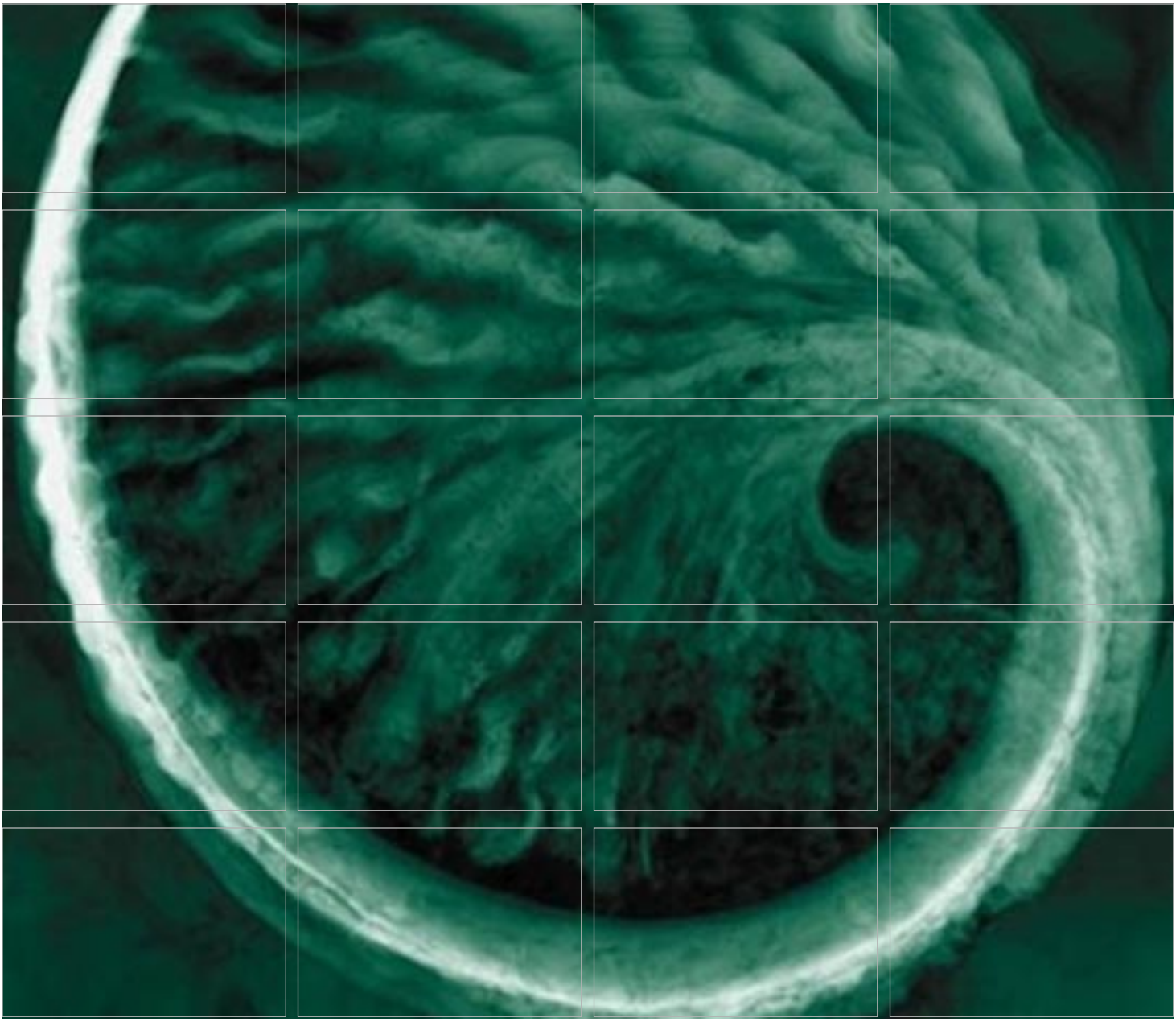


Cameron Engineering & Associates, LLP

Phase I Environmental Site Assessment

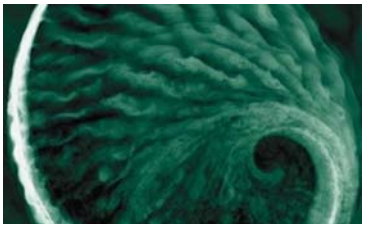
Suffolk County Surplus Land
Parcel C
Yaphank, New York 11980

8 November 2010

Delivering sustainable solutions in a more competitive world

ERM

Signatures



Cameron Engineering & Associates, LLP

Phase I Environmental Site Assessment

Suffolk County Surplus Land
Parcel C
Yaphank, New York 11980

ERM Project No. 0120809

8 November 2010

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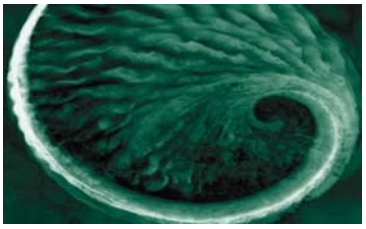

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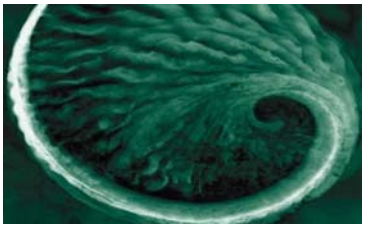
1. Introduction and Background



1.1 Purpose and Auditors

Environmental Resources Management (ERM) completed a Phase I Environmental Site Assessment (ESA) for 282± acres of surplus land located in Yaphank, New York. The ESA was performed to evaluate environmental conditions at the subject property as part of a Generic Environmental Impact Statement (GEIS).

For narrative purposes, the 282± acres of surplus land have been divided in four parcels. These are designated Parcels A, B, C and D. This ESA addresses a 30± acre portion that is designated Parcel C (the "site" or "subject property").

The site visit was performed on 31 August 2010 by Mr. Christopher O'Leary and Ms. Edyta Lagomarsini of ERM. ERM was not accompanied on the site visit, but previous information about the subject property was provided by public records reviewed with Ms. Lorinda Cafaro, a representative of the Suffolk County Department of Health Services (SCDHS) Environmental Division.

1.2 Scope of Work

This environmental assessment was conducted in conformance with the Cameron Engineering & Associates, LLP (Cameron) sub-consultant agreement dated 6 August 2010 and with the requirements of American Society for Testing and Materials (ASTM) Standard E 1527-05; Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and the standards for conducting all appropriate inquiries set forth by the United States Environmental Protection Agency (USEPA) at 40 Code of Federal Regulations (CFR) Part 312.

The ESA was conducted to evaluate and identify conditions indicative of releases and threatened releases of hazardous substances and petroleum products on, at, in or to the subject property. The Phase I ESA sought to gather information regarding: (1) current and past property users and occupancies; (2) current and past users of hazardous substances and petroleum products; (3) waste management and disposal activities that could have caused a release or threatened release of hazardous substances; (4) current and past corrective actions and response activities to address past and on-going releases of hazardous substances at the subject property; (5) engineering controls at the subject property; (6) institutional controls at the subject property; and (7) properties adjoining or located near the subject property that have environmental conditions that could have resulted in conditions indicative of releases or threatened releases of hazardous substances to the subject property.

The scope of this Phase I ESA included:

- An on-site inspection of the subject property to evaluate current conditions and identify areas of potential concern;
- A review of subject property and site area history through interviews and a review of various historical sources as referenced in Section 4 below;
- Observation of adjacent properties and the local area to evaluate the potential for adverse environmental impact to the subject property;

- Interviews/research of local city/county, tribal, state, and federal records, including contracting of Environmental Data Resources, Inc. (EDR) to identify regulatory listed sites as required in the regulatory records review section of the ASTM standard for Phase I ESAs, where available; and
- Interviews and/or requests for information from the User and subject property owner, as deemed appropriate by the Environmental Professional (EP).

Photographs of the site and surrounding areas were taken to document current conditions and are included in Appendix A. Copies of aerial photographs and topographic maps are presented in Appendix B. Prior environmental reports and the Phase I ESA Questionnaire are included in Appendix C. The EDR Database report can be found within Appendix D. The professional profiles of ERM personnel that worked on this Phase I ESA are included in Appendix E.

1.3 Limiting and Special Conditions

1.3.1 Limiting Conditions during the Site Visit

The weather during the site visit was sunny and the temperature approximately 91°F. An effort was made by two ERM assessors to transverse the subject property and to observe specific areas of interest identified based on a review of historical operations and aerial photographs of the subject property. Due to the size (30± acres) and the fact that a large majority of the subject property is densely wooded, not all of the subject property could be visually inspected during the site visit.

1.3.2 Significant Assumptions

No significant assumptions have been made.

1.3.3 Special Terms and Conditions

This Phase I assessment was conducted in conformance with the general terms and conditions of the 6 August 2010 sub-consultant agreement.

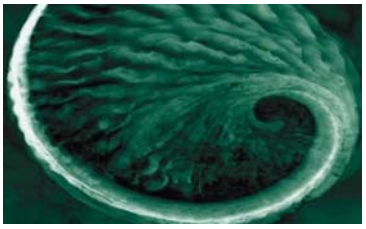
1.3.4 User Reliance

This report was prepared for the GEIS and Cameron for their sole use and reliance. Reliance on this report by any other person(s) or entity(ies) is strictly at their own risk, and ERM makes no warranties to person(s) or entity(ies) other than the GEIS and Cameron who will use the information provided in this report. If other person(s) or entity (ies) wish to rely upon this report (i.e. lenders, mortgagers, insurance companies, or other parties to a transaction), ERM will require that such parties agree to our contract terms in writing.

1.3.5 Deviations

There are no significant deviations from the ASTM-1527-05 standard.

2. Site Setting



2.1 Location

Parcel C is a 30± acre rectangular parcel of land is located in the Town of Brookhaven, New York, approximately 0.75-miles south of the Long Island Expressway (Interstate-495) and 0.6-miles west of Yaphank Avenue (County Road 21). The general location of the subject property and the physiographic features of the surrounding area are shown on Figure 1, developed from the United States Geological Survey (USGS) 7.5-minute quadrangle for Bellport, New York, dated 1967.

2.2 Neighboring Properties

Land use in the area of the subject property includes residential, agricultural, and commercial zoning. The adjacent properties and nearby land use, as observed by ERM at the time of the site inspection, is as follows:

- North: vacant undeveloped land and beyond by the Long Island Railroad (LIRR);
- South: The New York Pyrotechnics Product Corp (also known as the Grucci Firework Facility) to the southwest and vacant undeveloped land to the southeast;
- East: Suffolk County Minimal Correction Facility and the John J. Foley Nursing Facility; and
- West: undeveloped vacant land.

Based on ERM's observations, the closest residence is located to the east of the subject property beyond Yaphank Avenue. No visual evidence of environmental concerns was observed on immediately surrounding properties.

2.3 Topography and Hydrology

The subject property is located at an elevation ranging from approximately 45-95 feet above mean sea level, and is gently sloping to the south-southeast. The overall topographic trend of the surrounding area is also south-southeast towards Carmans River.

According to the EDR report, the subject property is not located within a wetland delineated area or the 100 or 500-year flood plains.

2.4 Soil, Geology, and Hydrogeology

The following information sources have been relied upon to summarize the environmental setting of the subject property:

- The USGS 7.5-minute Bellport quadrangle topographic maps; and
- The EDR report.

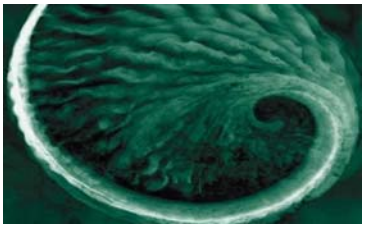
The rock stratigraphic unit at the subject property consists of Pleistocene Series/Quaternary System/Cenozoic Era. ERM obtained soil information from the *Geocheck ® Physical Source Summary,* included in the EDR Radius Map

Report. The surface soil component name is classified as variable and is Plymouth and Riverhead. Shallow soil in the vicinity of the subject property consists of loamy sand and sandy loam.

Based upon review of topographic maps and the Task 18 Memorandum – Smart Growth Impact Assessment, Suffolk County Comprehensive Water Resources Management Plan, local groundwater flows predominantly toward the south-southeast (towards Yaphank Creek and Carmans River) in the region. Groundwater underlying the subject property is encountered at approximately 16 to 66 feet below grade across Parcel C. Based on the predominant groundwater flow direction, residential properties to the east are located hydraulically cross-gradient of the subject property.

It is important to note that groundwater flow direction can be influenced locally and regionally by the presence of local wetland features, surface topography, recharge and discharge areas, horizontal and vertical inconsistencies in the types and location of subsurface soils, and proximity to water pumping wells.

3. Site Description and Operations Information



3.1 General Site Description

3.1.1 Ownership Information

No records regarding the ownership of the subject property were available to ERM. In a request to the Town of Brookhaven, a response was received from the town, which stated; the subject property was County owned land and was not on the assessment roll.

3.1.2 Subject Property Layout

Parcel C is a 30± acre rectangular piece of undeveloped woods mostly consisting of oak and pine scrub growth. Tire tracks on the dirt roads indicated frequent use by all-terrain vehicles and motorcycles. Discarded tires, wood, bricks, stone, and metal debris was observed along most of the dirt trails throughout the parcel.

At the time of this assessment, the subject property was undeveloped land and maintained no permanent structures.

3.2 Utilities

At the time of this assessment, the subject property maintained no permanent structures. High power transmission power lines were observed along the northern boundary of the subject property. Said transmission power lines exit the Long Island Power Authority (LIPA) substation in Upton, New York.

3.3 Processes and Material Use

3.3.1 Current Operations

At the time of this assessment, the subject property was vacant land.

3.4 Material Use and Storage

At the time of this assessment, the subject property contained no permanent structures and/or storage containers. In addition, no chemical use/storage was observed during the assessment.

3.4.1 Underground Storage Tanks (USTs)

At the time of this assessment, the subject property maintained no permanent structures. ERM noted no visual evidence (i.e. pipes, vents, pumps, stains) during the site visit that would suggest the presence of USTs on the subject property. No registered USTs were reported in the EDR report.

3.4.2 Aboveground Tanks (ASTs)

At the time of this assessment, no ASTs were observed at the subject property. No registered ASTs were reported in the EDR report.

3.5 Waste Management

3.5.1 Hazardous Waste

At the time of this assessment, the subject property was vacant undeveloped land. Evidence of hazardous waste storage or disposal was not observed.

3.5.2 Non-Hazardous Waste

From the visual assessment of the subject property, no staining of soils or wooded areas was noted. ERM did not observe evidence of solid waste disposal on the subject property.

3.6 Water Supply, Wastewater and Storm Water

At the time of this assessment, the subject property contained no permanent structures. Evidence of water supply wells was not observed by ERM.

3.6.1 Wastewater

At the time of this assessment, no permanent structures or wastewater sources were identified.

3.6.2 Storm Water

Precipitation that falls on the subject property percolates into the soil. No storm water management structures (drains, drywells, sumps) were identified during the site visit.

3.7 Air Emissions

No air emission sources were identified on the subject property.

3.8 Polychlorinated Biphenyls (PCBs)

The subject property was inspected for types of equipment that have been historically associated with the use of PCBs as a dielectric fluid coolant and stabilizer. There was no evidence of oil-filled transformers or large capacitors at the subject property that may contain PCBs.

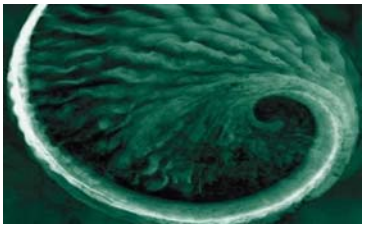
3.9 Visual Indications of On-Site Impacts

As indicated in Section 3.1.2, abandon tires, wood, bricks, stone, and metal debris was observed along most of the dirt trails throughout the parcel. No additional visual indications of on-site impacts were noted during the site inspection. However, it should be noted that, due to the size (30± acres) and the fact that the subject property is mostly densely wooded, some of the property was not visually observed during this assessment.

3.10 Asbestos-Containing materials

At the time of this assessment, the subject property contained no permanent structures. No evidence of asbestos containing material (ACM) dumping was observed on the subject property. No samples of the discarded material observed on the subject property was taken as part of this ESA to determine if they were potential asbestos containing materials (PACMs) /ACMs.

4. Site and Area History



4.1 Summary

Based on review of historical photographs and records, the subject property has been undeveloped vacant land since the 1900s. Surrounding properties have remained primarily undeveloped, agricultural lands with scattered commercial use (police headquarters and nursing home) since at least the 1960s.

4.2 Previous Environmental Reports

Several groundwater investigations have been completed in the area occupied by the subject property as summarized below.

1. *A Synthetic Organics Plume Delineation at Crescent Street, Yaphank*, prepared by the SCDHS, dated March 1981:

Background

Following the discovery of six contaminated private supply wells on Crescent Street in Yaphank, the SCDHS Groundwater Resources section was requested to begin a drilling program to determine the three-dimensional configuration and, if possible, the source of contamination.

Sampling of private wells on Crescent Street in October of 1978 showed that two homes (Andrus and Johnson) had 4 parts per billion (ppb) of both 1,1,1 trichloroethane (TCA) and 1,1,2 trichloroethylene (TCE). Samples taken in October of 1980 revealed six of 24 homes had TCA concentrations over the recommended New York State Health Department limit of 50 micrograms per liter (ug/L). All six affected wells also contained TCE, but below the 50 ug/L limit.

Before any drilling began, this spatial distribution suggested either the use of cesspool additives by residents on the west side of Crescent street (the original Drainz formulation contained 31 percent TCA with a small amount of TCE), or a discrete organics plume. The water table in this area is largely controlled by the Carmans River, and groundwater flow is from west to east, towards the river. A plume would then have to originate west of Crescent Street.

Findings

- Six private supply wells on Crescent Street were found to contain TCA, a halogenated hydrocarbon, in concentrations exceeding New York State guidelines.
- To delineate the extent of the concentrations, a drilling program was initiated by SCDHS. A total of 15 wells were installed.
- To delineate the organics contamination, a series of wells were drilled and vertical water quality profiles were compiled at each site. This included drilling 80 feet below grade (the lower limit of the hollow-stem auger rig that was used) and installing a 2-inch well with a 3-foot screen. A sample was collected at said depth, and the casing was then pulled back 10 feet and another sample was taken. This sampling procedure was continued until the screen reached the 30-foot levels where it was subsequently left. The groundwater samples collected were analyzed for 18 different synthetic organic compounds. A total of eighty-three samples were collected.

- A plume containing TCA and TCE was mapped. Its size is approximately 2,200 feet long, 320 feet wide and 35 feet thick. The TCA concentration throughout the plume exceeded the recommended New York State Drinking Water Standards (50 ug/l).
- An investigation into possible sources of the synthetic organics considered cesspool additive use by the Crescent Street residents, illegal dumping of industrial solvents in the Long Island Lighting Company (LILCO) right-of-way and disposal of the compounds from the Suffolk County buildings west of Yaphank Avenue.

Conclusions

The March 1981 report determined "as a result of the delineation investigation, all of the hydrogeologic and chemical data that was collected indicates that the source of contamination is the Suffolk County Department of Public Works' laboratory located on the west side of Yaphank Avenue, immediately north, of the Suffolk County Police Headquarters."

The TCA plume is located approximately 0.5-mile northeast of the subject property. From a review of the plume delineation investigation, it appears the plume is upgradient and/or cross-gradient to the subject property. As a result of the plume delineation location, it is unlikely the TCA plume will impact groundwater at the subject property.

