inaccurate.
- To add reagents using the Repeater pipettor, pipette down the side of the test tube just below the rim.
- When adding samples and calibrators using the positive displacement pipettor, always pipette below the liquid level. Pipet liquid up and down in tip to ensure complete volume transfer.
- The carryover volume of the positive displacement tips is minimal, but may affect results if you are going from a high to low Chlordane concentration. Use a new pipettor tip each time you pipette a new unknown.

#### **Assay Procedure**

#### **Collect/Store the Sample**

The following steps explain how to properly collect and store your samples.

- 1. Collect soil in appropriately-sized and labeled containers.
- 2. Take care to remove excess twigs, organic matter, and rocks or pebbles from the soil sample to be tested.
- 3. Soils obtained from areas adjacent to standing water, surface soils collected during or immediately after rain or snow, or any soils with relatively high amounts of water (≥ 30% by weight) should be dried before testing. Contact Technical Services for recommended methods.
- 4. Store soil samples at 4°C (39°F).

#### Prepare the Sample/Extract the Soil

- 1. Please follow the instructions from the SDI Sample Extraction Kit to prepare the soil extract before the assay.
- 2. **20 mL** of **90 % Methanol** will be used to extract Chlordane residues from a **10 g** soil sample.

#### **Perform the Test**

**NOTE:** Allow all test kit components to come to ambient temperature (at least 1 hour) before use.

1. Remove the Antibody coated test tubes from the foil pouch and label as follows (no more than 20 tubes/assay):

Tube Label	Tube Contents
NC	Negative Control
C1	20 ppb Calibrator
C2	100 ppb Calibrator
C3	600 ppb Calibrator
S1	Sample 1
S2	Sample 2
Etc.	_

- \* To conserve reagents not all calibrators need to be run but you should always use the negative control and the relevant calibrators for your action level. You do not have to perform the assay in duplicate; however, doing so increases the accuracy of the test.
- 2. Place the test tubes in the test tube rack pressing down firmly on each tube so that they are secured.

**CAUTION:** Do not "snap" the test tubes into the rack as this may result in a cracked tube.

- Position the Repeater pipettor at Setting 1 and use the 12.5 mL syringe to add 250 μL of Assay Diluent to all test tubes.
- Attach a clean pink pipette tip to the positive displacement pipet and adjust the dial to "050" to pipet 50 μL.
- 5. Use the positive displacement pipettor to add the Negative Control (methanol), the Chlordane Calibrators, and the Sample extracts to the appropriate test tubes. Use a clean pipette tip for each addition.

**CAUTION:** Replace the cap(s) on the calibrator vials immediately after use to minimize evaporation.

- 6. Let tubes incubate for 15 minutes.
- 7. Attach the **5.0 mL** Combitip labeled "Conjugate" to the Repeater pipettor and adjust the dial to **2** to add **200 µL** of Chlordane-Enzyme Conjugate to each tube.
- 8. Gently shake the test tube rack to mix to 10 to 15 seconds. Leave the tubes undisturbed for **5 minutes**.
- 9. Vigorously shake out the test tube contents into a sink or suitable container. Fill the test tubes to overflowing with cool tap or distilled water, then decant and vigorously shake out the remaining water.

Repeat this wash step three more times, being certain to shake out as much water as possible on each wash. After the final wash, remove as much water as possible by tapping the inverted tubes on absorbent paper.

- 10. Position the Repeater pipettor at Setting 2 and use a clean 12.5 mL Combitip to add 500 μL of Substrate to all test tubes. Briefly shake the test tube rack to mix, then incubate for 3 minutes.
- 11. If a blue color does not develop in the negative control test tube within 3 minutes after you add the substrate solution, the test is invalid and you must repeat the entire test.
- 12. Position the Repeater pipettor at Setting 2 and use a 12.5 mL syringe to add 500 μL of Stop Solution to all test tubes. This will turn the color from blue to yellow.

WARNING: Stop solution is 1.0 N Hydrochloric acid. Handle carefully.

#### **Results Interpretation**

You can either interpret the results visually within 3 minutes after adding the Substrate to each test tube, or you can perform a more precise analysis with a photometer after you add the Stop Solution.

#### **Visual Interpretation**

After you add the Substrate, wait 3 minutes then mix the test tubes by shaking them for a few seconds. Compare the sample test tube to the calibrator test tubes against a white background. The test tube rack in the kit is well suited for this purpose.