2. *Investigation Summary of Groundwater Contamination by Tetrachloroethene in Yaphank, Suffolk County, NY*, prepared by the Suffolk County Department of Health Services, dated February 1999:

Background

In November 1998 a groundwater investigation was initiated in response to a finding of seven private wells on Yaphank and Gerard Avenues contaminated with tetrachloroethene above the drinking water Maximum Contaminant Level (MCL) of 5 ug/L (micrograms per liter). Tetrachloroethene (also known as perchloroethylene or PCE) is a common solvent used for dry cleaning and metal degreasing. Concentrations of tetrachloroethene (hereinafter PCE) in the seven private wells ranged from 5 to 52 ug/L. Four other private wells contained traces of PCE from 1 to 4 ug/L. A total of 39 private wells were tested in the area. The impacted wells are southeast of, and hydrogeologically downgradient of, the Suffolk County Infirmary and other county facilities on the west side of Yaphank Avenue. Bottled water was supplied to the affected homes by the county, although there was no direct evidence that the County was responsible for the PCE, other than the proximity of the county facilities to the contaminated wells. Public water mains were installed by the Suffolk County Water Authority (SCWA) to serve affected residents on Yaphank and Gerard Avenues; however some residents continue to use private wells.

Findings

The areal and vertical extent of the PCE plume was delineated from the water quality data collected from 26 vertical profile monitoring wells, and from the private well analyses. The current configuration of the PCE plume is characterized from the data as follows:

- Length: 1.9 miles, originating near Sills Road and Long Island Avenue, and migrating in an east-southeast direction toward Southaven Park and the Carmans River;
- Width: approximately 800 feet at Yaphank Avenue;
- Depth: a maximum of 90 feet thick at Yaphank Avenue, with
- The highest PCE concentration of 180 ug/L detected 80 feet below the water table at Yaphank Avenue.

In cross section, the "slug" of higher PCE concentrations is deepest at Yaphank Avenue, with a tail of lower concentrations at successively shallower depths in the upgradient direction. PCE was detected at the top of the water table, located near the probable source area. The leading (downgradient) edge of the plume is entering Southaven County Park, east of Gerard Avenue.

Conclusions

The groundwater investigation determined that the contamination did not originate at the County facilities on Yaphank Avenue. The data indicate that the source of the PCE plume was in the vicinity of Sills Road and Long Island Avenue, south of Long Island Expressway Exit 66. The PCE source was most likely a short term release, possibly roadside dumping. Based upon a groundwater flow velocity of approximately 1.5 feet per day and the plume's length, the spill probably occurred about 18 to 22 years ago.

From a review of the plume investigation performed in 1998, it appears the plume is located beneath the northeast portion of the subject property. As a result of plumes delineation location, it is very likely the PCE plume has impacted the groundwater at the subject property. In addition, due to the presence of PCE in groundwater beneath the subject property, there is potential for PCE vapors[1] to migrate from the groundwater plume to overlying soils in the form of soil vapor.

3. *Investigation Summary: Perchlorate Contamination in Yaphank, Suffolk County, NY* prepared by the Suffolk County Department of Health Services, dated January 2001:

Background

An investigation to ascertain potential sources of the perchlorate contamination in Yaphank was initiated in July following the survey of water quality at private and non-community wells. A synoptic round of water table measurements from eight existing monitoring wells in the vicinity of the contamination was performed. These elevations indicated that the local, groundwater flow direction is to the southeast - toward the Carmans River. This determination was consistent with prior studies conducted by the department in the area, including the delineation of a plume of TCA that was tracked to the former Suffolk County Department of Public Works testing laboratory in 1981, and a 1998 investigation of PCE contamination that was found to originate some two miles upgradient of the PCE-impacted private wells on Yaphank Avenue. This flow direction was also in agreement with that found by the United States Geological Survey (USGS) during an investigation of groundwater near the Brookhaven Landfill (USGS Water-Resources Investigations Report 86-4070, E.J. Wexler, 1988).

The perchlorate data gathered by the SCDHS Bureau of Drinking Water during private well testing along Yaphank Avenue showed a lateral distance of approximately 1,000 feet between the northernmost and southernmost impacted wells. This indicated that contamination likely had originated at a non-point source or sources located in the upgradient area (to the northwest). The perchlorate contamination found in the private wells was estimated to be about 40 feet below the water table, where most private wells are screened in order to comply with SCDHS standards. This depth below the water table implied that the source area was located approximately 4,000 to 5,000 feet upgradient of the impacted private wells, based on estimations of the recharge rate, soil porosity and groundwater flow velocity.

The initial investigation of potential perchlorate sources was based upon the established direction of groundwater flow, and the private and non-community well water quality data. The inquiry had two main components, which were undertaken simultaneously. First, the SCDHS Office of Pollution Control began the inspection of all commercial and industrial facilities located in the upgradient area for past or present perchlorate use or handling. Second, the SCDHS Bureau of Groundwater Resources began a groundwater investigation with the installation of monitoring wells to track perchlorate back to its source or sources.

[1] The likelihood of vapor encroachment was evaluated using ASTM E 2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

Findings

- The two components of the current perchlorate investigation, the facility inspections and the groundwater investigation, were designed to ascertain potential sources of the contamination found in drinking water wells near Yaphank Avenue. The investigation's findings are summarized below:
- Local groundwater flow direction to the southeast was conclusively determined by twice measuring water table elevations at multiple wells. The flow direction established is consistent with several past groundwater investigations conducted in the area.
- The perchlorate concentrations detected in monitoring well samples were independently confirmed by analyses at two laboratories - those operated by the SCDHS and the SCWA.
- The SCDHS facility inspections found that perchlorate was not currently used or handled by any of the businesses examined in the upgradient area on Sills Road or within the Old Dock Road industrial park, with the exception of Fireworks by Grucci.
- Great Gardens Nursery is not considered a potential source of the perchlorate impacting the drinking water wells because the contamination predated the establishment of the nursery, and the highest perchlorate concentrations detected in groundwater are 2,000 feet upgradient of the nursery property.
- Groundwater monitoring wells were installed downgradient of four specific sites which may have handled perchlorate in the past: Fireworks by Grucci (fireworks), the Izumi/TRW plant (vehicle steering wheel assembly with airbags), and two sites formerly and currently occupied by True Green/ChemLawn (chemical fertilizer). Perchlorate was not detected in wells downgradient of the Izumi/TRW plant, or either of the True Green/ChemLawn locations. Several pesticide related compounds were found in the groundwater downgradient of both True Green/ChemLawn sites.
- The SCDHS laboratory detected perchlorate in the samples collected from the Fireworks by Grucci site, including: the incinerator ash, EOD demolition pile, soak pad water, and the soils adjacent to the soak pad.
- An area of groundwater impacted by perchlorate was found to extend from the vicinity of the Fireworks by Grucci site to approximately 10,000 feet to the southeast, being 2,000 feet wide immediately downgradient of the site, and with a maximum thickness of 35 feet in the aquifer. The maximum perchlorate concentration of 122 ug/L was detected at well PP15, approximately 1,500 downgradient of the site.

Conclusions

The SCDHS Offices of Water Resources and Pollution Control have conducted an extensive investigation of the potential sources of perchlorate in the groundwater at Yaphank, including: identification of impacted drinking water wells; determination of groundwater flow direction; industrial and commercial facility inspections; monitoring well installation and groundwater testing; soils and materials testing; and, data quality controls.

Prior to 1997, analytical methods to detect the low levels of perchlorate found in Yaphank groundwater did not exist. Therefore, it was not possible for any agency, either regulatory or perchlorate user, to have the ability to identify or track the perchlorate contamination in groundwater that is the subject of this report. Because the report identifies new or emerging issues pertaining to groundwater protection activities and perchlorate use, the information developed was reportedly provided to the United States Environmental Protection Agency (USEPA) Interagency Perchlorate Steering Committee.

From a review of the plume investigation performed in 2001, it appears the plume is located south and downgradient of the subject property. As a result of plumes delineation location, it is unlikely the perchlorate plume has impacted the groundwater at the subject property.

The prior environmental/investigation reports reviewed by ERM are included in Appendix C of this report.

4.3 Evaluation of Historic Information Sources

To determine past uses of the subject property and surrounding properties, ERM reviewed historical sources of information as outlined below. Copies of historical Sanborn Fire Insurance Maps, topographic maps and aerial photographs are presented in Appendix B.

Table 4.3 Summary of Historical Sources Reviewed

Agency/Source of Information	Data Provided	*Years Reviewed (if applicable)*	
		Subject Property	Adjacent Properties
Interview(s) with past owners/ occupants, (if appropriate)	Operational information	Not available	Not Applicable
Interview(s) with owner/ occupants of neighboring and nearby properties	Property information	Not Applicable	Not Applicable
Town of Brookhaven	Building permits, inspection and planning record file.	Not available	Not available
Suffolk County Department of Health Services	Property Information	1980s- present	Not available
EDR	Topographic Maps	1904, 1947, 1967	1904, 1947, 1967
EDR	Sanborn Fire Insurance Maps	Not available	Not available
EDR	Aerial Photographs	1957, 1961, 1969, 1976, 1980, 1985, 1994, 2006	1957, 1961, 1969, 1976, 1980, 1985, 1994, 2006

4.3.1 Subject Property

Based on review of historical photographs and records, the subject property has been undeveloped vacant land since the 1900s. A detailed chronology of the subject property is included in the chart below:

Year	***Chronological Chart of Historical Site Use***
1904 - 1947	➢ According to numerous topographic maps, the subject property was undeveloped forest land.
1957- 1976	➢ According to the aerial photograph the subject property is undeveloped forest land. High power transmission lines are present along the northern boundary of the Site.
1980	➢ The aerial photograph is similar to the earlier 1957-1976 photographs.
1985	➢ The 1985 aerial photograph was of poor quality and did not provide specific details on the subject property.
1994	➢ The 1994 aerial photograph does not depict any structures on the subject property.
2006	➢ The aerial photograph is similar to photographs from the 1970s. No structures are visible on the subject property.
Present	➢ Observations made at the time of ERM's site inspection are discussed throughout this report.

4.3.1.1 Discontinued Operations

Since the 1900s the subject property has been undeveloped vacant land with no permanent structures.

4.3.2 Adjacent Properties and Surrounding Area

The chronology of the adjacent properties and surrounding area is based on ERM's review of reasonably ascertainable resources researched for the subject property.

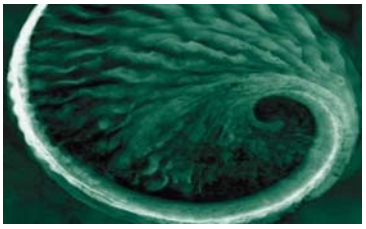
According to aerial photographs, the surrounding properties have been undeveloped land since at least the early 1900s. The only buildings visible on surrounding properties include the Foley Nursing Home and the Suffolk County Police Headquarters, both east of the subject property, which were constructed circa 1960s. A review of the additional information indicates that the surrounding properties remained in similar configuration to that observed by ERM during site reconnaissance.

No indications of environmental concerns having occurred on, or in the surrounding area of the subject property were identified by ERM in the review of historical documentation or during the site visit.

4.3.3 Non-Regulatory Interviews

ERM was unable to interview the former property owners and occupants, as contact information was not provided by Mr. Cliff Peterson, Deputy Commissioner, SCDPW.

5. Database and Government Records Review



5.1 Government Records Review/Interviews

Information was requested from various agencies that were expected to have relevant records relating to the subject property. The subject property is not located on tribal lands or within tribal jurisdiction. Information was requested from the following sources:

- United States Environmental Protection Agency;
- New York State Department of Environmental Conservation;
- Suffolk County Department of Health Services; and
- Town of Brookhaven Building Department (TOBBD).

Information obtained from these agencies, or the status of the requests, is summarized below:

5.1.1 Federal Records

A Freedom of Information Act Request was sent to the USEPA regarding environmental incidents on the subject property. As of the date of this report, a response had not been received. ERM will forward any salient information received from the USEPA indicating material conditions or incidents upon receipt.

5.1.2 State Records

A Freedom of Information Act Request was sent to the NYSDEC regarding environmental incidents on the subject property. The NYSDEC responded and a file review was conducted for documents related to the subject property. None of the documents reviewed at the NYSDEC related to the subject property.

5.1.3 County Records

A Freedom of Information Act Request was sent to the SCDHS regarding environmental incidents, storage of hazardous material, permits, inspections, tanks, violations, etc related to the subject property. The SCDHS responded and a file review was conducted for documents related to the subject property. No documents other than the reports describing the containment plumes discussed in Section 4.2 were found related to the subject property.

5.1.4 Local Records

A Freedom of Information Act Request was sent to the TOBBD regarding building records, permits, certificate of occupancy, and environmental incidents on the subject property. A response was received from the TOBBD which stated that they did not maintain records for the subject property because it is a County owned property.

5.2 Environmental Database Search

EDR was contracted to conduct a database search for agency records. The database report, presented in Appendix D, defines and summarizes the ASTM databases reviewed in the EDR report and notes if any locations (including the

subject property) were identified in the specified radius. The locations identified in the EDR report were evaluated to determine which sites were located within the ASTM specified search distance from the subject property boundary. Only those locations worthy of further discussion are discussed below and data on additional locations are in the appended EDR database report.

It should be noted that the computerized geocoding technology used in the database search is based on available census data and is only accurate to approximately ±300 feet. The EDR report provides a list of unmapped locations for which inadequate location information was provided. The list of "unmapped" locations was reviewed to determine if these are within the study radius. If the "unmapped" locations appeared likely to be within the search radius for a specific database, they are discussed in the sections that follow.

Based on maps of the area, the required database search radius for a given database, and the site reconnaissance, it appears that none of the unmapped locations are within the designated search distances for each database. Locations identified within the study radii were evaluated to determine if they are likely to have adversely impacted the subject property. The criteria used to evaluate the potential for adverse impact to the subject property include:

- distance from the subject property;
- expected depth and direction of groundwater and surface water flow;
- geology and physical ground conditions;
- expected storm water flow direction; and
- the presence/absence of documented contaminant releases at the identified locations that have not been remedied to the satisfaction of regulators.

The identification of a location as potentially upgradient or downgradient is based on the expected direction of groundwater flow to the south-southeast.

5.2.1 Subject Property

The subject property was not identified in any of the databases searched by EDR. The absence of the identification of the subject property indicates that there is no documented regulatory activity at the site.

5.2.2 Surrounding Properties

When evaluating the potential impacts from off-site properties, the properties are not expected to have adversely impacted the subject property when: (1) the case has been closed to the satisfaction of regulators, (2) they are located down-gradient of the subject property relative to the reported ground water flow direction to the south-southeast, (3) they are not located within a proximal distance to the subject property that is likely to have an impact., or (4) if there aren't any reported spills and/or violations, it is presumed not likely to have impacted the subject property.

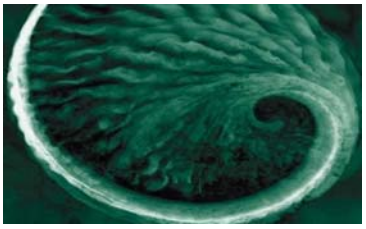
The facilities listed below are not expected to pose an environmental concern to the subject property; however are detailed within the search radii of the EDR report.

- The Caithness Long Island Energy Center (CLIEC) was identified within the specified search radii in EDR's database searches. CLIEC, at 50 Zorn Boulevard, located approximately ¼-mile west of the subject property, was identified as a Major Oil Storage Facility (MOSF). No spills and/or violations have been reported for the site and it is not expected to pose an environmental concern to the subject property.

- Two (2) DeChiaro Associates Corporation sites were also identified by the EDR database search, at Grucci Lane, located approximately ¼-mile south of the subject property, reported a Solid Waste Facility/Landfill (SWF/LF). EDR listed the SWF/LF as a C&D processing center for the following wastes: asphalt, brick, concrete, rock and soil. The SWF/LF is located downgradient of the subject property and no spills and/or violations have been reported for the site; therefore it is not expected to pose an environmental concern to the subject property.

- The Suffolk County Skilled Nursing Facility (SCSNF) located on Glover Drive, approximately 1/8-mile east of the subject property boundary. The SCSNF is listed for an underground storage tank (UST) and RCRA Non-generator. Said EDR listing is for an 8,000-gallong UST for #2 fuel oil installed in 1992. No spills and/or violations have been reported for the site and it is not expected to pose an environmental concern to the subject property.
- The Suffolk County Police Headquarters (SCPHQ) located on Yaphank Avenue, approximately 1/8-mile east of the subject property boundary. The SCPHQ is listed for UST, HIST LTANKS, and LTANKS. The EDR listing details two (2) 8,000-gallon #2 fuel oil USTs installed in 1983. The LTANKS listing is associated with a test tank failure in 1989. Said spill was closed in 1992. The spill has been closed and a No Further Remediation (NFR) letter has not been issued for either site. However, based on distance from the subject property and location down-gradient the LUST site are not expected to pose an environmental concern to the subject property.

6. ASTM Definitions and Requirements



6.1 Discussion of ASTM definitions

A *Recognized Environmental Condition (REC)*, as defined in ASTM E 1527-05, is "The presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property…The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

A *Historical REC* is defined as "…an environmental condition which in the past would have been considered a recognized environmental condition, but may or may not be considered a recognized environmental condition currently."

A *de minimis condition* is use to defined issues that are not considered RECs and "…generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

A *data gap* is defined as the "lack of, or inability to, obtain information required by this practice despite good faith efforts by the EP to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.). The report shall identify and comment on significant data gaps that affect the ability of the EP to identify recognized environmental conditions and identify the sources of information that were consulted to address the data gaps."

A *data failure* occurs "when all of the standard historical sources that are reasonably ascertainable [within the User-prescribed timeframe] and likely to be useful have been reviewed and yet the objectives have not been met. Data failure is not uncommon in trying to identify the use of the property at five year intervals back to first use or 1940 (whichever is earlier). Notwithstanding a data failure, standard historical sources may be excluded if: (1) the sources are not reasonably ascertainable, or (2) if past experience indicates that the sources are not likely to be sufficiently useful, accurate, or complete in terms of satisfying the objectives."

The *User* of the report is defined as "…the party seeking to use Practice E-1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager."

6.2 Data Gaps

The following table summarizes the data gaps identified during the assessment. The significance of the data gaps with respect to the conclusions of this assessment is presented in Section 8.0.

Data Gap Summary

Data Gap	Sources Consulted to Address Data Gap	Significance[1]
Interviews with former owners/ operators were not conducted.	ERM interviewed Mr. Thomas Isles, current Suffolk County employee. Contact information for former property owners and occupants was not readily available.	Low
An Environmental Lien search was not performed for the subject property.	Tax records, historical topographic maps, aerial photos, and city directories.	Low
A Chain-of-Title was not provided for review by the client.	Tax records, historical topographic maps, aerial photos, and city directories.	Low
Lack of information regarding former Agricultural activities in the vicinity of the Site.	Aerial Photographs	Moderate

[1] 'Significance' provides a qualitative indication of the implication of the identified data gap relative to the EP's ability to identify conditions indicative of releases or threatened releases to the subject property; the 'significance' of the data gaps are rated from low to high.

6.3 User Provided Information

ERM provided Mr. Thomas Isles of the Suffolk County Department of Planning with the Phase I ESA Questionnaire to ascertain the following information:

- An evaluation of the presence of Environmental Cleanup Liens for the subject property;
- Activity and Use Limitations such as engineering controls (e.g., slurry walls, caps) and land use restrictions or institutional controls (e.g., deed restrictions, covenants) that may be in place for the subject property;
- Specialized knowledge, including personal knowledge or experience, related to the subject property or nearby properties based on professional experience or knowledge of the subject property;
- Fair Market Value to evaluate whether a purchase price is significantly below Fair Market Value;
- Obvious Indicators that suggest past or present spills, stains, releases, cleanups on or near the subject property; and
- Common Knowledge about specific chemicals, possible contamination, or past use of the subject property and surrounding area.

The Phase I ESA Questionnaire was completed by Mr. Isles and issued to ERM on 5 November 2010. The Phase I ESA Questionnaire is attached as Appendix C. Responses are discussed in the table below:

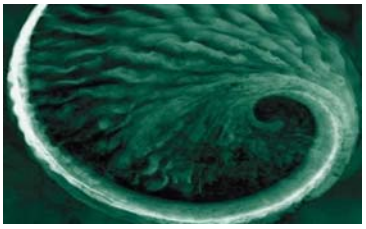
Table 6.3 User- Provided Information

User Request	Response
Environmental Cleanup Liens	Mr. Isles is not aware of any environmental liens currently recorded against the subject property. ERM was not requested to perform an independent evaluation of environmental liens for the subject property. This has been identified as a data gap in Section 6.2 of this report.
Activity Use Limitations and land use restrictions or institutional controls	Mr. Isles is not aware of any Activity Use Limitations and/or land use restrictions currently recorded against the subject property.
Specialized Knowledge	Mr. Isles indicated on the questionnaire, he was aware of specialized knowledge regarding the subject property. Said specialized knowledge relates to the three groundwater plume investigations performed by the SCDHS from 1981 until 2001. Information regarding these investigations are summarized in Section 4.2 and the complete investigation reports are provided in Appendix C. ERM is not aware of additional specialized knowledge for the site.
Fair Market Value	Mr. Isles was not aware of the purchase price or fair market value.
Obvious Indicators that involve past or present spills, stains releases or cleanups	Mr. Isles was aware of any obvious indicators which involve past or present spills, stains releases or cleanups. Said obvious indicators are the groundwater plume investigations performed by the SCDHS from 1981-2001.
Common Knowledge about specific chemicals, possible contamination, or past use	Information and documentation, including previous environmental investigations was provided to ERM and is presented throughout this report in the relevant report sections and appendices.

6.4 Reason for Performing Phase I

This Phase I ESA has been performed to as part of the Generic Environmental Impact Statement being prepared for the 282± acres of surplus land located in Yaphank, New York.

7. Conclusions



ERM conducted a Phase I ESA at the subject property. Our conclusions and opinions are based on a scope of work that followed the requirements set forth in ASTM Standard E 1527-05 and 40 CFR 312. A summary of ERM's conclusions and opinions are presented below.

Based on the data obtained during the site visit, the environmental database review, and interviews with persons familiar with the site and its history, the following environmental conditions were identified at the subject property:

7.1 Recognized Environmental Conditions

The following RECs were identified as part of this assessment:

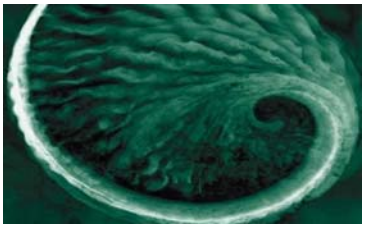
- ***Groundwater Plume***: From a review of the plume investigation performed in 1998, it appears the PCE plume is located beneath the northeast portion of the subject property. The data from the investigation indicated that the source of the PCE plume was in the vicinity of Sills Road and Long Island Avenue, south of Long Island Expressway Exit 66. The PCE source was most likely a short term release, possibly roadside dumping. Based upon a groundwater flow velocity of approximately 1.5 feet per day and the plume's length, the spill likely occurred about 18 to 22 years ago. It is very likely the PCE plume has impacted the groundwater at the subject property. In addition, due to the presence of PCE in groundwater beneath the subject property, there is potential for PCE vapors to migrate from the groundwater plume to overlying soils in the form of soil vapor.

7.2 Other Potential Issues of Environmental Concern

ERM identified the following de minimus or other potential issues as part of this assessment:

- During the site reconnaissance, several types of debris were observed throughout the subject property. Said debris included discarded tires, bricks, wood, stone, and metal, etc. There was no visual evidence of petroleum or chemical impacts to the debris. On Long Island, the NYSDEC investigates any illegal dumping of waste materials of unknown origin and the property owner is required to follow proper regulatory procedures for addressing the unauthorized disposal of these types of materials under oversight by the NYSDEC.

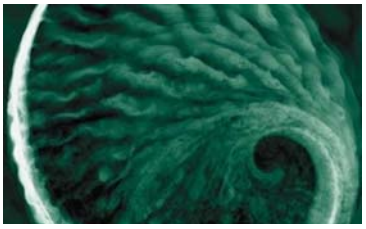
8. Qualifications of Environmental Professional



This assessment was conducted by Christopher O'Leary of ERM. James Perazzo of ERM reviewed the contents of this report. The professional qualifications for Mr. O'Leary and Mr. Perazzo are included in Appendix E. The signatures for Mr. O'Leary and Mr. Perazzo are affixed onto the cover of this report. Mr. Perazzo is the designated Environmental Professional for this project and prepared the following declaration.

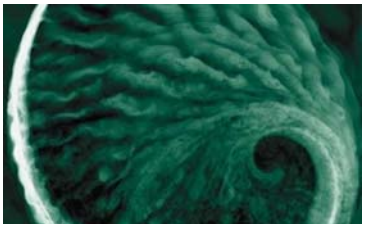
- I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR 312.
- I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

9. Limitations



The innocent landowner, contiguous owner, and prospective purchaser defenses to liability under CERCLA require that a person acquiring property conduct an all appropriate inquiry with respect to the subject property. ERM has conducted this environmental assessment in accordance with the standards for conducting an all appropriate inquiry set forth at 40 CFR. Part 312. Those standards require the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations and exercise of discretion. Professional judgments expressed herein are based on the facts currently available within the limits of the existing data, and data gaps identified herein, scope of work, budget, and schedule. Those standards also require that the client undertake certain additional inquiries. In addition, the liability defenses under CERCLA require, among several other things, that the client after the acquisition stop any continuing releases, prevent any future threatened releases and prevent or limit human, environmental or natural resource exposure to any hazardous substance released at the subject property. Therefore, ERM makes no warranties, expressed or implied, including, without limitation, warranties as to merchantability or fitness for a particular purpose, including any warranty that this Phase I assessment will in fact qualify client for the innocent landowner, contiguous property owner or prospective purchaser defense to liability under CERCLA. ERM's assessment is limited strictly to identifying recognized environmental conditions associated with the subject property. Results of this assessment are based upon the visual site inspection of readily accessible areas of the subject property conducted by ERM personnel, information from interviews with knowledgeable persons regarding the site, information reviewed regarding historical uses, information provided by contacted regulatory agencies, and review of publicly available and practically reviewable information identifying current and historical uses of the property and surrounding properties. All conclusions and recommendations regarding the subject property represent the professional opinions of the ERM personnel involved with the project, and the results of this report should not be considered a legal interpretation of existing environmental regulations. ERM assumes no responsibility or liability for errors in the public data utilized, statements from sources outside of ERM, or developments resulting from situations outside the scope of this project. We make no warranties, expressed or implied, including, without limitation, warranties as to merchantability or fitness for a particular purpose.

10. References

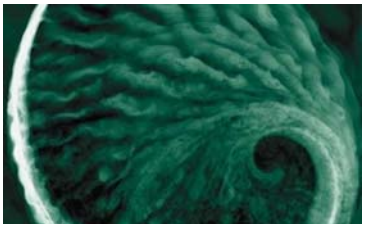


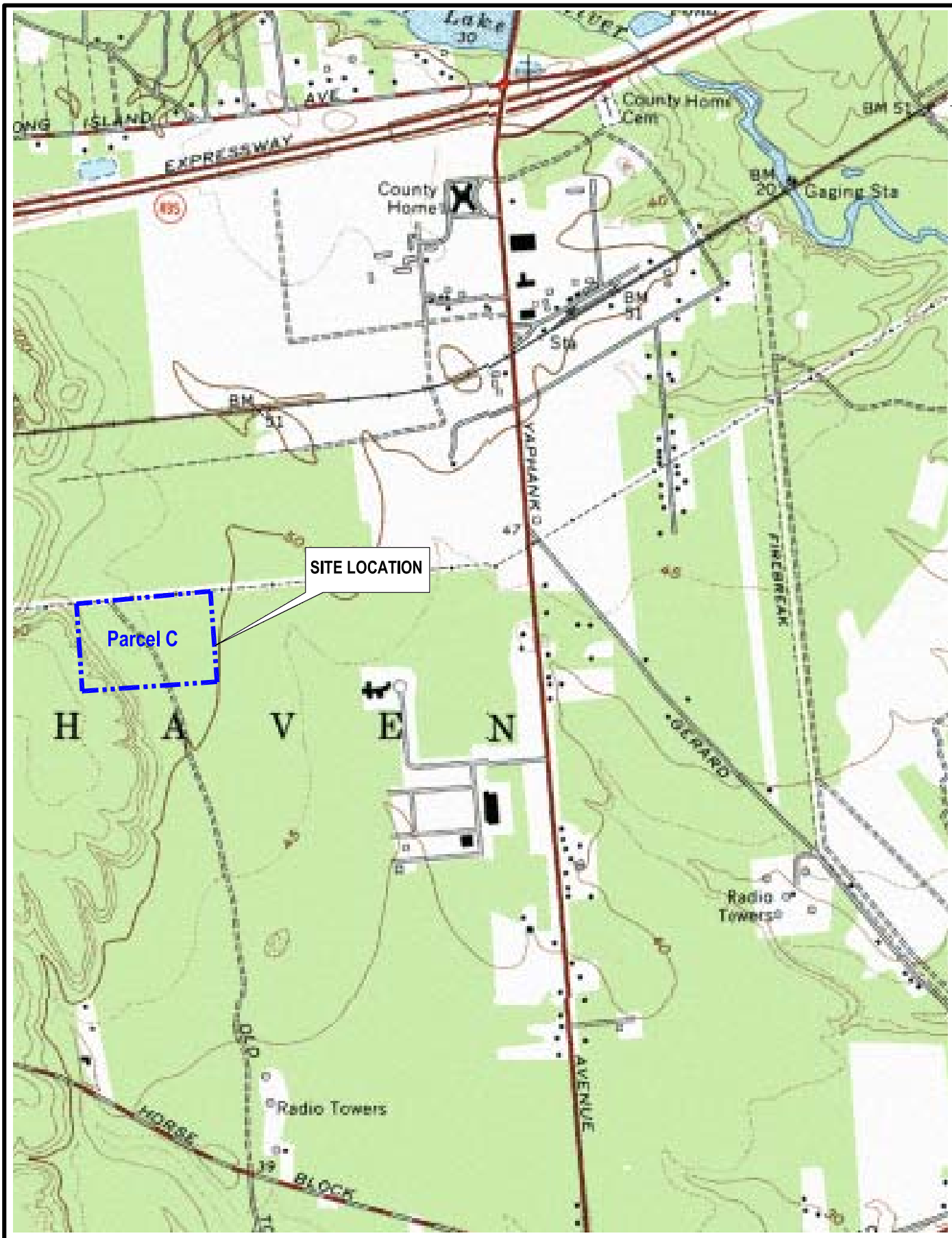
The following sources were used in conducting the Phase I Environmental Site Assessment detailed in this report. Where information obtained from these sources was determined to be useful by the Environmental Professional, it is summarized in the body of this report.

Table 10.1 User-Provided Information

Agency/Company	Person Contacted	Regarding
US EPA Region 2 290 Broadway, 26th Floor New York, New York 10007	Freedom of Information Act Officer	environmental incidents
NYSDEC 50 Circle Road Stony Brook, New York 11790	Records Access Officer	environmental incidents
Suffolk County Department of Health Services	Records Access Officer	permits, violations, storage tanks, inspections, violations. etc
Synthetic Organics Plume Delineation at Crescent Street, Yaphank	SCDHS	TCA Plume
Investigation Summary of Groundwater Contamination by Tetrachloroethene in Yaphank, Suffolk County, NY	SCDHS	TCE Plume
Investigation Summary: Perchlorate Contamination in Yaphank, Suffolk County, NY	SCDHS	Perchlorate Plume
Environmental Data Resources	N/A	Sanborn maps, aerial photographs, topographic maps, and database report.
Internet resources	N/A	Aerial photographs (Google Earth and Microsoft Terraserver);

Figures





Scale (1"=1400')

700' 0 700' 1400' 2800'

Map Name: BELLPORT
Horizontal Datum: NAD83
Date Published: 1967
Source: MyTopo

Figure 1 - Site Location Map
Parcel C
Yaphank, NY

ERM

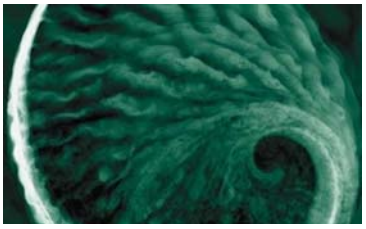
Scale (1"=1400')

700' 0 700' 1400' 2800'

Figure 2 - Site Vicinity & Surrounding Area Map
Parcel C
Yaphank, NY

ERM

Appendix A
Site Photographs



Photograph: *1*	*View of the undeveloped forest land on the subject property.*	
Cameron Engineering & Associates, LLP	***ERM***	*Parcel C* *Yaphank, N.Y. 11980*

Photograph: *2*	*Another view of the undeveloped forest land on the subject property.*	
Cameron Engineering & Associates, LLP	***ERM***	*Parcel C* *Yaphank, N.Y. 11980*

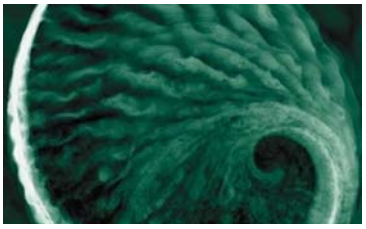
Photograph: *3*	*View of northern boundary line of the subject property.*

Cameron Engineering & Associates, LLP	***ERM***	*Parcel C Yaphank, N.Y. 11980*

Photograph: *4*	*View of the Grucci Fireworks property to the southwest of the subject property.*

Cameron Engineering & Associates, LLP	***ERM***	*Parcel C Yaphank, N.Y. 11980*

Appendix B
Sanborns, Aerial Photographs & Topographic Maps



Suffolk County Yaphank Center Parcels B and C
Yaphank Avenue
Yaphank, NY 11980

Inquiry Number: 2843813.7
August 12, 2010

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

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

Certified Sanborn® Map Report

8/12/10

Site Name:	**Client Name:**
Suffolk County Yaphank Center	ERM, Inc.
Yaphank Avenue	40 Marcus Drive
Yaphank, NY 11980	Melville, NY 11747
EDR Inquiry # 2843813.7	Contact: C Oleary

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by ERM, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name:	Suffolk County Yaphank Center Parcels B and
Address:	Yaphank Avenue
City, State, Zip:	Yaphank, NY 11980
Cross Street:	
P.O. #	NA
Project:	NA
Certification #	C6C4-4F1D-AB94

Sanborn® Library search results
Certification # C6C4-4F1D-AB94

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Suffolk County Yaphank Center Parcels B and C
Yaphank Avenue
Yaphank, NY 11980

Inquiry Number: 2843813.9
August 13, 2010

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

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

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography August 13, 2010

Target Property:

Yaphank Avenue

Yaphank, NY 11980

Year	***Scale***	***Details***	***Source***
1957	Aerial Photograph. Scale: 1"=750'	Panel #: 40072-G8, Bellport, NY;/Flight Date: March 31, 1957	EDR
1961	Aerial Photograph. Scale: 1"=500'	Panel #: 40072-G8, Bellport, NY;/Flight Date: May 17, 1961	EDR
1969	Aerial Photograph. Scale: 1"=750'	Panel #: 40072-G8, Bellport, NY;/Flight Date: October 06, 1969	EDR
1976	Aerial Photograph. Scale: 1"=750'	Panel #: 40072-G8, Bellport, NY;/Flight Date: April 10, 1976	EDR
1980	Aerial Photograph. Scale: 1"=750'	Panel #: 40072-G8, Bellport, NY;/Flight Date: September 08, 1980	EDR
1985	Aerial Photograph. Scale: 1"=1000'	Panel #: 40072-G8, Bellport, NY;/Flight Date: March 25, 1985	EDR
1994	Aerial Photograph. Scale: 1"=750'	Panel #: 40072-G8, Bellport, NY;/Flight Date: April 08, 1994	EDR
2006	Aerial Photograph. Scale: 1"=604'	Panel #: 40072-G8, Bellport, NY;/Flight Date: January 01, 2006	EDR

INQUIRY #: 2843813.9
YEAR: 1957
= 750'
N

INQUIRY #: 2843813.9
YEAR: 1961
= 500'
N

INQUIRY #: 2843813.9
YEAR: 1969
= 750'
N

INQUIRY #: 2843813.9
YEAR: 1976
= 750'
N

INQUIRY #: 2843813.9
YEAR: 1980
= 750'
N

INQUIRY #: 2843813.9
YEAR: 1985
= 1000'
N

INQUIRY #: 2843813.9
YEAR: 1994
= 750'
N

INQUIRY #: 2843813.9
YEAR: 2006
= 604'
N

Suffolk County Yaphank Center Parcels B and C
Yaphank Avenue
Yaphank, NY 11980

Inquiry Number: 2843813.8
August 13, 2010

EDR Historical Topographic Map Report

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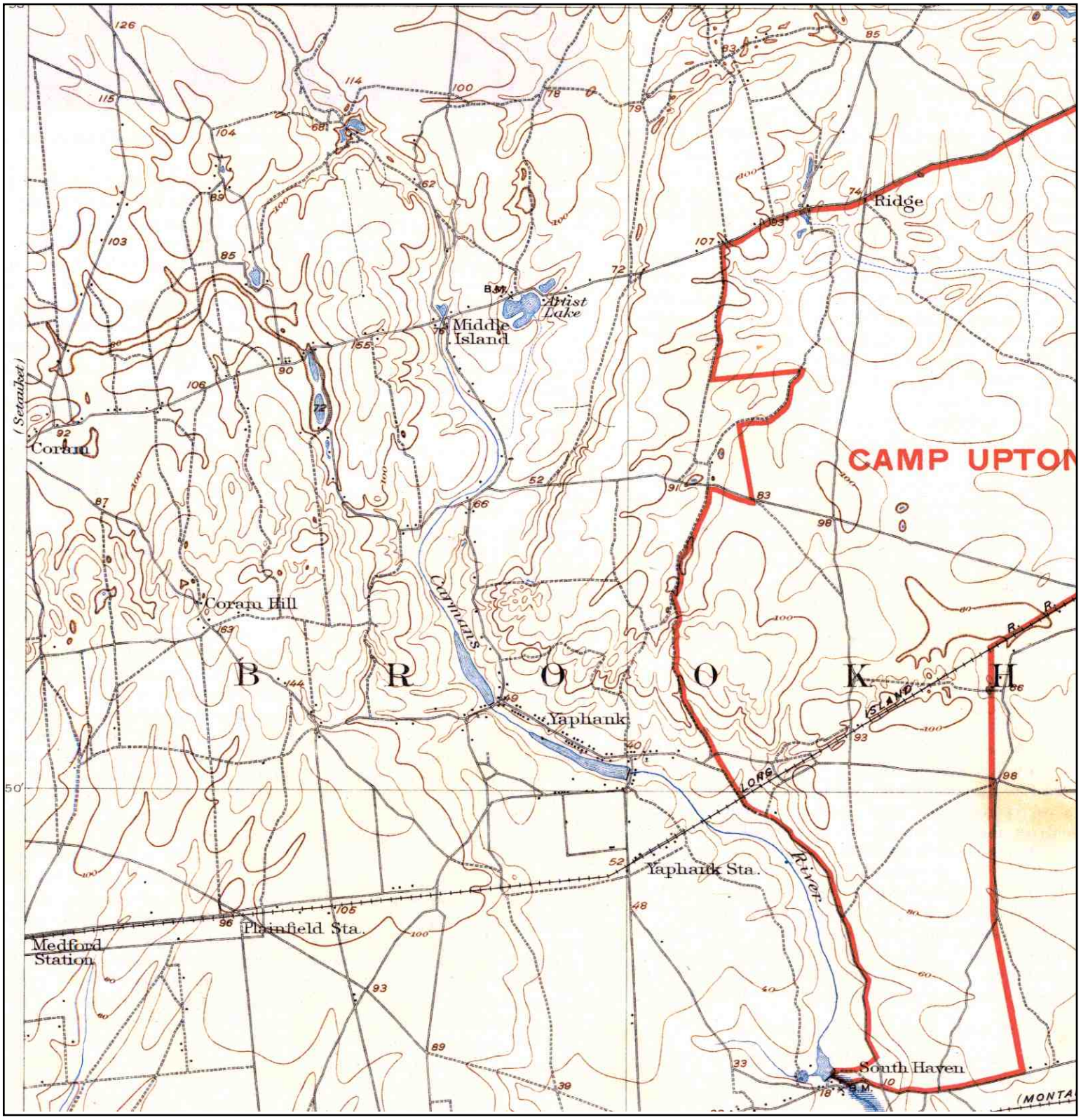
Historical Topographic Map