- If a sample test tube contains *more* color than the calibrator test tube, the sample contains Chlordane at a concentration *lower* than the calibrator.
- If a sample test tube contains *less* color than the calibrator test tube, the sample may contain Chlordane at a concentration *greater* than the calibrator.
- If the sample test tube contains color that is between the calibrator test tubes, the sample contains Chlordane at a concentration between the calibrator concentrations.
- If a sample test tube contains approximately the same amount of color as the calibrator test tube, the sample contains Chlordane at a concentration approximately equal to the calibrator.
- If the sample test tube contains less color than the 600 ppb Calibrator test tube, you may dilute a fraction of the soil extract in 90 % methanol (for example, 1:10) and perform the assay again. To determine the concentration of the diluted extract multiply the result by the dilution factor. (Go to "Photometric Interpretation" for further details.)

#### **Photometric Interpretation**

**NOTE:** After you add Stop Solution to the test tubes, results should be read within 30 minutes.

- 1. Dry the outside of all assay tubes prior to photometric analysis.
- 2. Place a blank test tube (from the EnSys/EnviroGard Field Accessory Kit) containing 1.5 mL of deionized

water or equivalent in the left (reference) well of the differential photometer.

**NOTE:** Be careful not to mix plastic blanking tubes with the antibody tubes from the foil pouch in the test kit.

- 3. Place the Negative Control test tube into the right (sample) well. Record the optical density (OD) of the Negative Control.
- 4. Remove the Negative Control test tube and replace it with the 20 ppb Calibrator test tube to reactivate the photometer. Record the result. Repeat this step to determine the OD for each of the remaining calibrators and for each sample.

Compare the OD of each sample to the OD of each calibrator:

- If a sample OD is *equal* to the OD of a calibrator, the sample contains Chlordane at a concentration *approximately equal* to the calibrator.
- If a sample OD is *greater* than a calibrator OD, the sample contains *less* Chlordane than the calibrator.
- If a sample OD is *lower* than a calibrator OD, the sample may contain *more* Chlordane than that calibrator.
- If an assay result indicates that a soil sample contains greater than 600 ppb total Chlordane, but you need more specific information, the soil extract may be diluted 1:10 in 90% methanol, and assayed again. You must then multiply the results of the re-assay by 10 to determine the approximate sample extract concentration.

**NOTE:** If you know in advance that the "action level" of interest is greater than 600 ppb total Chlordane in soil, the assay may be modified to pinpoint that particular concentration.

#### Example Data

Actual OD values will vary. This data is for demonstration purposes only.

Tube	OD	Interpretation
NC	0.90	
C1 (20 ppb)	0.65	
C2 (100 ppb)	0.49	
C3 (600 ppb)	0.35	
S1	0.58	>20 ppb < 100 ppb
S2	0.16	> 600 ppb

#### Limitations of the Procedure

Soil sampling error may significantly affect testing reliability. The distribution of pesticides in different soils can be extremely heterogeneous. Soils should be dried and homogenized before analysis by any method. Split samples (i.e. for GC and immunoassay) should always derive from the same homogenate.

# **Ordering Information**

Description	Catalogue Number		
EnviroGard Chlordane in Soil Test Kit	7311000		
SDI Sample Extraction Kit (with methanol in ampules)	73110EA		
Ensys/Envirogard Field Soil Lab (Accessory Kit)**	6050400		
Differential Photometer (110V)	6000001		
Differential Photometer (220V)	6000002		
5 mL Combitip for Repeating Pipette (1 each)	6005200		
12.5 mL Combitip for Repeating Pipette (1 each)	A00009		
50 mL Combitip for Repeating Pipette (1 each)	6005600		
Gilson Microman Positive Displacement Pipette Tips- yellow (200/bag)	6030500		
Gilson Microman Positive Displacement Pipette Tips – pink (200/bag)	6030600		
Ensys/Envirogard Field Soil Lab (Accessory Kit) Rental	6997020		
** To obtain part numbers and pricing for individual items in the Field Soil Lab contact SDI at the number below.			

## **Ordering/Technical Assistance**

Should you have and questions regarding this procedure prior to analysis contact Technical Service to avoid costly mistakes.