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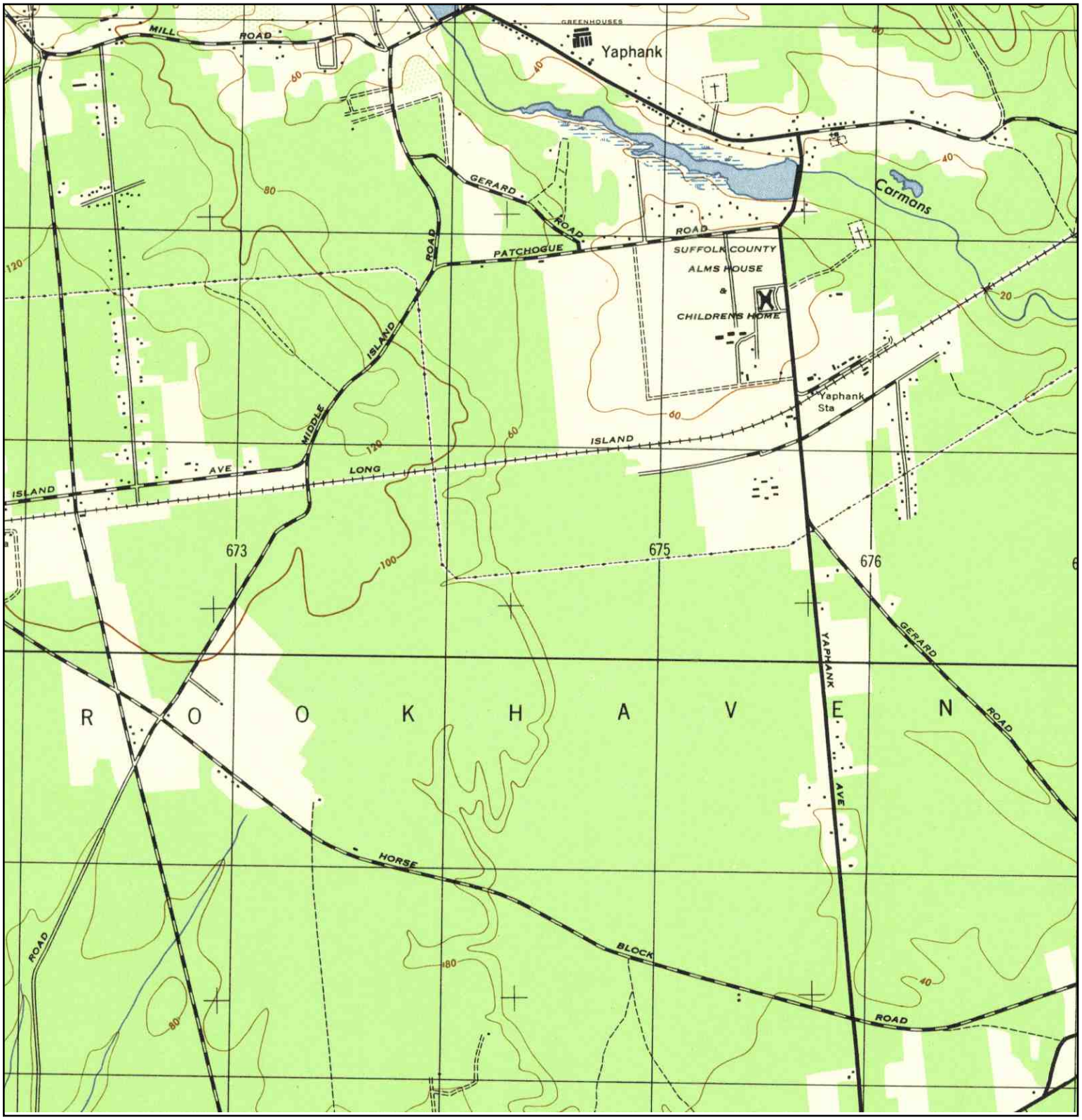
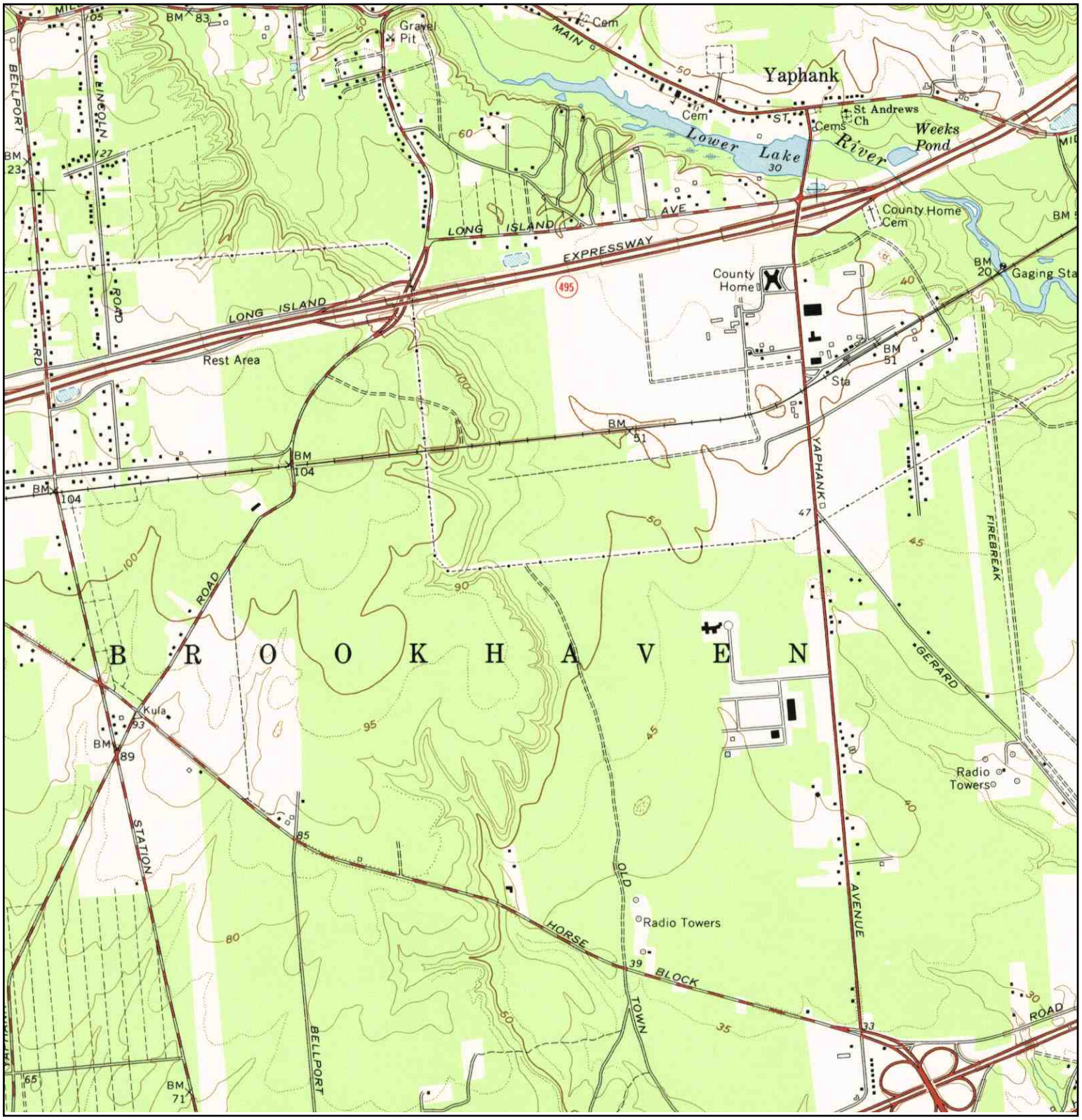
Historical Topographic Map



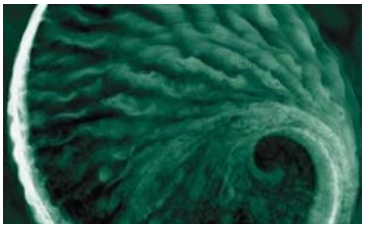
N	TARGET QUAD NAME: BELLPORT MAP YEAR: 1947 SERIES: 7.5 SCALE: 1:25000	SITE NAME: Suffolk County Yaphank Center Parcels B and C ADDRESS: Yaphank Avenue Yaphank, NY 11980 LAT/LONG: 40.8182 / -72.9311	CLIENT: ERM, Inc. CONTACT: C Oleary INQUIRY#: 2843813.8 RESEARCH DATE: 08/13/2010

Historical Topographic Map



N	TARGET QUAD NAME: BELLPORT MAP YEAR: 1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Suffolk County Yaphank Center Parcels B and C ADDRESS: Yaphank Avenue Yaphank, NY 11980 LAT/LONG: 40.8182 / -72.9311	CLIENT: ERM, Inc. CONTACT: C Oleary INQUIRY#: 2843813.8 RESEARCH DATE: 08/13/2010

Appendix C
Prior Environmental Reports & Phase I ESA Questionnaire



22713

PETER R. AKRAS
ASS'T. P. H. ENGINEER

SYNTHETIC ORGANICS PLUME DELINEATION AT CRESCENT STREET, YAPHANK

Suffolk County
Department of Health Services

David Harris, M.D., M.P.H.
Commissioner

Prepared by

Craig Werle
Division of Environmental Health Services

March 4, 1981

SUMMARY

1) Six private supply wells on Crescent Street were found to contain 1,1,1 trichloroethane, a halogenated hydrocarbon, in concentrations exceeding New York State guidelines.

2) To delineate the extent of the concentrations, a drilling program was initiated by the Suffolk County Department of Health Services. A total of 15 wells were installed.

3) Groundwater samples were collected at each site from the upper 65 feet of the upper glacial aquifer and analyzed for 18 different synthetic organic compounds. Eighty-three samples were collected.

4) A plume containing 1,1,1 trichloroethane and 1,1,2 trichloroethylene was mapped. Its size is approximately 2,200 feet long, 320 feet wide and 35 feet thick. The 1,1,1 trichloroethane concentration throughout the plume exceeded recommended New York State Drinking Water Standards.

5) An investigation into possible sources of the synthetic organics considered cesspool additive use by the Crescent Street residents, illegal dumping of industrial solvents in the LILCO right-of-way and disposal of the compounds from the Suffolk County buildings west of Yaphank Avenue.

6) All of the hydrogeologic and chemical data that were collected indicate that the source of contamination is the Suffolk County Department of Public Works' laboratory located on the west side of Yaphank Avenue, immediately north of the Suffolk County Police Headquarters.

SYNTHETIC ORGANICS PLUME DELINEATION AT CRESCENT STREET, YAPHANK

Following the discovery of six contaminated private supply wells on Crescent Street in Yaphank, the Groundwater Resources Section was requested to begin a drilling program to determine the three-dimensional configuration and, if possible, the source of contamination. This report summarizes the results of the section's work.

Background Information

Sampling of private wells on Crescent Street in October, 1978 showed that two homes (Andrus and Johnson) had 4 ppb of both trichloroethane and trichloroethylene. Samples taken in October, 1980 revealed six of twenty-four homes had trichloroethane concentrations over the recommended state limit of 50 µg/l. All six affected wells also contained trichloroethylene, but below the 50 µg/l limit. Table 1 lists the individual well concentrations.

Table 1

	Hansen	Andrus	Johnson	Nelson	Manino	Kirkup
1,1,1 trichloroethane	154	230	280	83	260	450
1,1,2 trichloroethylene	28	16	12	27	29	31

Figure 1 shows the clustered grouping of the six contaminated wells. Before any drilling began, this spatial distribution suggested either the use of cesspool additives by residents on the west side of Crescent Street (the original Drainz formulation contained 31 percent 1,1,1 trichloroethane with a small amount of 1,1,2 trichloroethylene), or a discrete organics plume.

The water table in this area is largely controlled by the Carmans River, and groundwater flow is from west to east, towards the river. A plume would then have to originate west of Crescent Street.

Drilling Investigation

To completely delineate the organics contamination, a series of wells were drilled and vertical water quality profiles compiled at each site. This included drilling 80 feet below grade (the lower limit of the hollow-stem auger rig that was used) and installing a 2-inch well with a 3-foot screen. A sample was collected at this depth, and the casing was then pulled back 10 feet and resampled. This procedure continued until the screen reached the 30-foot level where it was subsequently left. Depth to water in this area is about 24 feet.

Figures 1 and 2 show the locations of the 15 wells installed during the investigation. Numbering of wells is chronologic and indicates the order in which they were drilled. The analytical results for all the wells are shown in Table 2.

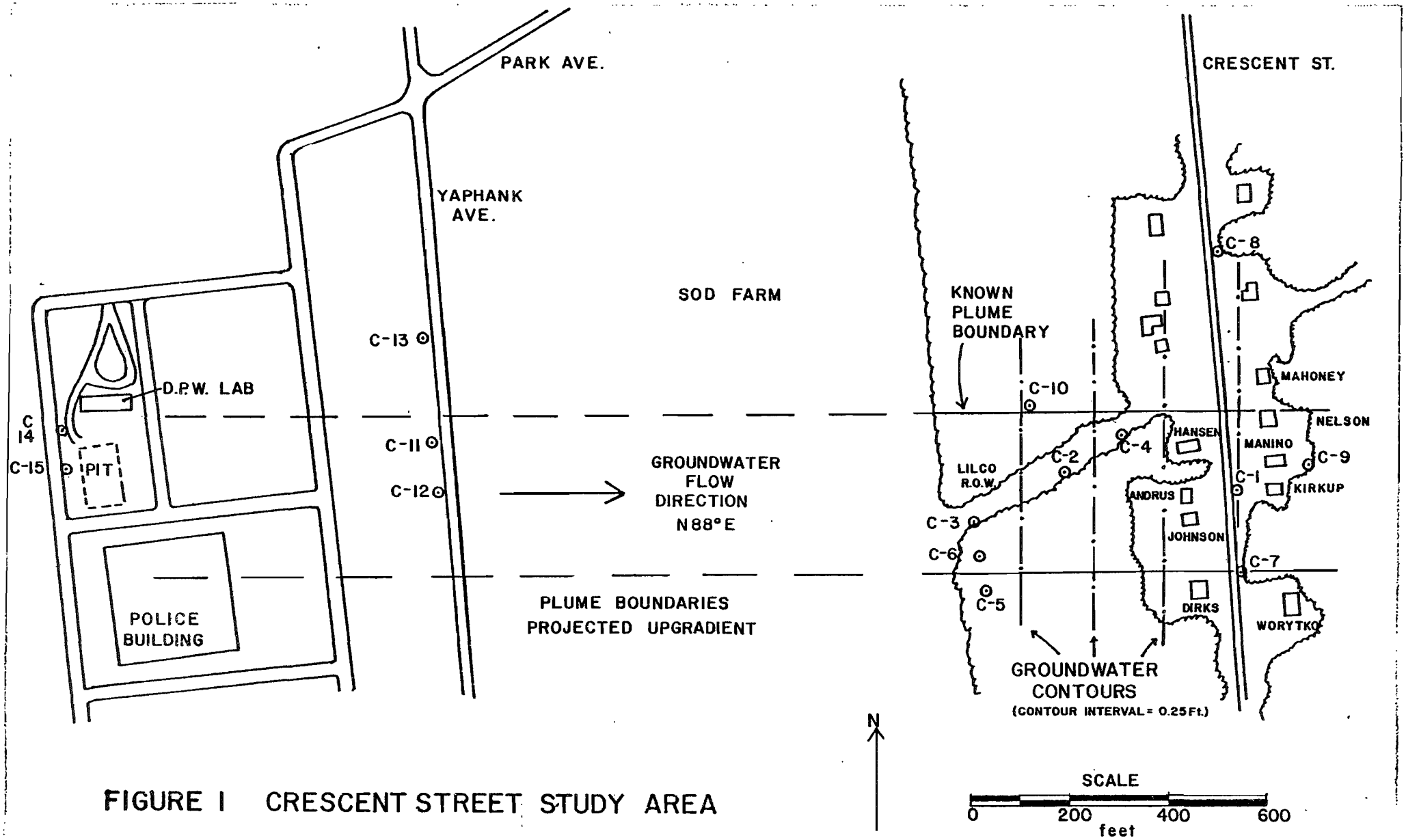


FIGURE I CRESCENT STREET STUDY AREA

FIGURE 2 CRESCENT STREET STUDY AREA

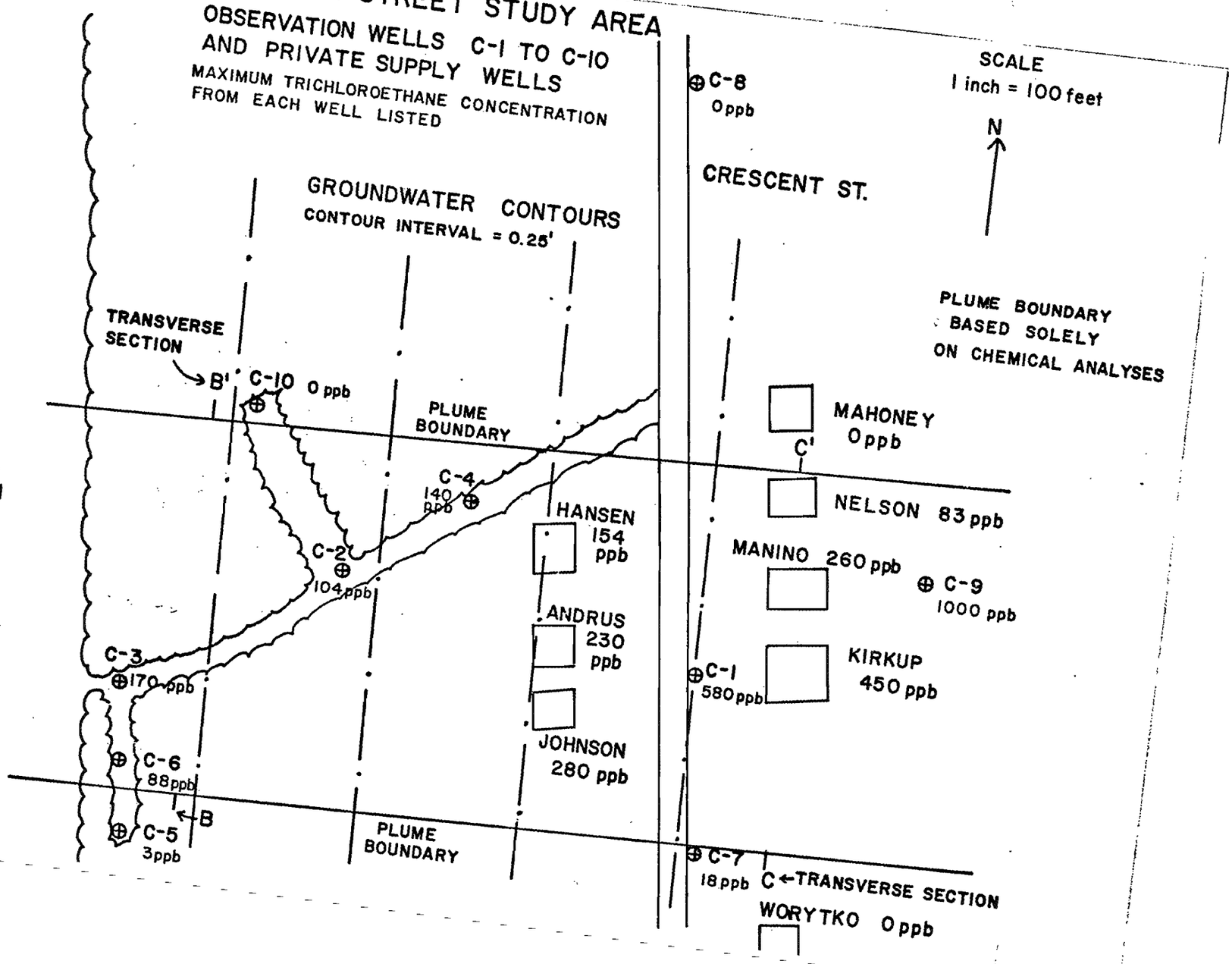


TABLE 2

MONITORING WELL RESULTS

Depth from Grade (ft)	Well Number														
	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15
30	260* 16	19 0	170 9	140 15	2 ND	56 ND	ND ND	ND ND	89 10	ND ND	120 ND	40 ND	ND ND	ND ND	ND ND
40	580 32	95 10	160 6	ND ND	3 ND	88 ND	18 ND	ND ND	200 22	ND ND	8 ND	ND ND	ND ND	ND ND	ND ND
50	490 43	104 10	12 ND	19 ND	ND ND	6 ND	ND ND	ND ND	620 70	ND ND	--	ND ND	ND ND	ND ND	ND ND
60	100 7	68 6	ND ND	31 ND	ND ND	2 ND	ND ND	ND ND	1000 88	ND ND	--	ND ND	ND ND	ND ND	ND ND
70	ND ND	18 ND	ND ND	--	ND ND	ND ND	ND ND	ND ND	6	ND ND	--	ND ND	ND ND	ND ND	ND ND
80	ND ND	2 ND	ND ND	--	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	--	ND ND	--	ND ND	ND ND

*Upper number is 1,1,1 trichloroethane concentration in parts ber billion.
Lower number is 1,1,2 trichloroethylene concentration in parts per billion.

ND = Not detectable (<2 ppb for 1,1,1 trichloroethane; <5 ppb for 1,1,2 trichloroethylene).

Plume Delineation

The first well, C-1, was installed in the center of the contaminated area to establish the vertical distribution of the synthetic organics. The depths of the affected private wells were unobtainable, so that data could not be used for this determination. Results from this site show the two constituents to be concentrated in the top 40 feet of the water table.

Wells C-2, C-3 and C-4 were installed in the LILCO right-of-way to determine whether trichloroethane was present upgradient from Crescent Street. If the contaminants had been introduced through the use of cesspool additives, one would not expect to find any organics in this area. The results show that both contaminants were present in all three wells and in the same vertical range as found in C-1. This definitively indicated that a synthetic organics plume originating west of Crescent Street was responsible for the contamination.

The width of the plume, an important parameter to be quantitatively determined, seemed to be established on Crescent Street by the six affected homes. Wells C-5, C-6 and C-10 were drilled to find the north and south boundaries west of Crescent Street. To check the width on Crescent Street, wells C-7 and C-8 were drilled. Wells C-8 and C-10 were north of the plume and completely clean. The plume boundaries can be seen as diffuse zones where organic concentration decreases to low, but still detectable, levels. Wells C-5 and C-7 establish the southern edge of the plume, as they are in this zone of diffusion.

To investigate the concentration and depth of the plume east of Crescent Street, well C-9 was installed. Table 2 shows that this well penetrated the most concentrated part of the plume encountered during the drilling program.

A sod farm, shown on Figure 1, prevented the installation of wells between C-3 and Yaphank Avenue. To locate wells across this 1,000-foot gap, it was necessary to survey the tops of wells C-2 through C-10, so water-table contours could be drawn and the groundwater gradient and flow direction determined. The contours shown on Figures 1 and 2 are the result of this work. The flow direction was found to be N.88°E. (almost due east).

Using the flow direction and water quality results, the plume boundaries can be accurately drawn between the edge of the sod farm and the east side of Crescent Street (see Figures 1 and 2). Projecting these lines upgradient to Yaphank Avenue, wells C-11, C-12 and C-13 were installed. Table 2 shows 1,1,1 trichloroethane was found in C-11 and C-12. The results from well C-13, purposely located to establish the plume's northern boundary, show no detectable traces of the synthetic organics.

The laboratory run by the Suffolk County Department of Public Works, located immediately north of the Suffolk County Police Headquarters and about 2,200 feet west of Crescent Street (see Figure 1), has used 1,1,1 trichloroethane and 1,1,2 trichloroethylene in the past. As hydrogeologic and water quality information became available during the investigation, the lab

was determined to be the most probable source. Because the contamination had been traced from Crescent Street to within 600 feet of the lab, two wells were installed upgradient of the probable disposal sites. All of the samples from wells C-14 and C-15 were clean with no detectable amounts of any organic compounds.

Discussion

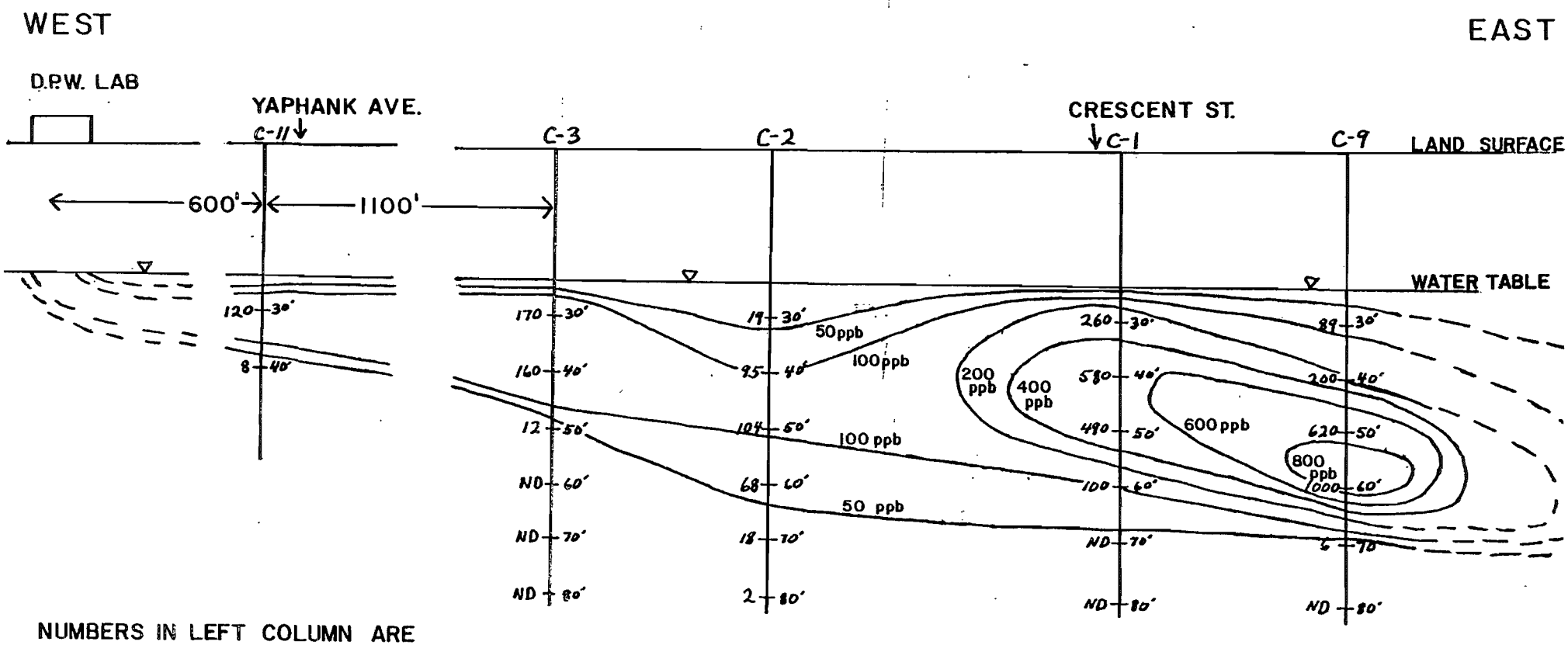
The vertical water quality profiles and local groundwater hydraulics are entirely complementary (this is not always the case in hydrogeologic investigations) in identifying the source of the plume. When the history of solvent use and disposal at the lab is also taken into account, little room for alternative conclusions remains, except for the method or location of disposal.

The plume boundaries between the sod farm and Crescent Street are drawn solely on the basis of water quality information. The location of contaminated and clean wells dictates the position of these lines with little variation possible. A pit once used for disposal of used materials behind the lab is bracketed when the boundary lines are extended upgradient using the established flow direction.

A longitudinal cross section of the plume is shown in Figure 3, and this also implicates that the lab is the plume's source.

Trichloroethane found in C-11 and C-12 is confined to the surface of the saturated zone. This would be expected near the

FIGURE 3 LONGITUDINAL PROFILE, ORGANICS PLUME, YAPHANK, N.Y.



NUMBERS IN LEFT COLUMN ARE
TRICHLOROETHANE CONCENTRATIONS
IN PARTS PER BILLION (ND = NOT DETECTABLE)
RIGHT COLUMN IS DEPTH FROM GRADE

HORIZONTAL SCALE 1" = 100'
VERTICAL SCALE 1" = 20'

point of introduction; however, as the heavier-than-water compounds move downgradient, they slowly sink further below the top of the water table under the influence of gravity. At C-9 one can see the bulk of the contamination has migrated downward 25 to 30 feet. This is also illustrated by the transverse sections shown in Figure 4.

Because groundwater velocity is generally in the range of several feet per day, the synthetic organics now found beneath Crescent Street represent material that entered the upper glacial aquifer at some time in the past. To calculate groundwater velocity in this area, one can use the equation:

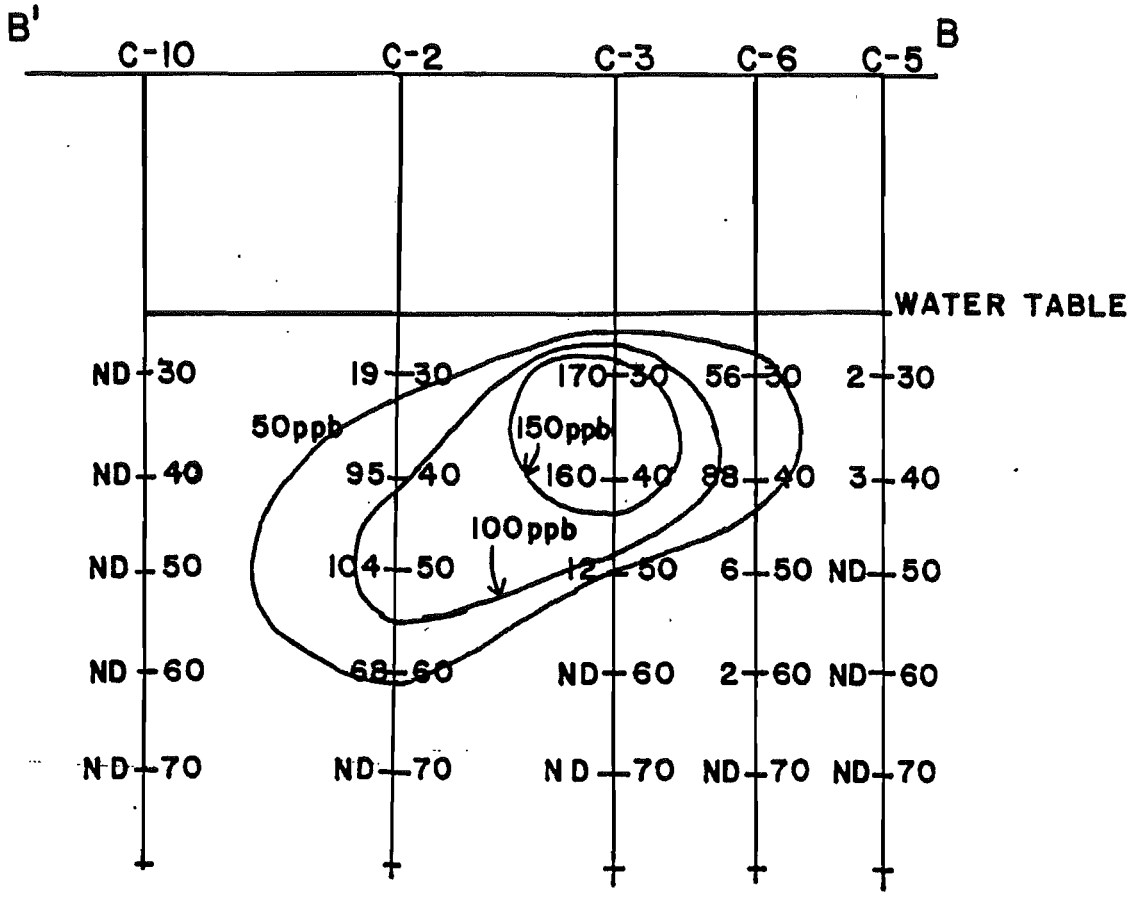
$$u = Ki/n,$$

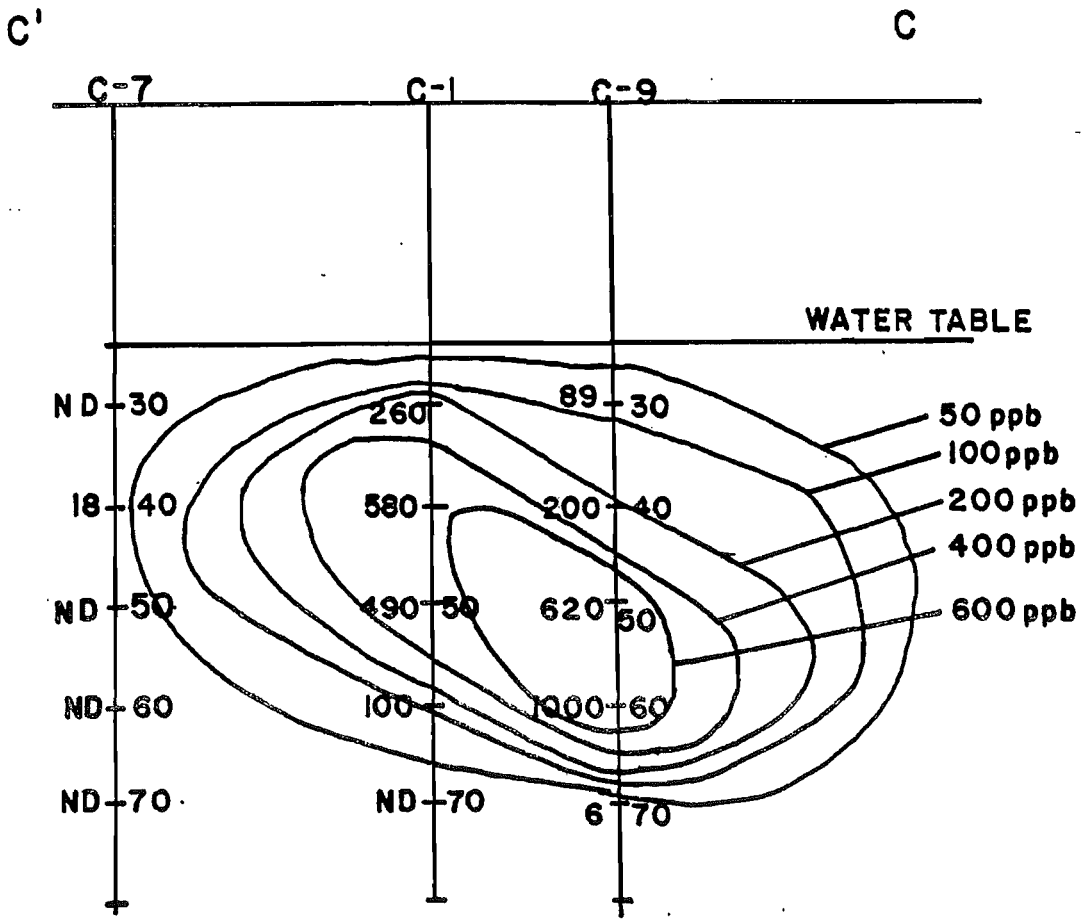
where u = average velocity
K = hydraulic conductivity
i = local groundwater gradient
n = porosity

(Hydraulic conductivity is a measure of the material in an aquifer--medium to coarse sand in this case--to transmit water. It is commonly defined as the rate of flow of water in gallons per day through a cross-sectional area of 1 square foot. The groundwater gradient is a quantitative measure of the water table's slope or, more formally stated, the change in static head per unit distance measured in the direction of the maximum rate of decrease. Porosity is also dependent on the character of the aquifer material and is defined as the amount of interconnected pore space available for fluid transmission. It is expressed as a percentage of the total volume of material that is occupied by interstices).

FIGURE 4 TRANSVERSE SECTIONS

SEE FIGURE 2 FOR SECTION LOCATIONS





The groundwater gradient determined from wells C-2 through C-10 is about 8.8 feet per mile, or .0017 feet per foot. McClymonds and Franke (1972, USGS Prof. Paper 627-E, p. 13) found the hydraulic conductivity in this area to be 1,500 gallons per day per square foot. Based on material recovered from the auger flights during the drilling, porosity was estimated to range from .30 to .35. Groundwater velocity, therefore, may vary between 0.97 and 1.13 feet per day. Since Crescent Street is approximately 2,200 feet from the DPW lab, the organics now found in the private supply wells are from 5.3 to 6.2 years old. The trichloroethane found in C-11, 120 μg/l, which exceeds the recommended guidelines, will reach Crescent Street in about 4.0 to 4.5 years.

APPENDIX 1

INFORMATION ON THE HEALTH EFFECTS OF 1,1,1 TRICHLOROETHANE AND 1,1,2 TRICHLOROETHYLENE

SUMMARY

Trichloroethylene

Presently, the New York State Health Department has established a limit of 50 ppb for trichloroethylene in water supplies. If this material is present with other organic compounds, the combined total should not exceed 100 ppb.

According to data contained in the National Academy of Sciences 1977 report on drinking water and health, trichloroethylene has been found to be an animal carcinogen in certain species of mice. During a chronic feeding study, the mice developed hepatocellular carcinoma. It should be noted that rats were also included in the feeding study, however, they were resistant to the carcinogenic effects of trichloroethylene.

The limits that have been applied to drinking water supplie is based upon a continuing intake of two liters per day of water consumed over an extended lifetime. The statistical risk involved for an individual consuming two liters of water per day over a lifetime exposure, assuming a body weight of 70 kilograms, would result in one additional cancer per 100,000 population. This is based upon an intake of 46 ppb of the compound in the water supply. This risk factor is taken from the New York State Department of Health publication "Organic Chemicals and Drinking Water."

1,1,1 Trichloroethane

To date, there has been no data received by the Suffolk County Health Department that indicates any carcinogenic properties of this material. However, the general State Health Department guideline of 50 ppb has been used as a recommended acceptable level.

DM/jdm
2/24/81

TRICHLOROETHANE

—1,1,1-Trichloroethane. Methylchloroform; Chlorothene. $C_2H_3Cl_3$; mol wt 133.42. CH_3CCl_3; C 18.00%, H 2.27%, Cl 79.72%. Prepd by the action of chlorine on 1,1-dichloroethane: Sutton, *Proc. Roy. Soc.* A133, 673 (1931); by the catalytic addition of HCl to 1,1-dichloroethylene: Ger. pat. 523,436 (1931); U.S. pat. 2,209,000 (Nutting, Huscher, 1940).