To Place an Order or Receive Technical Assistance, please call Strategic Diagnostics Inc. at:

Call toll-free 800-544-8881

Or 302-456-6789 Phone 302-456-6782 Fax

web site: <a href="www.sdix.com">www.sdix.com</a>
e-mail: <a href="techservice@sdix.com">techservice@sdix.com</a>

#### **General Limited Warranty**

SDI's products are manufactured under strict quality control guidelines and are warranted to be free from defects in materials and workmanship. New instruments and related non-expendable items are warranted for one year from date of shipment against defective materials or workmanship under normal use and service.

Warranty obligation is limited to repair or replacement of the defective product or to refund of the purchase price, at the discretion of SDI. Other warranties, express or implied, are disclaimed. SDI's liability under any warranty claim shall not exceed the refund of the purchase price paid by the customer. Under no circumstances shall SDI be liable for special, indirect or consequential damages.

#### **Safety**

To receive complete safety information on this product, visit our web site at www.sdix.com.

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# Operation of the Repeater Pipet

#### To Set or Adjust Volume

To determine the pipetting volume, the dial setting (1-5) is multiplied by the minimum pipetting volume of the tip (indicated on the side of the Combitip, e.g. 1~100 uL.)

#### To Assemble Pipet Tip

Slide filling lever down until it stops. Then raise the locking clamp and insert the tip until it clicks into position. Be sure the tip plunger is fully inserted into the barrel before lowering the locking clamp to affix the tip in place.

#### To Fill Tip

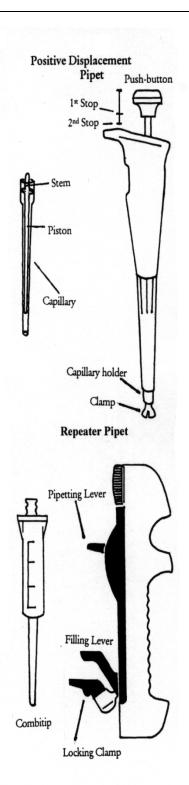
With tip mounted in position on pipet, immerse end of tip into solution. Slide filling lever upward slowly. Combitip will fill with liquid.

#### To Dispense Sample

Check the volume selection dial to ensure pipetting volume. Place tip inside test tube so that tip touches the inner wall of tube. Completely depress the pipetting lever to deliver sample. NOTE: Dispense one portion of reagent back into the container to engage the ratchet mechanism and ensure accuracy.

#### To Eject Tip

Empty tip of any remaining solution into appropriate container by pushing filling lever down. Raise locking clamp upward, and remove the Combitip.



# Operation of the Positive Displacement Pipet

#### To Set or Adjust Volume

Turn lower part of push-button to adjust volume up or down. See kit instructions for appropriate setting.

#### To Assemble Pipet Tip

Press push button to 2<sup>nd</sup> stop to open clamp (see diagram, this is as far as push button will go down.) Select piston and slide stem fully into clamp. Slide mounted piston into capillary. Gently push capillary until it snaps onto capillary holder.

#### To Withdraw Sample

With tip mounted in position on pipet, press push-button to 1st stop and hold it. (If you push beyond the 1st stop tip will eject.) Place tip at bottom of liquid sample and slowly release push-button to withdraw measured sample. Ensure that no air bubbles exist in the pipette tip. If bubbles exist, dispense sample and re-withdraw.

#### To Dispense Sample

Wipe any liquid from outside of capillary taking care not to touch orifice. Place tip into dispensing vessel (immersing end of the tip if vessel contains liquid) and slowly press push-button to 1st stop. Pipet liquid up and down in tip to ensure complete transfer. Hold push-button at 1st stop when removing tip from vessel.

#### To Eject Tip

Press push-button to second stop. Tip (capillary and piston) is ejected.

NOTE: When using yellow tips on the positive displacement pipet, pipetting volumes range from 5-25 uL. (i.e. Pipet set on 2-5-0 will pipet 25 uL.)

When using pink tips on the positive displacement pipet, pipetting volumes range from 50-250 uL.

(i.e. Pipet set on 2-5-0 will pipet 250 uL.)

# **Appendix D**

# Community Air Monitoring Plan Addendum



# Community Air Monitoring Plan Bianchi/Weiss Greenhouses Site (1-52-209) East Patchogue, New York

#### Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



#### Prepared by

EA Engineering, P.C., and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211 (315) 431-4610

and

Louis Berger and Associates, P.C. 412 Mount Kemble Avenue Morristown, New Jersey 07960 (973) 407-1000

> October 2008 Revision: FINAL EA Project No. 14368.33

# Community Air Monitoring Plan Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

#### Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



#### *Prepared by*

EA Engineering, P.C. and Its Affiliate EA Science and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, New York 13211-2158 (315) 431-4610

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EA Engineering, P.C.	
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Robert Casey, Site Manager	Date
EA Science and Technology	
	Oatabar 2009

October 2008 Revision: FINAL EA Project No.: 14368.33

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#### 1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform a Remedial Investigation (RI)/Feasibility Study (FS) at the Former Bianchi/Weiss Greenhouses site (NYSDEC Site No.1-52-209).