Liquid. Nonflammable. Solidifies at −32.5°; d_4^{20} 1.3492; bp_{760} 74.1°; n_D^{20} 1.43838. Insoluble in water. Absorbs some water. Soluble in acetone, benzene, carbon tetrachloride, methanol, ether. Less toxic than carbon tetrachloride.

USE: In cold type metal cleaning, also in cleaning plastic molds. *Human Toxicity:* Irritating to eyes, mucous membranes, and in high concns, narcotic.

—1,1,2-Trichloroethane. Vinyl trichloride. $CH_2ClCHCl_2$; mol wt 133.42. $C_2H_3Cl_3$; C 18.00%, H 2.27%, Cl 79.73%. Prepd by catalytic chlorination of ethane or ethylene. Joseph, U.S. pat. 2,752,401 and Pye, U.S. pat. 2,752,402 (both 1956 to Dow Chemical Co.); Reynolds, U.S. pat. 2,783,286 (1957 to Olin Mathieson Chem. Corp.).

Nonflammable liq; pleasant odor; d_4^{20} 1.4416; solidif −35°; bp 113–114°; n_D^{20} 1.4711. Insoluble in water; miscible with alcohol, ether, and many other organic liquids.

USE: Solvent for fats, waxes, natural resins, alkaloids. *Human Toxicity:* Irritating to eyes, mucous membranes, and, in high concns, narcotic.

α-TRICHLOROETHANE

General Information

Synonyms: 1,1,1-Trichloroethane; methyl chloroform.

Description: Colorless liquid.

Formula: CH_3CCl_3.

Constants: Mol wt: 133.42, bp: 74.1°C, fp: −32.5°C, flash p: none, d: 1.3492 at 20°/4°C, vap. press.: 100 mm at 20.0°C.

Hazard Analysis

Toxic Hazard Rating:

- Acute Local: Irritant 1; Ingestion 1; Inhalation 2.
- Acute Systemic: Inhalation 2; Skin Absorption 1.
- Chronic Local: Irritant 1.
- Chronic Systemic: Ingestion 1, Inhalation 1.

Toxicity: Narcotic in high concentrations.

TLV: ACGIH (recommended); 350 parts per million in air; 1900 milligrams per cubic meter of air.

Disaster Hazard: Dangerous; See chlorides.

Countermeasures

Ventilation Control: Section 2.

Personal Hygiene: Section 3.

Storage and Handling: Section 7.

β-TRICHLOROETHANE

General Information

Synonyms: 1,1,2-Trichloroethane; vinyl trichloride.

Description: Liquid, pleasant odor.

Formula: $CH_2ClCHCl_2$.

Constants: Mol wt: 133.4, bp: 114°C, fp: −35°C, d: 1.4416 at 20°/4°C, vap. press.: 40 mm at 35.2°C.

Hazard Analysis

Toxic Hazard Rating:

- Acute Local: Irritant 1; Ingestion 1; Inhalation 1.
- Acute Systemic: Inhalation 2.
- Chronic Local: Irritant 1.
- Chronic Systemic: Ingestion 2; Inhalation 2.

TLV: ACGIH (recommended); 10 parts per million of air; 45 milligrams per cubic meter of air. May be absorbed via the skin.

Toxicology: Trichloroethane has narcotic properties and acts as a local irritant to the eyes, nose and lungs. It may also be injurious to the liver and kidneys. A fumigant.

Disaster Hazard: Dangerous; See chlorides.

Countermeasures

Ventilation Control: Section 2.

Personal Hygiene: Section 3.

Storage and Handling: Section 7.

TRICHLOROETHYLENE

—Trichloroethylene. *Trichloroethene;* ethinyl trichloride; Tri-Clene; Trielene; Trilene; Trichloran; Trichloren; Algylen; Trimar; Triline; Tri; Threthylen; Trethylene; Westrosol; Chlorylen; Gemalgene; Germalgene. $ClCH{=}CCl_2$; mol wt 131.40. C_2HCl_3: C 18.28%, H 0.77%, Cl 80.95%. Usually prepd from *sym*-tetrachloroethane by elimination of HCl (by boiling with lime): Ger. pat. 171,900. By passing tetrachloroethane vapor over calcium chloride catalyst at 300°: Ger. pat. 263,457; without catalyst at 450–470°: Brit. pat. 575,530 (1946 to Du Pont). Modern process survey: S. A. Miller, *Chemical and Process Engineering* 47, 268 (1966).

Nonflammable, mobile liquid. Characteristic odor resembling that of chloroform. d_4° 1.4904; d_4^{15} 1.4695; d_4^{20} 1.4649; d_4^{t} between 17.6° and 75° = 1.49486 − 0.001641*t*. Vapor density: 4.53 (air = 1.00). Solidifies at −83°; mp −73°; bp_{760} 86.7°; bp_{400} 67.0°; bp_{200} 48.0°; bp_{100} 31.4°; bp_{60} 20.0°; bp_{40} +11.9°; bp_{20} −1.0°; bp_{10} −12.4°; bp_5 −22.8°; $bp_{1.0}$ −43.8°; n_D^{17} 1.47914; n_4^{25} 1.45560. Practically insol in water; miscible with ether, alcohol, chloroform. Dissolves most fixed and volatile oils. Slowly dec (with formn of HCl) by light in the presence of moisture. Trichloroethylene for medicinal purposes may contain some thymol or ammonium carbonate (not more than 20 mg/100 ml) as a stabilizer. Industrial grades of trichloroethylene may contain other stabilizers, such as triethanolamine stearate and cresol. LD orally in dogs: 5.86 g/kg. Lethal concn for mice in air: 7800 ppm.

Caution: Use with adequate ventilation. Preserve trichloroethylene in sealed, light-resistant ampuls or in frangible, light-resistant glass tubes. Avoid prolonged exposure of the product to excessive heat. It must be dispensed in the unopened glass container in which it was placed by the manufacturer.

USE: Solvent for fats, waxes, resins, oils, rubber, paints, and varnishes. Solvent for cellulose esters and ethers. Used for solvent extraction in many industries. In degreasing, in dry cleaning. In the manuf of organic chemicals, pharmaceuticals, such as chloroacetic acid.

MED USE: Inhalation analgesic and anesthetic for short operative procedures. Often used for obstetric analgesia. Formerly for trigeminal neuralgia, migraine, angina pectoris. *Side Effects:* Tachycardia, bradycardia, cardiac arrhythmias, tachypnea may occur. *Human Toxicity:* Moderate exposures can cause symptoms similar to alcohol inebriation. Higher concns can have narcotic effect. Deaths occurring after heavy exposure have been attributed to ventricular fibrillation. Liver injury is not definitely established in occupational exposures.

VET USE: Has been used as an inhalant anesthetic for pigs, dogs, cats. Also as a disinfectant and detergent for skin, minor wounds and surgical instruments. It is useful in the removal of grease and tar from hair coat and wounds of animals.

TRICHLOROETHYLENE

General Information

Synonyms: Ethinyl trichloride; ethylene trichloride.

Description: Stable, colorless, heavy, mobile liquid, chloroform-like odor.

Formula: $CHClCCl_2$.

Constants: Mol wt: 131.40, mp: −73°C, bp: 87.1°C, fp: −86.8°C, d: 1.45560 at 25°/4°C, autoign. temp.: 770°F, vap press.: 100 mm at 32°C, vap. d.: 4.53, flash p: 90°F, lel: 2.5%, uel: 90%.

Hazard Analysis

Toxic Hazard Rating:

- Acute Local: Irritant 1; Ingestion 1; Inhalation 1.
- Acute Systemic: Ingestion 2; Inhalation 3; Skin Absorption 2.
- Chronic Local: Irritant 1.
- Chronic Systemic: Inhalation 1; Skin Absorption 1.

TLV: ACGIH (recommended); 100 parts per million of air; 535 milligrams per cubic meter of air.

Toxicology: Inhalation of high concentrations causes narcosis and anesthesia. A form of addiction has been observed in exposed workers. Prolonged inhalation of moderate concentrations causes headache and drowsiness. Fatalities following severe, acute exposure have been attributed to ventricular fibrillation resulting in cardiac failure. There is some question as to damage to liver or other organs from chronic exposure. Cases have been reported but are of questionable validity. Determination of the metabolites trichloracetic acid and trichloroethanol in urine reflects the absorption of trichloroethylene.

NOTE: A food additive permitted in food for human consumption (Section 10). A common air contaminant (Section 4).

Fire Hazard: Slight, when exposed to heat or flame. High concentrations of trichloroethylene vapor in high-temperature air can be made to burn mildly if plied with a strong flame. Though such a condition is difficult to produce, flames or arcs should not be used in closed equipment which contains any solvent residue or vapor.

Spontaneous Heating: No.

Disaster Hazard: Dangerous; See chlorides.

Countermeasures

Ventilation Control: Section 2.

Personnel Protection: Section 3.

Storage and Handling: Section 7.

Shipping Regulations: Section 11.

MCA warning label.

IATA: Other restricted articles, class A, no label required, 40 liters (passenger and cargo).

Conclusions and Recommendations

In view of the relative paucity of data on the mutagenicity, carcinogenicity, teratogenicity, and long-term oral toxicity of 1,1,2-trichloroethane, estimates of the effects of chronic oral exposure at low levels cannot be made with any confidence. It is recommended that studies to produce such information be conducted before limits in drinking water are established.

Trichloroethylene

Introduction

Trichloroethylene (trichloroethene) is used primarily in metal degreasing. It is also used in dry-cleaning operations, as a solvent, in organic synthesis, and in refrigerants and fumigants (Frear, 1969). The U.S. production of this compound in 1973 was over 451 million pounds (USITC, 1975).

Trichloroethylene is slightly soluble in water (CRC Handbook of Chemistry and Physics, 1970–1971). It can be formed during chlorination of water (USEPA, 1975d). The 10-city survey indicated that finished water of five supplies contained trichloroethylene, at 0.1–0.5 μg/liter (USEPA, 1975a).

Metabolism

Butler (1949) indicated that trichloroacetic acid, trichloroethanol, and small amounts of chloroform and monochloroacetic acid were the metabolic products of trichloroethylene. Ikeda and Ohtsuji (1972) reported that rats excrete 5–7 times more trichloroethanol than trichloroacetic acid after exposure to trichloroethylene. The excretion of trichloroethylene and trichloroacetic acid in the urine has been used to some extent to measure trichloroethylene exposure.

Health Aspects

Observations in Man Exposure to trichloroethylene results in central nervous system depression, incoordination, and unconsciousness, as evidenced by its use as an anesthetic. Acute human exposures have occurred, but have not always been clear-cut cases of exposure to a single entity. The report of Feldman *et al.* (1970) concerned a person who was

exposed to trichloroethylene vapors from an overheated degreasing unit. He experienced nausea, vomiting, blurred vision, and numbness of the face 10–12 h after exposure. The recovery of sensation in the face and motor function of facial muscles occurred slowly over an 18-month period. Sagawa *et al.* (1973) reported accidental exposure of a yo[illegible] woman to vapor and mist of trichloroethylene, which result[illegible] unconsciousness and a permanent residual disability with re[illegible] mobility. In fatal cases of acute trichloroethylene exposur[illegible] Kleinfeld and Tabershaw (1954), there was no tissue [illegible] autopsy. Based on chronic exposure of human work pop[illegible] no reported problems with respect to hepatotoxicity. [illegible] Stewart *et al.* (1970) and Ikeda and Imamuru (1973) reported a rather prolonged (2–3 days) biologic half-life for trichloroethylene.

The NIOSH (1973) recommended the occupational exposure to trichloroethylene at not in excess of 100 ppm as a time-weighted average exposure for an 8-h work day.

Observations in Other Species

Acute Effects The acute oral LD_{50} of trichloroethylene in rats was 4,920 mg/kg (Registry of Toxic Effects of Chemical Substances, 1975). Comparative studies of acute toxicity of halogenated hydrocarbon solvents have also demonstrated that near-lethal doses of trichloroethylene are necessary to produce mild hepatic dysfunction (Klassen and Plaa, 1966). Baker (1958) reported severe changes in the cerebellum, particularly in the Purkinje cell layers in dogs exposed to 3,000 ppm of trichloroethylene vapor. The dogs were exposed from 2–8 h/day for up to 6 days.

Chronic Effects In a study of the chronic effects of trichloroethylene, a 6-month inhalation exposure to 3,000 ppm resulted in increased liver and kidney weights in mice and rats (Adams *et al.*, 1951).

Mutagenicity No available data.

Teratogenicity Schwetz *et al.* (1975) described the acute exposure of mice and rats to 300 ppm, 7 h/day, on days 6–15 of gestation. No embryonal or fetal toxicity was noted, nor were there any teratogenic effects.

Carcinogenicity Trichloroethylene was tested for carcinogenicity by NCI (1976) in a chronic feeding study. Both sexes of Osborne-Mendel rats and $B6C3F_1$ mice were used. Animals were exposed to two doses

(MTD and 1/2 MTD) by oral gavage 5 times/week for 78 weeks. All animals were then kept until terminal sacrifice at 90 or 110 weeks for mice and rats, respectively. The doses used were as follows: 1,097 and 549 mg/kg for both male and female rats and 2,339 and 1,169 mg/kg for male mice and 1,739 and 869 mg/kg for female mice. Significant dose-related hepatocellular carcinoma was seen in both male and female mice, but the rats were quite resistant to the carcinogenic effects of trichloroethylene.

Carcinogenic Risk Estimates

The statistical assessment of human cancer risk associated with trichloroethylene in drinking water is based on the results of a carcinogenesis bioassay experiment with animals (NCI, 1976). Trichloroethylene was dissolved in corn oil and administered by gavage to male and female $B6C3F_1$ mice 5 days/week for 78 weeks. The surviving mice were sacrificed at 90 weeks, and a complete necropsy and microscopic evaluation of all animals were conducted. Highly significant differences in the incidence of hepatocellular carcinomas were found between treated and control mice of both sexes.

The available sets of dose–response data were individually considered as described in the risk section in the chapter on margin of safety. Each set of dose–response data was used to statistically estimate both the lifetime risk and an upper 95% confidence bound on the lifetime risk at the low-dose level. These estimates are of lifetime human risks and have been corrected for species conversion on a dose/surface area basis. The risk estimates are expressed as a probability of cancer after a lifetime consumption of 1 liter of water/day containing Q ppb of the compound of interest. For example, a risk of $1 \times 10^{-6}\,Q$ implies a lifetime probability of 2×10^{-5} of cancer if 2 liters/day were consumed and the concentration of the carcinogen was 10 ppb (i.e., $Q = 10$). This means that at a concentration of 10 ppb during a lifetime of exposure this compound would be expected to produce one excess case of cancer for every 50,000 persons exposed. If the population of the United States is taken to be 220 million people this translates into 4,400 excess lifetime deaths from cancer or 62.8/yr. Since several data sets are typically available the range of the low-dose risk estimates are reported. For trichloroethylene at a concentration of 1 μg/liter ($Q = 1$) the estimated risk for man would be $0.36\text{–}1.1 \times 10^{-7}\,Q$. The upper 95% confidence estimate of risk at the same concentration is $0.55\text{–}1.6 \times 10^{-7}\,Q$.

It should be emphasized that these extrapolations are based on a number of unverifiable assumptions: extrapolation from high exposure to low exposure in mice, on the basis of a multistage mathematical model;

extrapolation from mouse to man, on the basis of the surface-area rule; and extrapolation from gavage exposure to oral exposure assumed equal. These estimated human risks should be taken as crude estimates at best.

Conclusions and Recommendations

It is concluded that trichloroethylene has low toxicity, both acute and chronic. Only after high acute accidental exposures have effects been reported in humans. These have been related to the depressant effect on the central nervous system. No fetal toxicity or teratogenic effects have been reported. Carcinogenic bioassay demonstrated hepatocellular carcinoma in one strain of mice. The chronic toxicity data are summarized in Table VI-58.

Trichlorofluoromethane

Introduction

Trichlorofluoromethane (Freon 11) is used in the manufacture of aerosol sprays, refrigerants, blowing agents, and cleaning compounds and in fire extinguishers (USEPA, 1975d). The U.S. production of this compound in 1973 was over 333 million pounds (USITC, 1975). It has been reported that the finished water of Washington, D.C., contained less than 1 μg/liter of trichlorofluoromethane (Scheiman *et al.*, 1974).

Metabolism

When trichlorofluoromethane was inhaled by humans, recovery of the intact compound in exhaled air was 79–99% and in urine, 0.07–0.09%, and metabolites amounted to 0.2% or less (Mergner *et al.*, 1975). Terrill (1974) demonstrated that absoprtion of a fluorocarbon, F115, in dogs was 35–48 times greater by inhalation than by oral administration. Charlesworth (1975) indicated that the main factor affecting the fate of fluorocarbons is the body fat, where they are concentrated and slowly released into the blood at concentrations that should not cause any risk of cardiac sensitization. Blake and Mergner (1974) showed that inhalation of ^{14}C-labeled Freon 11 by dogs resulted in complete recovery in exhaled air (101.8%) in 1 h, recovery from urine of only 0.0095%, and no evidence of biotransformation. However, Niazi and Chiou (1975), who administered Freon 11 intravenously in dogs, demonstrated that, although the compound is rapidly eliminated from the bloodstream, it is then eliminated via three compartments with half-lives of 3.2, 16, and 93 min.

TABLE VI-58 . Toxicity of Trichloroethylene

Species	Duration of Study	Dosage Levels and No. of Animals Per Group	Highest No-Adverse-Effect Level or Lowest-Minimal-Effect Level	Effect Measured	Reference
Mouse (male)	78 weeks	0, 1.169, and 2.339 mg/kg/day, gavage 20–50 animals/group	1.169 mg/kg/day	hepatomas	NCI, 1976
Mouse	78 weeks	0, 869, and 1.739 mg/kg/day, gavage 20–50 animals/group	869 mg/kg/day	hepatomas	NCI, 1976

[This compound is an animal carcinogen.]

Compound	Allowed μg/l[1] for the lower 95% confidence limit on safe dose for three risk values			Reference (source of data)
	1×10^{-4}	1×10^{-5}	1×10^{-6}	
Tetrachloroethylene	220.0	22.0	2.20	NCI, 1976 (#C04580)
o-Toluidine Hydrochloride	267.0	26.7	2.67	NCI, 1979 (#C02335)
1,2,2-Trichloroethane	46.0	4.6	.46	NCI, 1978 (#C04579)
Trichloroethylene	460.0	46.0	4.6	NAS, Drinking Water and Health, 1977
2,4,6-Trichlorophenol	497.0	49.7	4.97	NCI, 1979 (#C02904)
Trimethylphosphate	506.0	50.0	5.06	NCI, 1978 (#C03781)
Trimethylthiourea	40.0	4.0	.40	NCI, 1979 (#C02186)
Urethane	4.3	.43	.043	Port, et al., Oncology 33, 66 (1976)
Vinyl Chloride	110.0	11.0	1.10	Maltoni, et al., Gli Ospedali della Vita 2, 65 (1975)

[1]An intake of two liters of water per day would produce one excess cancer death per lifetime for 10,000, 100,000 and 1,000,000 population (assuming 70 kg body weight).

[2]National Cancer Institute Bioassay (NCI number given in parenthesis).

New York State Dept.of Health

APPENDIX 2

DEPARTMENT OF HEALTH SERVICES
MEMORANDUM

To: James Pim

Date: March 4, 1981

From: Pete Akras

Subject: CRESCENT STREET WELL CONTAMINATION, YAPHANK
SPILL # 1980-146

D.P.W. Laboratory -

On 3/3/81 John Finkenberg and I met with Mr. Calvin Berger, engineer in charge of the D.P.W. laboratory on Yaphank Rd. in Yaphank. The purpose of the meeting was to gain information regarding the disposal of solvents used in the analysis of asphalt samples.

The D.P.W. laboratory has been at its present location since the late 1940's. Mr. Berger has records for each year showing the amount and type of each solvent purchased. He showed us a chart indicating this information going back to at least the last 20 years. He was hesitant to release this information without prior approval of his superiors.

Information gathered at the meeting, however, indicated that prior to 1972 carbon tetrachloride was the main solvent used in the asphalt analyses. Beginning in 1972, trichloroethane was used at the rate of about 1 - 55 gallon drum per year. Beginning in 1974, the use increased to 155 gal/year and since 1975 the usage rate has been approx. 200 gal/year. This year usage is estimated to be 220 gal/year. Eight hundred to 900 asphalt analyses are performed each year and each test requires approx. 1 gal. of trichloroethane. The solvent presently being used is 1,1,1 trichloroethane manufactured under the trade name Chlorothene NU by Dow Chemical Co.

According to Mr. Berger, for the last 2 - 3 years a high volume still has been used to reclaim the used solvent. Used solvent is held in 5 gal. containers for reclamation in the Spee-Distill model SC-15. Waste from the still, including trichlor and asphalt sludge, amounts to about 4 gal/year and is picked up by a solid waste hauler. Prior to use of the still, the lab used its own "glassware still". At this time, there is no way to ascertain the efficacy of this method or even if, in fact, this method was actually used.

In the 1960's there was a small concrete incinerator located behind the lab building used to incinerate spent solvent, asphalt sludge,

paper, etc. This area has also been used in the past as a dumping ground for concrete cylinders, asphalt samples and possibly spent solvent.

An organic sample taken from the cesspool behind the D.P.W. lab building in December of last year was inconclusive. We re-sampled the two cesspools and our lab should have the results soon (field #1PA2-3 and #2PA2-3).

Police Headquarters Building -

Our investigation continued at the S.C. Police Dept. Headquarters Building on Yaphank Rd., Yaphank. We met with Police Officer Raymond La Shire and inquired about possible sources of groundwater contamination in the building.

We were shown a metal treatment plating operation in the weapons repair shop. The operation consists of a series of six 25 gallon longitudinal dip tanks. The first tank is a caustic cleaner (Pentrate Alkali Cleaner) followed by 2 rinse tanks, a nickel blueing tank (Nickel Pentrate) and 2 final rinse tanks. All tanks are static (no running rinses); however, they drain to a floor drain, which appears to be connected to the sanitary system or a dry well. There are no solvents used in this operation. Police Officer La Shire was directed to hold and haul the waste chemicals in the tank rather than drain to the floor drain.

Individual hand cleaning of weapons is performed using cloth swabs and small quantities of solvent. The swabs are wetted with solvent and are used to clean carbon and grease off the weapons. The swabs are then discarded with the refuse. There is no discharge of spent solvent.

Police Officer La Shire states that there are no chemicals added to the cesspools (e.g. Drainz) and that the only problem encountered with their waste system has been a clogged line that was corrected.

As far as we could determine, there is no bulk storage of tri-chloroethane at this site.

Field Survey -

The LILCO right-of-way extends from Crescent St. to Yaphank Road. There was no evidence of dumping along the R.O.W. that would cause trichloroethane contamination. The R.O.W. is heavily wooded adjacent to Crescent St. and then continues across Imperial Sod Farm. The

woods are undisturbed except for locations where test wells were installed by SCDHS. On the sod farm property near Yaphank Rd. is a storage garage, underground gasoline tank and irrigation pump house. Empty drums from Stauffer Chemical Co. are stacked outside this building.

It is possible that the source of contamination is from illegal dumping of solvents that may have occurred sometime in the past. Those familiar with the area from the Groundwater Resources Section have mentioned that the area behind the present Police Headquarters Building has been used for a long time as a dumping ground. It is possible that drums of used solvents are buried here.

Conclusions -

Based upon the information gathered so far from this investigation together with results of test wells installed by SCDHS, the D.P.W. lab is the most likely source of the well contamination. Prior investigations by this Department of the Central Garage and Vector Control buildings indicate that the D.P.W. lab is the only known user of trichloroethane in the area. Further sampling of test wells adjacent to the D.P.W. lab may support or refute these conclusions.

P.A.

Pete Akras
PA/rt
cc: William Roberts
cc: Jack Finkenberg

Investigation Summary

Groundwater Contamination by Tetrachloroethene in Yaphank, Suffolk County, NY

Suffolk County Department of Health Services
Clare B. Bradley, M.D.,M.P.H.
Commissioner

Division of Environmental Quality
Joseph H. Baier, P.E.
Director

Bureau of Groundwater Resources
Martin Trent
Bureau Chief

February 1999

Background

In November 1998 a groundwater investigation was initiated in response to a finding of seven private wells on Yaphank and Gerard Avenues contaminated with tetrachloroethene above the drinking water Maximum Contaminant Level (MCL) of 5 ug/L (micrograms per liter). Tetrachloroethene (also known as perchloroethylene or PCE) is a common solvent used for dry cleaning and metal degreasing. Concentrations of tetrachloroethene in the seven private wells ranged from 5 to 52 ug/L. Four other private wells contained traces of PCE from 1 to 4 ug/L. A total of 39 private wells were tested in the area. The impacted wells are southeast of, and hydrogeologically downgradient of, the Suffolk County Infirmary and other county facilities on the west side of Yaphank Avenue.

Bottled water was supplied to the affected homes by the county, although there was no direct evidence that the county was responsible for the PCE, other than the proximity of the county facilities to the contaminated wells. Public water mains are being installed by the SCWA to serve affected residents on Yaphank and Gerard Avenues.

Investigation

In order to delineate the plume of PCE contamination, the Bureau of Groundwater Resources drilled a series of 26 vertical profile monitoring wells and sampled 105 aquifer segments to collect water quality information. Vertical profile wells were drilled either by the hollow-stem auger method or by percussion installation using a Geoprobe. Water analyses were performed by the Department of Health Services, Public & Environmental Health Laboratory which is certified by the NYS Environmental Laboratory Approval Program.

Several monitoring wells were surveyed to determine groundwater elevations. Based upon the elevations measured, the direction of groundwater flow was determined to be east-southeast towards the Carmans River. Groundwater flow direction was confirmed by both the empirical data collected and a plot of groundwater elevation contours utilizing the county groundwater model (plot attached as Appendix A).

The contamination incident received extensive television and newspaper coverage as a Yaphank Avenue resident claimed that the pollution originated at a former "dump" at the county farm. The NYSDEC conducted an inspection of the area on December 11, 1998 and determined material at the site was solid waste and not classified as hazardous waste. Their observation was supported by tests from a vertical profile monitoring well (CF-1), installed immediately downgradient of the farm dump, which indicated that the site was not a source of the PCE contamination. In addition, with the exception of low concentrations of di(ethylhexyl)phthalate, no pesticides were detected in the monitoring

well. A summary of well CF-1 results are contained in Appendix B. The dump site was cleaned up by the county Department of Public Works.

Another potential source investigated was a former fireworks detonation pit behind the Suffolk County Police Headquarters building. Monitoring wells installed at this location (wells YP-5, 6 & 8) detected no significant PCE concentrations, eliminating the pit as a potential source of the contamination.

Inspections of the county Infirmary, Minimum Security Facility, Police Headquarters and the K-9 training area by the Department of Health Services, Office of Pollution Control were conducted to insure no other potential contamination sources were present. A recommendation was made to connect the Infirmary wheelchair wash down area to the sewage treatment plant rather than disposing of wash water in the recharge basin.

Additional vertical profile monitoring wells were drilled and sampled at multiple levels to trace the PCE contamination through the wooded area upgradient (west-northwest) of the county Infirmary along the LILCO/LIPA right-of-way. Extensive dumping of construction and other debris, including rusted drums, was evident in these undeveloped wooded areas and along the utility right-of-ways and fire roads which traverse the area.

Findings

The areal and vertical extent of the PCE plume was delineated from the water quality data collected from the 26 vertical profile monitoring wells, and from the private well analyses. The current configuration of the PCE plume is characterized from the data as follows:

1) Length: 1.9 miles, originating near Sills Road and Long Island Avenue, and migrating in an east-southeast direction toward Southaven Park and the Carmans River;
2) Width: approximately 800 feet at Yaphank Avenue;
3) Depth: a maximum of 90 feet thick at Yaphank Avenue, with
4) the highest PCE concentration of 180 ug/L detected 80 feet below the water table at Yaphank Avenue.

Areal and cross sectional views of the plume are attached as Appendix C. In cross section, the "slug" of higher PCE concentrations are deepest at Yaphank Avenue, with a tail of lower concentrations at successively shallower depths in the upgradient direction. PCE was detected at the top of the water table in monitoring well YP-21, located near the probable source area. The leading (downgradient) edge of the plume is entering Southaven County Park, east of Gerard Avenue. A summary of the monitoring well analyses is contained in Appendix D.

Conclusions

The groundwater investigation determined that the contamination did not originate at the county facilities on Yaphank Avenue. The data indicate that the source of the PCE plume was in the vicinity of Sills Road and Long Island Avenue, south of Long Island Expressway Exit 66. The PCE source was most likely a short term release, possibly roadside dumping. Based upon a groundwater flow velocity of approximately 1.5 feet per day and the plume's length, the spill probably occurred about 18 to 22 years ago.

Recommendations

Although public water is now available to homeowners in the impacted area, some residents continue to use private wells. Funding to aid homeowner connection to the water mains should be investigated through the town community development agency. Illegal dumping on the area's utility right-of-ways and fire roads should be discouraged to the extent possible by installing a gate to eliminate public access through the county property to the LILCO/LIPA right-of-way west of the K-9 training area, and by re-erecting the traffic barricade on the (dead-end) portion of Long Island Avenue east of Sills Road. LILCO/LIPA should be requested to remove accumulated solid waste and debris from their right-of-ways. Roadside dumping in the plume's upgradient area along Long Island Avenue should be removed, and access to off-road disposal areas eliminated.

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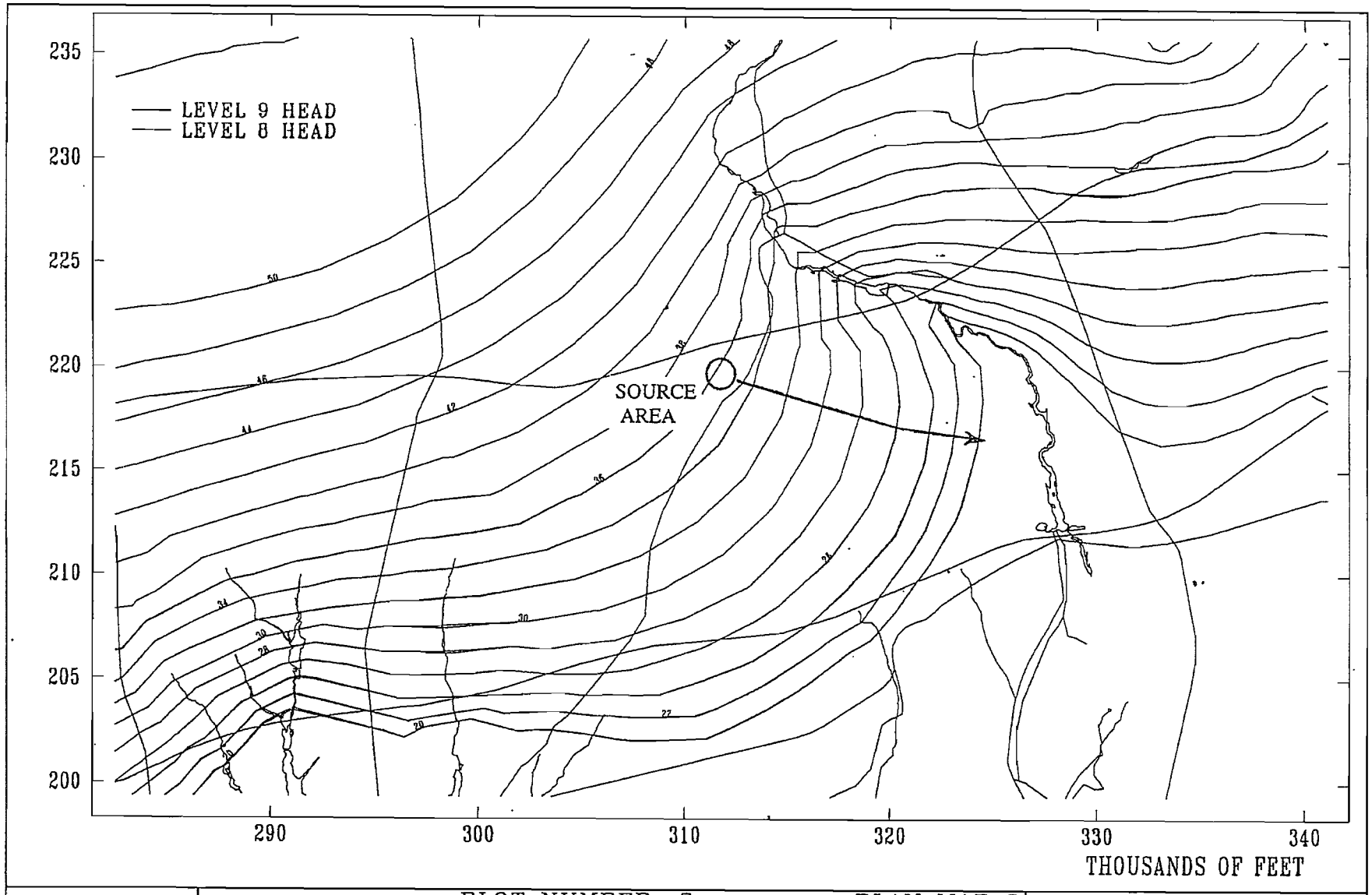
APPENDIX A



DATE/TIME:
PLOTTED: DYNPLOT6
CREATED: DYNFLOW5
DATE/TIME: 11/ 1/98
SAVE FILE: PB_MAIN.SAV

PLOT NUMBER 3 PLAN MAP 2
SUFFOLK COUNTY GROUNDWATER MODEL
LONG TERM AVERAGE FLOW FIELD (ANNUAL AVG. PUMPING/RECHARGE)
DATE: 10/19/98

CDM
environmental engineers, scientists, planners, & management consultants

APPENDIX B

MONITORING WELL CF-1 - PESTICIDE ANALYSIS SUMMARY											
Well Depth BLS	pH	Spec. Cond.	NO3	As, Cd, Hg	VOCs	Chlorinated Pesticides	EDB DBCP	Semi-Volatile Pesticides	Carbamate Pesticides	Chlorinated Acids	TCPA
21-23	6.7	114	0.2	ND	ND	ND	ND	ND	ND	ND	ND
33-35	6.0	89	0.6	ND	1 chloroform	ND	ND	3.8 DEHP	ND	ND	ND
45-47	5.8	96	0.8	ND	1 chloroform	ND	ND	3.4 DEHP	ND	ND	ND

BLS = below land surface

ND = none detected

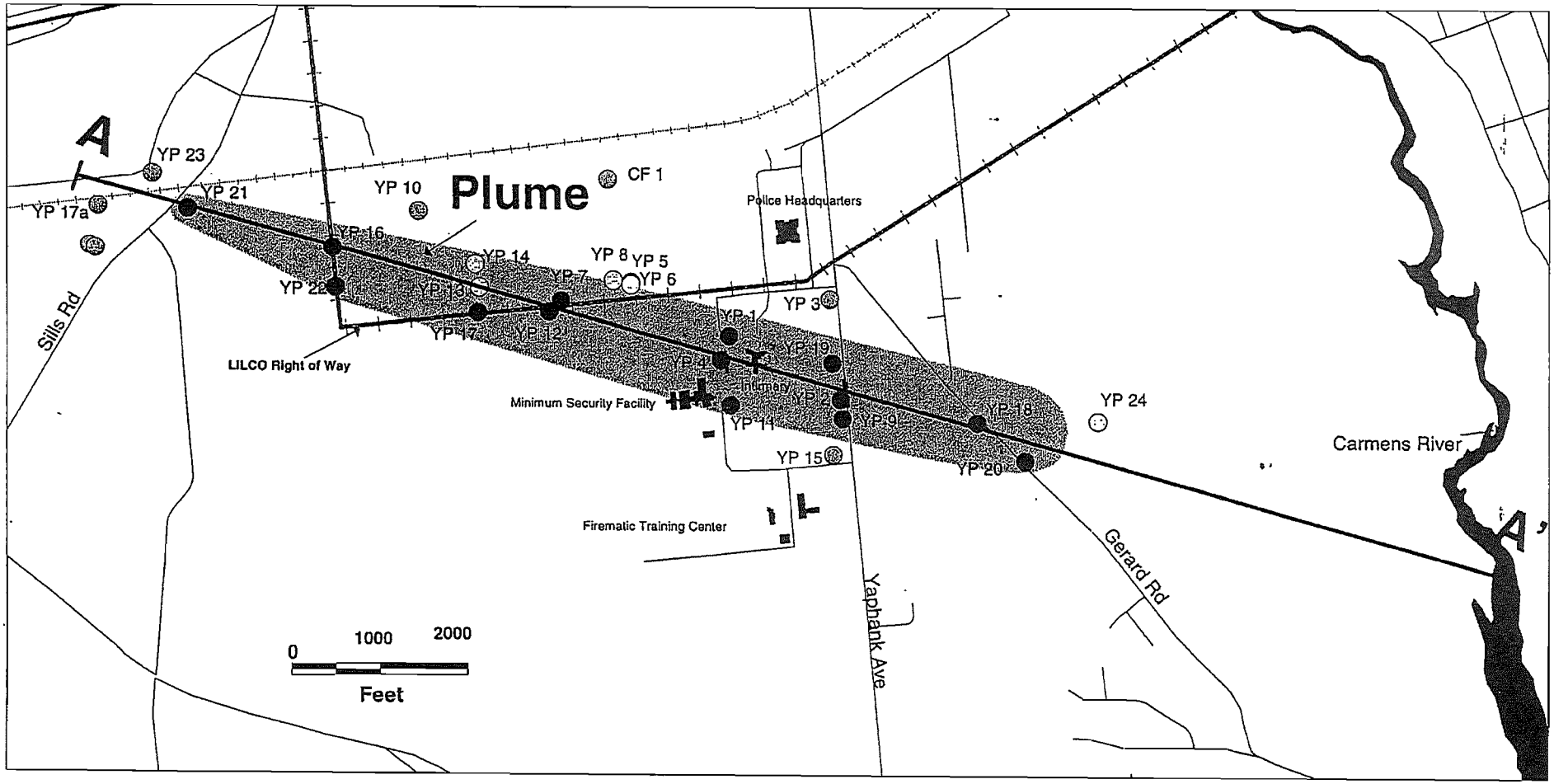
DEHP = diethylhexylphthalate [bis(2-ethylhexyl)phthalate] drinking water MCL is 6 ug/L

chloroform drinking water MCL is 100 ug/L

nitrate (NO3) MCL is 10 mg/L

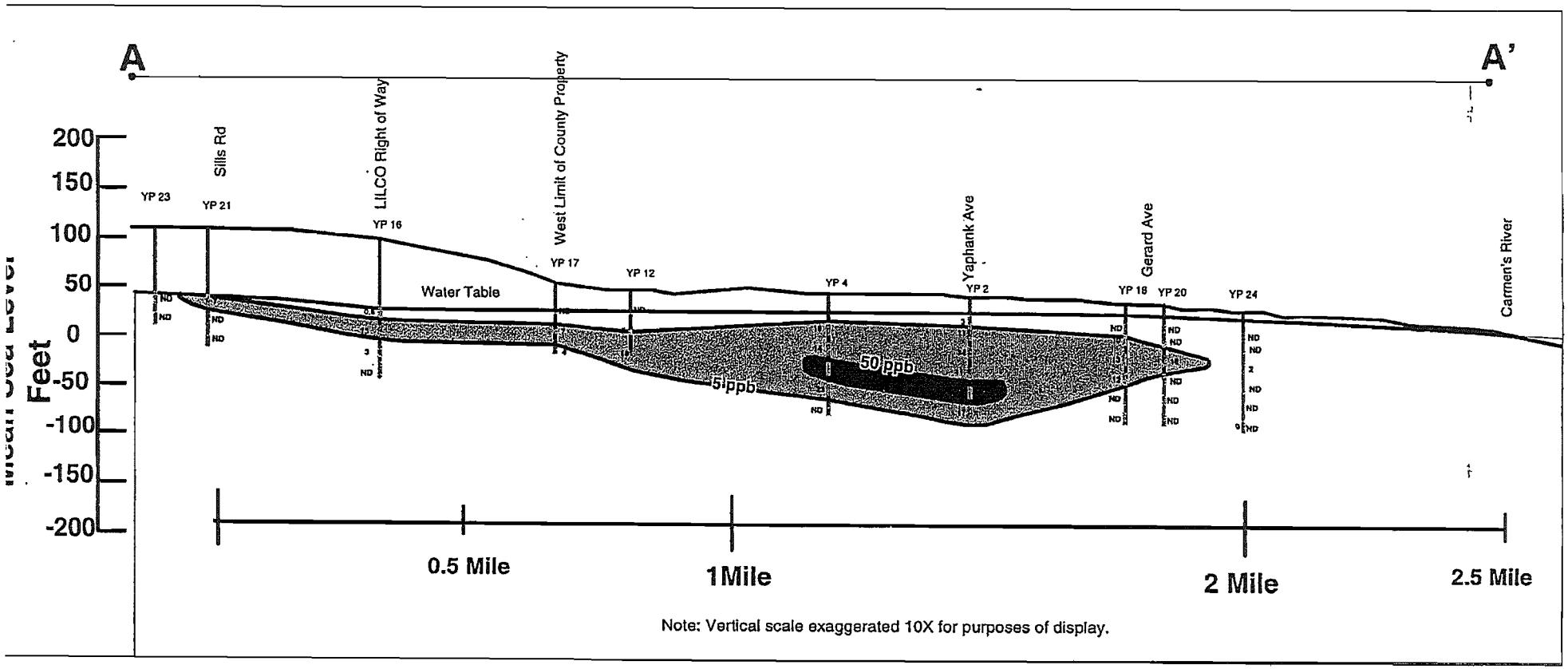
APPENDIX C

AREAL EXTENT OF YAPHANK PCE PLUME



APPENDIX C

CROSS SECTIONAL VIEW OF YAPHANK PCE PLUME



Note: Vertical scale exaggerated 10X for purposes of display.