The Work Assignment will be conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-33). This Community Air Monitoring Plan (CAMP) was prepared as a requirement of the RI/FS Work Plan. The elements of this CAMP were prepared in accordance with the NYSDEC *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2002)<sup>1</sup>.

#### 1.1 SITE DESCRIPTION

The subject site is located at 25 Orchard Road, in East Patchogue, Suffolk County, New York. The property is a square-shaped parcel that has main access to the site on Orchard Road. An alternative access road exists on Hedges Road to the north of the property, but is currently overgrown with vegetation. Residential properties are located to the north, south, east, and west of the property.

#### 1.2 SITE BACKGROUND

The subject site has been operated as a nursery and commercial greenhouses from 1929 until recently. The site was owned by the Bianchi family and Bianchi Orchards from 1929 to 1992. The Weiss family and Kirk Weiss Greenhouses purchased the site in 1992. It was recently purchased by the Henron Development Corporation to be developed into an 11 home subdivision. Currently, site properties are in various stages of demolition. In 2005, the Town of Brookhaven Environmental Department required environmental sampling due to the historical use of the property. Surface and subsurface soil samples revealed elevated levels of pesticides and metals.

#### 1.3 MONITORING

Real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the work area will be necessary. Monitoring activities will consist of a combination of continuous and periodic monitoring, which will be performed dependent upon the type of activity being conducted at the site, as discussed below.

<sup>&</sup>lt;sup>1</sup> NYSDEC. 2002. Draft DER-10 Technical Guidance for Site Investigation and Remediation. December.

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#### 1.3.1 Continuous Air Monitoring

Continuous monitoring for VOCs and particulates will be required for all ground intrusive activities associated with the former Bianch/Weiss Greenhouses Work Assignment. Ground intrusive activities are anticipated to include the removal of on-site stockpiles, site re-grading, and the installation of soil borings and monitoring wells.

VOCs will be monitored at the downwind perimeter of the immediate work area on a continuous basis. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using a MiniRAE 2000 or equivalent, which is appropriate to measure the types of contaminants known or suspected to be present at the site. The MiniRAE 2000 will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The MiniRAE 2000 is capable of calculating 15-minute running average concentrations, which will be compared to the levels specified in Section 1.4.1.

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the work area at temporary particulate monitoring stations. The particulate monitoring will be performed using a Thermo MIE pDR-1000 DataRam or equivalent. The Thermo MIE pDR-1000 DataRam is real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size [PM-10] and capable of integrating over a period of 15 minutes for comparison to the airborne particulate action level. The Thermo MIE pDR is equipped with an audible alarm to indicate exceedance of the action level. In addition to using the Thermo MIE pDR-1000 DataRam, fugitive dust migration will be visually assessed during all work activities. If particulate concentrations are recorded at higher or equivalent concentrations at the upwind station during investigation activities then continuous air monitoring will be discontinued, as approved by NYSDEC representative.

#### 1.3.2 Periodic Air Monitoring

Periodic monitoring for VOCs will be required during non-intrusive activities associated with the former Bianchi/Weiss Greenhouses RI/FS Work Assignment. Non-intrusive activities are anticipated to include the collection of groundwater samples from monitoring wells and the collection of surface soil samples. Periodic monitoring during sample collection will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap, monitoring during well bailing/purging, monitoring after digging up soil samples, and taking a reading prior to leaving a sample location.

#### 1.4 ACTION LEVELS AND RESPONSE

This subsection identifies the action levels and corresponding responses for concentrations of VOCs and particulates detected during the field activities associated with the RI/FS for the former Bianchi/Weiss Greenhouses Site.

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#### 1.4.1 Volatile Organic Compounds

If the ambient air concentration of total organic vapors at the downwind perimeter of the work area exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background, but less than 25 ppm, work activities will be stopped, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 ft downwind of the work zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 ft), is below 5 ppm over background for the 15-minute average.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings will be recorded and be available for NYSDEC and New York State Department of Health (NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

#### 1.4.2 Particulates

The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) for inert or nuisance Total Dust is 15 mg/m $^3$ . The OSHA PEL for inert or nuisance Respirable Dust is 5 mg/m $^3$ . Both of these values are based on an 8-hour day time weighted average exposure. The MIE Personal DataRAM Aerosol Monitor (DataRAM) has a measurement range from 0.001 to 399.9 mg/m $^3$  and measures particle sizes from 0.1 to 10.0  $\mu$ m. Particulates with sizes of 10.0  $\mu$ m or less are respirable.

If the downwind PM-10 particulate level is 5 milligrams per cubic meter (mg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 5 mg/m³ above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are still greater than 5 mg/m<sup>3</sup> above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 5 mg/m<sup>3</sup> of the upwind level and in preventing visible dust migration.

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Similar to the VOC readings, all particulate readings will be recorded and be available for NYSDEC and NYSDOH personnel to review upon request.

# Appendix E

## Soil Management Plan Addendum



### Soil Management Plan Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233



Prepared by

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## Soil Management Plan Bianchi/Weiss Greenhouses (1-52-209) East Patchogue, New York

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#### 1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform a Remedial Investigation (RI)/Feasibility Study (FS) at the Former Bianchi/Weiss Greenhouses site (NYSDEC Site No.1-52-209). The Work Assignment is being conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-33).

This Soil Management Plan (SMP) was prepared as a component of the RI/FS Work Plan to address handling of soil during the interim remedial measures (IRM) and RI activities proposed for the site. The elements of this SMP describe the protocol and procedures to be followed to protect human health and the environment during all field activities that requires the management and contact with both on-site and off-site soil. EA and its teaming partner The Louis Berger Group, P.C. (Berger), will be implementing and managing all aspects of the SMP.

#### 1.1 SITE DESCRIPTION

The subject site is located at 25 Orchard Road, in East Patchogue, Suffolk County, New York. The property is a square-shaped parcel that has main access to the site on Orchard Road. An alternative access road exists on Hedges Road to the north of the property, but is currently overgrown with vegetation. Residential properties are located to the north, south, east, and west of the property.

#### 1.2 SITE BACKGROUND

The subject site has been operated as a nursery and commercial greenhouses from 1929 until recently. The site was owned by the Bianchi family and Bianchi Orchards from 1929 to 1992. The Weiss family and Kirk Weiss Greenhouses purchased the site in 1992. It was recently purchased by the Henron Development Corporation to be developed into an 11 home subdivision. Currently, the site properties are in various stages of demolition. In 2005, the Town of Brookhaven Environmental Department required environmental sampling due to the historical use of the property. Surface and subsurface soil samples revealed elevated levels of pesticides and metals.

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#### 2. INTERIM REMEDIAL MEASURES AND REMEDIAL INVESTIGATION

The IRM and RI activities at the Bianchi/Weiss Greenhouses site, covered under this SMP, include the following tasks:

- Sampling, removal, and disposal of stockpiled demolition debris and soil.
- A limited excavation and disposal of soil within the on-site subsurface drainage structures, and endpoint confirmatory sampling.
- Management and disposal of the excavated material.
- Improvement of the existing on-site conditions, and site grading and resurfacing to prevent soil and surface water runoff to migrate off-site.
- Field investigation activities that include the evaluation of on-site soil and the evaluation of on-site/off-site groundwater.

A brief description of these activities is provided in the following subsections. All sampling and analytical protocols required for off-site disposal will be managed and performed by EA/Berger. All excavation and management of site related demolition debris and soil will be managed by a qualified subcontractor.

#### 2.1 EXISTING STOCKPILED SOIL AND DEMOLITION DEBRIS

Historical demolition activities at the site generated two stockpiles of a mixture of demolition debris, including bricks, concrete, piping, and soil. The stockpiles are currently located on the northwest portion of the site near the Orchard Road access gate. EA/Berger will perform sampling of the material to identify its characteristics for proper off-site disposal or use. Six toxicity characteristic leaching procedure (TCLP) samples will be collected and analyzed to complete the characterization. Due to the large amount of concrete debris, three of the six TCLP samples will be composite concrete chip samples collected from various concrete pieces located within the stockpiles. The remaining three samples will consist of composited soil from the stockpiles. TCLP analysis will be performed using United States Environmental Protection Agency (USEPA) Method 1311. No quality assurance/quality control (QA/QC) samples will be collected for TCLP analysis.

Based on the analytical results from the TCLP sampling the subcontractor will load, haul, and dispose of the stockpiled material at a NYSDEC approved off-site facility. It is estimated for budget purposes that approximately 120 cubic yards (yd³) of demolition debris and soil are stockpiled on-site. If analysis distinguishes the stockpile material as common construction debris

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and non-hazardous, then Henron Development Corporation will be offered the right of first refusal to handle the disposal and/or use of the stockpiled material.

Due to the noted public interest in the removal of this material, this task item will be the first priority under the IRM.

#### 2.2 EXCAVATION OF ON-SITE SUBSURFACE DRAINAGE STRUCTURES

Historical sampling at the sites nine subsurface drainage structures revealed the presence of Semi-volatile organic compounds (SVOCs), metals, and chlordane above applicable NYSDEC standards, criteria, and guidance values. Based on the results of the previous investigation and the observation made during the scoping session and site visit a limited excavation of sediment/soil within the nine subsurface drainage structures (CP-1, CP-2, DW-1, DW-2, DW-3, DW-4, DB, LP-1, and LP-2) will be completed. In addition, sediment, soil, and/or water samples at two stormwater drainage structures and an unknown subsurface structure located northeast of the former generator building will be collected.

Soil will be excavated until visually clean or a minimum of 1 ft of material is removed at each structure, all material will be placed in a lined roll-off staged on-site. Endpoint sampling will be performed at the base of each excavation. Excavated material removed from the subsurface drainage structures will be stored in a lined, covered roll-off to prevent the migration of potentially contaminated sediment/soil on the site. Roll-off units used to temporarily store material shall be water tight. A cover shall be placed over the units to prevent precipitation from contacting the stored material. Proper storage, handling, and stockpiling of on-site soil is presented in this SMP.

All subsurface drainage structure samples will be analyzed for volatile organic compounds (VOCs) by USEPA Method 8260B, SVOCs by US EPA Method 8270C, target analyte list (TAL) metals by USEPA Method 6010, and pesticides by USEPA Method 8081A in accordance with the NYSDEC Analytical Services Protocol. A composite TCLP sample will be collected from the stockpiled material for proper disposal at an off-site location. TCLP analysis will be performed using USEPA Method 1311.

Prior to the excavations, any notable conduits will be evaluated to determine the direction and subsequent discharge area. Based on the results of the endpoint samples, additional excavation will be completed as necessary. The drainage structures shall be covered for safety upon completion of the excavations.

EA/Berger will collect a composite TCLP sample from the excavated material for analysis and proper disposal at an approved off-site facility. Upon receipt of analytical results and approval from an off-site disposal facility a subcontractor will arrange for pick-up and transport of the excavated material.

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#### 2.3 SITE GRADING, FILLING, AND RESURFACING

Upon completion of the removal of on-site stockpiles and the excavation and sampling of subsurface drainage structures, the contracted subcontractor will provide site grading and general site resurfacing to mitigate the potential migration of site surface soil along the perimeter of the property as well as filling the open pits, trenches, and holes that are an immediate safety concern.

Site control measure such as silt fencing, hay bales, and soil placement/movement will be included in the services for subcontracting purposes. In addition, in areas of the site where re-grading is required, mulching will be performed to control dust migration. All dust monitoring activities to be completed during the site grading, filling, and resurfacing activities will be done in accordance with NYSDEC TAGM 4031. EA/Berger will be responsible for all dust monitoring activities including daily set-up, periodic station inspections, and daily data management.

A Community Air Monitoring Plan (CAMP) has been developed to monitor particulates during all intrusive field activities and is provided in Appendix D of the RI/FS work plan. In the event that dust control exceeds the thresholds defined in the CAMP, then water methods will be used to suppress dust migration from the site.

#### 2.4 FIELD INVESTIGATION ACTIVITIES

EA/Berger will implement an on-site soil sampling program to delineate the nature and extent of impacts within the on-site soil, as well as evaluate the backfill material placed in the former location of the underground storage tanks (UST) and determine the toxicity of the on-site soil through field and laboratory analysis. In addition EA/Berger will oversee the installation of ten monitoring wells at both on-site and off-site locations.

All drill cuttings will be handled and disposed of in a manner that does not pose a threat to human health and the environment. Spoils and drill cuttings generated at off-site locations will be drummed and transported to the Bianchi/Weiss Greenhouses site for storage and eventual disposal. The drill cuttings and spoils generated during field investigation activities will be disposed of at a properly permitted treatment, storage, or disposal facility.

Representative composite samples of cuttings and spoils will be analyzed to determine if the materials are classified as a "hazardous waste" or a "solid waste" and to ensure proper classification, treatment, and disposal.

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#### 3. EXCAVATION AND DISPOSAL ACTIVITIES

#### 3.1 EXCAVATION ACTIVITIES

Because the levels of known soil contamination and concentrations will not be defined prior to the IRM activities, potential exposure risks exist for site workers, including construction or landscape maintenance workers. Therefore, Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) training will be required of construction workers whose activities disturb the soil.

The Bianchi/Weiss Greenhouses site has limited analytical information for the on-site soil; therefore grossly contaminated soil could be unexpectedly encountered during excavation. The subcontractor and/or the EA/Berger on-site representative are required to notify NYSDEC immediately when suspected contamination is discovered. All excavation or other work in the affected area will be stopped and the area will be cordoned off until an evaluation can be made.

#### 3.2 SOIL DISPOSAL

All off-site disposal of hazardous and non-hazardous waste will be in accordance with all applicable NYSDEC Resource Conservation and Recovery Act-C regulations and guidelines. Weight records of material disposed of at the approved disposal facility will be collected by the contractor and submitted to EA/Berger for inclusion in the IRM report. All waste transportation manifests will be signed by a NYSDEC representative or an EA/Berger representative on behalf of NYSDEC. Off-site facilities receiving soil from the site will be pre-approved by NYSDEC.

#### 3.2.1 Clean Soil

If on-site reuse is not practical or cost effective, clean waste soil will be disposed of in a Class III or other acceptable landfill. The landfill may require specific analytical testing to document that chemical concentrations do not exceed their waste acceptance criteria. All sampling and analytical testing will be managed by EA/Berger.

#### 3.2.2 Non-Hazardous Soil

Non-hazardous contaminated soil will be disposed of in a Class II or other acceptable off-site treatment, storage, or disposal facility, depending on the acceptance criteria of the facility. The off-site disposal facility may request or require additional analytical testing of the soil to document that chemical concentrations do not exceed their waste acceptance criteria. The contractor will notify EA/Berger of any additional analytical testing requirements or requests from the off-site facility. Additional sampling and analytical testing will be managed by EA/Berger.

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#### 3.2.3 Hazardous Soil

If analytical results indicate that the soil/debris is considered a listed hazardous waste, it will be transported by a licensed hauler and disposed of at a permitted off-site treatment, storage, or disposal facility. The off-site disposal facility may request or require additional analytical testing of the soil to document that chemical concentrations do not exceed their waste acceptance criteria. The subcontractor will notify EA/Berger of any additional analytical testing requirements or requests from the off-site facility. Additional sampling and analytical testing will be performed by EA/Berger.

#### 3.3 DECONTAMINATION PROCEDURES

The subcontractor will construct and place a decontamination pad near the access gate located on the western portion of the site. The decontamination pad will be equipped with a drain system and holding tank on a properly graded area that has no deleterious material. The decontamination pad will be constructed to prevent any migration or seepage of fluids and sediments into the ground, as well as have a curbed perimeter for splash and over spray protection. All earthwork equipment will be decontaminated prior to mobilizing to the Bianchi/Weiss Greenhouses site.

Decontamination will be completed on an as needed basis utilizing a steam pressure washer and water brought from an off-site location.

The subcontractor will maintain and clean the decontamination pad after daily use. The subcontractor will be required to dismantle, remove, and properly dispose of the pad following demobilization.

Prior to demobilizing any earthwork equipment (including excavation, hauling, grading, and compacting equipment) from the site, the subcontractor will decontaminate all equipment. In addition, all vehicles and other construction related equipment leaving the site will be decontaminated.

The subcontractor will be responsible for containerizing, staging, and transport of all generated decontamination water and sediment off-site for disposal at a NYSDEC approved licensed and permitted facility. All waste characterization sampling of decontamination fluids and sediments will be performed by EA/Berger based on the requirements of the off-site treatment, storage, or disposal facility.

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#### 4. MANAGEMENT OF DEMOLITION DEBRIS AND EXCAVATED SOIL

#### 4.1 EXISTING STOCKPILED DEMOLITION DEBRIS

All on-site demolition debris and soil stockpiles will be handled prior to any other proposed IRM activities. Wherever possible, broken concrete, bricks, soil, and other demolition debris stockpiles will not be relocated or expanded during loading and removal of the material.

Demolition debris and soil loaded into transport vehicles for off-site disposal will be covered with continuous heavy-duty plastic or another covering to minimize emissions to the atmosphere. The covering will be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate.

Additional procedures for the off-site transportation of soil generated during the implementation of IRM activities are provided in Section 5, Transportation Activities.

The anticipated facility for disposal and reprocessing of non-hazardous demolition debris and soil is All State Rubbish in Patchogue, New York, assuming that all permits and licenses are in satisfactory standing with NYSDEC. If the demolition debris and soil is determined to be hazardous, then the disposal facility will be selected based on the waste characterization analytical results.

#### 4.2 EXCAVATED SOIL

Excavated material removed from the subsurface drainage structures will be stored in a lined, covered roll-off to prevent the migration of potentially contaminated sediment/soil on the site. Roll-off units used to temporarily store material will be water tight. A cover will be placed over the units to prevent precipitation from contacting the stored material.

When transporting excavated soil for off-site disposal the roll-offs will be covered with continuous heavy duty plastic or other covering to minimize emissions to the atmosphere. The covering will be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate.

Additional procedures for the off-site transportation of soil generated during the implementation of IRM activities are provided in Section 5, Transportation Activities.

The anticipated off-site facility for disposal of non-hazardous excavated soil is All State Rubbish in Patchogue, New York. Off-site facilities receiving soil from the site will be pre-approved by NYSDEC. If the demolition debris and soil is determined to be hazardous, then the disposal facility will be selected based on the waste characterization analytical results.

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#### 5. TRANSPORTATION ACTIVITIES

All demolition debris, excavated soil, drill cuttings, and spoils sent off-site for disposal will be transported by a hauler licensed in accordance with 6 NYCRR Part 364, and if determined to be a hazardous waste, the waste shipment will be accompanied by a manifest in accordance with 6 NYCRR Part 372. The NYSDEC project manager and/or EA/Berger representative will be responsible for implementation and management of the transportation disposal activities, to ensure the wastes are properly disposed. Management of the transportation activities includes the issuance and collection of "trip tickets", collection of receipts for tipping fees, signing waste manifest, etc.

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#### 6. BEST MANAGEMENT PRACTICES

Construction Best Management Practices (BMPs) are management practices, operating procedures, or schedules of activities to control, reduce, or prevent discharge of pollutants from construction activities. A trailer with water tank and sprayers will be located on-site during all IRM activities to provide adequate dust suppression, as necessary. Excavation and soil and concrete debris handling activities will include the following BMPs:

#### 6.1 GENERAL

- Material or products will be stored in manufacturer's original containers.
- Where possible storage will be under a roof.
- Storage areas will be neat and orderly to facilitate inspection.
- Check all equipment for leaks and repair leaking equipment promptly.
- Perform major maintenance, repairs, and washing of equipment away from the excavation site.
- Protect storm drains using earth dikes, straw bales, sand bags, absorbent socks, or other controls to divert or trap and filter runoff, as well as storm drains that receive surface water runoff from the site.
- Designate a completely contained area away from storm drains for refueling and/or maintenance work that must be performed at the site.
- Clean up all spills and leaks using dry methods (absorbent materials/rags).
- Dry sweep dirt from paved surfaces for general cleanup.
- Train employees in using these BMPs.

#### 6.2 CONCRETE BREAKOUT

- Avoid creating excess dust when breaking and loading concrete. Prevent dust from entering waterways.
- Protect storm drains using earth dikes, straw bales, sand bags, absorbent socks, or other controls to divert or trap and filter runoff.
- Shovel or vacuum saw-cut slurry and remove from the site.

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• Remove contaminated broken pavement from the site promptly. Do not allow rainfall or runoff to contact contaminated broken concrete.

#### 6.3 EXCAVATION

- Schedule excavation work for dry weather periods when possible.
- Protect storm drains using earth dikes, straw bales, sand bags, absorbent socks, or other controls to divert or trap and filter runoff.
- Avoid over-application by water trucks for dust control.
- Cover stockpiles and other construction materials with heavy duty plastic. Protect from rainfall and prevent runoff with temporary roofs or heavy duty plastic and berms.