APPENDIX D

YP-1

- DTW 19.75

Screen Depth	PCE
18-28	0.7
30-40	5
50-60	5
70-80	7
90-100	17
110-120	<0.5

YP-2

- DTW 17.48

Screen Depth	PCE
17-27	3
30-40	11
50-60	34
70-80	41
90-100	180
110-120	17

YP-3

- DTW 17.61

Screen Depth	PCE
17-27	<0.5
40-50	<0.5
60-70	<0.5
80-90	<0.5
100-110	<0.5

YP-4

Screen Depth	PCE
30-40	10
50-60	14
70-80	77
90-100	23
110-120	<0.5

YP-5

- Geoprobe

Screen Depth	PCE
22-24	<0.5
26-28	<0.5
34-36	0.8

YP-6

- Geoprobe

Screen Depth	PCE
22-24	<0.5
26-28	<0.5
34-36	0.7

YP-7

Screen Depth	PCE
18-28	5
30-40	9
50-60	16
70-80	2
90-100	<0.5
110-120	<0.5

YP-8

- Geoprobe

Screen Depth	PCE
20-22	<0.5
40-42	0.6
60-62	0.7
74-76	<0.5
next	

YP-9

Screen Depth	PCE
17-27	<0.5
30-40	<0.5
50-60	24
70-80	21
90-100	<0.5
110-120	<0.5

YP-10

Screen Depth	PCE
31-33	<0.5
40-42	<0.5
51-53	<0.5
72-74	<0.5

YP-11

Screen Depth	PCE
18-28	<0.5
30-40	<0.5
50-60	15
70-80	13
90-100	<0.5
110-120	<0.5

YP-12

Screen Depth	PCE
20-22	<0.5
40-42	5
60-62	10

APPENDIX D

YP-13

Screen Depth	PCE
24-26	<0.5
44-46	4
64-66	1

YP-14

Screen Depth	PCE
24-26	<0.5
44-46	4
64-66	1

YP-15

Screen Depth	PCE
30-40	<0.5
50-60	<0.5
70-80	<0.5
90-100	<0.5
110-120	<0.5

YP-16

Screen Depth	PCE
DTW 72'	
70-80	0.6
90-100	13.
110-120	3.
130-140	<0.5

YP-17

- LILCO rt-of-way

Screen Depth	PCE
28-30	<0.5
48-50	7.
68-70	4.

YP-17a

- N of shop @ LIRR

Screen Depth	PCE
80-90	ND
100-110	ND
120-130	ND
140-150	ND

CF-1

- County Farm Dump

Screen Depth	PCE
21-23	<0.5
33-35	<0.5
45-47	<0.5

YP-18

- Gerard Ave

Screen Depth	PCE
20-30	<0.5
30-40	10
50-60	13
70-80	12
90-100	<0.5
110-120	<0.5

YP-19

- Yaphank Ave s/sump

Screen Depth	PCE
20-30	<0.5
30-40	2
50-60	7
70-80	18
90-100	3
110-120	<0.5

YP-20

- Gerard Ave (south)

Screen Depth	PCE
20-30	<0.5
30-40	<0.5
50-60	16
70-80	<0.5
90-100	<0.5
110-120	<0.5

YP-21

- Fire Rd (E/Sills Rd)

Screen Depth	PCE
70-80	7
90-100	<0.5
110-120	<0.5

YP-22

- LILCO Rt-of-Way

Screen Depth	PCE
70-80	<0.5
90-100	6
110-120	<0.5
130-140	<0.5

YP-23

- Ll Ave
- DTW 74'

Screen Depth	PCE
70-80	<0.5
90-100	<0.5

YP-24

- Southaven Park

Screen Depth	PCE
20-30	<0.5
30-40	<0.5
50-60	2
70-80	<0.5
90-100	<0.5
110-120	<0.5

Investigation Summary: Perchlorate Contamination in Yaphank, Suffolk County, NY

January 2001

Suffolk County Department of Health Services
Clare B. Bradley, M.D.,M.P.H.
Commissioner

Division of Environmental Quality
Vito Minei, P.E., Director

Office of Water Resources
Paul Ponturo, P.E.

Office of Pollution Control
Alex Santino, P.E.

Bureau of Groundwater Resources
Martin Trent

Background

Perchlorate (ClO_4^-) exists primarily as solid salts of ammonium, potassium, or sodium perchlorate. The compound has a high aqueous solubility which contributes to its high mobility in groundwater systems. Perchlorate is very stabile and is known to persist for decades in ground and surface waters. The compound ammonium perchlorate ($NH_4 ClO_4$) is an oxidizing agent and primary ingredient in solid fuel rocket propellant, missiles and fireworks. It is also used in some munitions, matches, and vehicle air bag inflators, and is a trace constituent in some chemical fertilizers.

Perchlorate is a health concern because of its effect on thyroid hormone function. It competitively inhibits iodine uptake, which can affect metabolism, growth, and development. The New York State Department of Health has recommended an enforceable drinking water guideline for perchlorate of 18 ug/L; however, a formal Maximum Contaminant Level (MCL) for perchlorate has not yet been established.

An analytical method capable of detecting low levels of perchlorate was developed in 1997 at a California laboratory. Prior to that time, no analytical procedures existed to test for perchlorate below a concentration of 400 ug/L. Monitoring for perchlorate by the Suffolk County Department of Health Services (SCDHS) began in 1998, when in-house laboratory capabilities, with a detection limit as low as 2 ug/L, were developed at the department's Public & Environmental Health Laboratory (PEHL).

The availability of resources limits the number of perchlorate analyses that can be performed by SCDHS. Therefore, it has been necessary to prioritize the testing of drinking water supplies for perchlorate. Community water supplies were given the first priority, because they serve the vast majority of Suffolk County's population. Non-community public water supplies were given second priority, followed by private wells. Additional resources are being obtained to increase the SCDHS monitoring capabilities.

The testing has confirmed perchlorate detections in 36 community water supply wells (at 20 wellfields) in Suffolk County, two of which exceeded the 18 ug/L guideline. As a result, use of the two impacted wells at the SCWA's Old Country Road, Westhampton and South Spur, Commack wellfields were restricted. Perchlorate has also been found in 21 non-community water supply wells at 17 facilities, and one of these exceeded the drinking water guideline (Nature Center at Peconic Dunes County Park).

The testing of private wells in Yaphank was conducted following confirmation of low levels of perchlorate contamination in a non-community supply well serving the Horseblock Road Shopping Plaza. A survey was initiated by the SCDHS Bureau of Drinking Water in which forty (40) wells in the area were sampled. Perchlorate was detected in 13 drinking water wells, including 11 private wells and two non-community water systems. Three of the private wells tested exceeded the drinking water guideline, containing between 24 and 26 ug/L perchlorate. SCDHS advised these residents not to use their well water for consumptive purposes. A summary of the results of the samples in which perchlorate was detected is contained in Appendix A.

Investigation of Potential Perchlorate Sources

An investigation to ascertain potential sources of the perchlorate contamination in Yaphank was initiated in July following the survey of water quality at private and non-community wells. A synoptic round of water table measurements from eight existing monitoring wells in the vicinity of the contamination was performed. These elevations indicated that the local groundwater flow direction is to the southeast – toward the Carmans River. This determination was consistent with prior studies conducted by the department in the area, including the delineation of a plume of 1,1,1 trichloroethane (TCA) that was tracked to the former Suffolk County Department of Public Works testing laboratory in 1981, and a 1998 investigation of tetrachloroethene (PCE) contamination that was found to originate some two miles upgradient of the PCE-impacted private wells on Yaphank Avenue. This flow direction was also in agreement with that found by the United States Geological Survey (USGS) during an investigation of groundwater near the Brookhaven Landfill (USGS Water-Resources Investigations Report 86-4070, E.J. Wexler, 1988).

The perchlorate data gathered by the Bureau of Drinking Water during private well testing along Yaphank Avenue showed a lateral distance of approximately 1,000 feet between the northernmost and southernmost impacted wells. This indicated that contamination likely had originated at a non-point source or sources located in the upgradient area (to the northwest). The perchlorate contamination found in the private wells was estimated to be about 40 feet below the water table, where most private wells are screened in order to comply with SCDHS standards. This depth below the water table implied that the source area was located approximately 4,000 to 5,000 feet upgradient of the impacted private wells, based on estimations of the recharge rate, soil porosity and groundwater flow velocity.

The initial investigation of potential perchlorate sources was based upon the established direction of groundwater flow, and the private and non-community well water quality data. The inquiry had two main components, which were undertaken simultaneously. First, the SCDHS Office of Pollution Control began the inspection of all commercial and industrial facilities located in the upgradient area for past or present perchlorate use or handling. Second, the Bureau of Groundwater Resources began a groundwater investigation with the installation of monitoring wells to track perchlorate back to its source or sources.

Facility Inspections

A systematic examination of the industrial and commercial facilities located in the distant upgradient area (8,000 to 10,000 feet northwest of the impacted wells on Yaphank Avenue) on Sills Road and within the Old Dock Road industrial park revealed no current perchlorate use at these facilities. A summary of the results of these inspections is contained in Appendix B prepared by the Office of Pollution Control. The inspections identified three businesses that may have handled or used items containing perchlorate in the past, including: the Izumi/TRW plant (vehicle steering wheel assembly with air bags), and two sites formerly and currently occupied by True Green/ChemLawn (chemical fertilizers). However, monitoring wells installed and sampled by the Bureau of

Groundwater Resources downgradient of these three potential sources showed no evidence of perchlorate contamination (see Groundwater Investigation section).

The Great Gardens Nursery (chemical fertilizer use), the potential perchlorate source located nearest to the contaminated drinking water wells, was removed from consideration as a possible source based partially on an analysis of recent aerial photographs, and the time frame of first appearance of perchlorate in the downgradient wells. It was determined from the aerial photographs that the perchlorate contamination of the well serving the Horseblock Road Shopping Plaza predated the establishment of this nursery.

The facility inspection conducted at Fireworks by Grucci on August 2, 2000 found that materials containing perchlorate chemicals (fireworks) are utilized and handled at the site. Field testing of fireworks is conducted, as was incineration of waste material including dud shells. Appendix C includes the SCDHS' inspection report dated August 2, 2000, and a list of items in need of corrective action in correspondence of August 7th and 31st, 2000 to Fireworks by Grucci.

Several potential source areas at Fireworks by Grucci were identified where perchlorate contamination could enter the environment. These included the soak pad area where waste shells (duds) are immersed in water in open 55-gallon drums prior to incineration, a pile of demolition debris from the former Explosive Ordinance Disposal (EOD) burn chamber, and an uncovered roll-off container used to store incinerator ash. During the inspection samples of the incinerator ash, EOD demolition debris, soak drum water, and soil adjacent to the soak pad, were collected. The results of the analyses are contained in Appendix C and are summarized in the table below.

Material Sampled	Perchlorate Concentration
incinerator ash	24.6 ppm
EOD demolition debris	0.138 ppm
soak drum water	1,600 ppm
soil at soak drum area	22.3 ppm

* ppm = parts per million

In addition to the potential perchlorate sources that were identified during the facility inspection of Fireworks by Grucci, another possible source may be the field test firing operations at the site. The perchlorate concentrations found in the incinerator ash sample indicate that the incineration process is an incomplete burn of the fireworks chemicals, causing the residual ash to contain elevated levels of perchlorate. These residual concentrations suggest that firing the shells into the air for detonation during field testing would similarly result in incomplete combustion, facilitating air bourne fallout of ash containing perchlorate. Depending on the elevation of the test firing, and wind speed and direction, the unburned residues containing perchlorate may have been deposited over a wide area near the facility.

Groundwater Investigation

The groundwater investigation of potential perchlorate sources was initially based on the previously established direction of groundwater flow and the estimated distance to the source area(s) upgradient of the impacted private and non-community wells. At the completion of the investigation, a series of 20 vertical profile wells and four standard monitoring wells were drilled, and 112 water samples were collected. Water quality sampling data for the profile and monitoring wells are summarized in Appendix D.

Information from prior groundwater investigations conducted by the SCDHS and USGS in the Yaphank area were used to evaluate two sites as potential sources of the perchlorate contamination. First, a former Suffolk County Police demolition pit located west of the Yaphank headquarters building was eliminated as a potential source, because perchlorate was not detected in the monitoring wells installed there during the 1998 SCDHS tetrachloroethene (PCE) investigation, and the established direction of groundwater flow precluded interception with the drinking water wells impacted by perchlorate. Second, the Brookhaven Town Landfill was eliminated as a potential source, since the groundwater flow direction established by the USGS during prior studies, and by the SCDHS as part of this investigation, also precluded interception with the drinking water wells impacted by perchlorate. This conclusion is supported by the lack of landfill leachate indicators in the perchlorate impacted drinking water wells.

The first five monitoring wells for the investigation, designated PP1 through PP5 (see the Yaphank Perchlorate Investigation - Plate 1), were installed as vertical profile wells at locations approximately 5,000 feet upgradient of the known contaminated private and non-community wells. The well locations also ranged from about 300 to 1,000 feet downgradient (southeast) of the Fireworks by Grucci site. All five wells were found to contain perchlorate near the top of the water table. The deepest levels sampled at each well – 30 to 40 feet below the water table – did not contain perchlorate. These data indicated that a source or sources were located in the nearby upgradient area.

The next six vertical profile monitoring wells, designated PP6 through PP11, were installed upgradient of Fireworks by Grucci and downgradient of the Old Dock Road Industrial Park. None of these wells contained perchlorate at any of the aquifer levels tested, effectively eliminating industries within the upgradient area on Sills Road and in the industrial park as potential sources of the perchlorate contamination. Three of these wells were installed downgradient of specific industries that possibly may have used perchlorate in the past.

Wells PP7 and PP10 were installed downgradient of the current and former locations of True Green/ChemLawn, due to the potential for some chemical fertilizers to contain perchlorate. No perchlorate was detected in the monitoring wells at either site. However, both wells contained concentrations of several pesticide related compounds, and these findings were referred to the NYSDEC Bureau of Pesticides Management. Well PP11 was installed downgradient of the Izumi/TRW plant due to the potential use of perchlorate in air bags in steering wheel assemblies. Perchlorate was not detected at any aquifer level

in this well.

Four standard monitoring wells, designated PP12 through PP15, were installed at the perchlorate "hot spot," previously identified by profile well PP5 at a location approximately 1,000 feet downgradient of Fireworks by Grucci. Each of these standard monitoring wells was screened 35 to 40 feet below the land surface, which was approximately 20 to 25 feet below the water table. Perchlorate concentrations in these four wells ranged from 71 to 122 ug/L. These monitoring wells which contained the highest perchlorate concentrations found are located 2,000 to 3,000 feet upgradient of the Great Gardens Nursery, eliminating the nursery as a potential source.

Vertical profile wells PP16 through PP18 and PP20 were installed to delineate the northern and southern boundaries of the impacted area to the east of Fireworks by Grucci. Vertical profile well PP19 was installed to clarify the depth of the perchlorate contamination in the downgradient area of Horseblock Road and Yaphank Avenue. Two shallow private wells tested in this area did not contain perchlorate because they were screened above the contaminated aquifer segment. The results of well PP19 confirmed that the contamination had migrated vertically as well as horizontally. Perchlorate was not found in the upper three aquifer levels sampled, but was detected beginning at a depth of 30 to 35 feet below the water table.

Vertical profile wells PP21 through PP23 were installed in the area immediately upgradient of Fireworks by Grucci. Wells PP21 and PP22 contained low concentrations of perchlorate at the top of the water table while the deeper levels sampled did not, which is an indication of a nearby source. It is possible that the perchlorate present at these two locations resulted from unburned residue from aerial fireworks testing at the site. This theory is supported by the information that no other upgradient perchlorate sources were identified in the facility inspections, and because perchlorate was not detected in the upgradient monitoring wells (PP6 through PP11). As a follow-up to these detections, surface soil samples were collected near well PP20, and from the area between wells PP21 and PP22. The soil samples were analyzed for perchlorate and none was detected.

Vertical profile well PP24 was installed to determine if any of the perchlorate impacted groundwater may have originated at a tannery that allegedly existed decades ago near Horseblock and Sills Roads. No perchlorate was detected at any aquifer level in this well.

Each of the water samples collected from the monitoring wells for this investigation were also analyzed for 23 metals, including arsenic. Compounds containing arsenic are used in the manufacture of fireworks to create blue fire. Arsenic was not detected in any of the water samples.

Data Quality Controls

Additional data to confirm groundwater flow direction and the accuracy of the perchlorate analyses conducted by SCDHS was developed during the investigation. This was accomplished by redetermining water table elevations across the area impacted by

perchlorate, and by obtaining a second independent analysis of water samples shown to contain perchlorate.

In order to conclusively determine groundwater flow direction, all 24 monitoring wells installed by SCDHS were surveyed to establish elevations. A new round of synoptic water levels was taken at the monitoring wells, and also at 10 pre-existing wells, in the area bounded by Sills Road on the west to Yaphank Avenue on the east. The water table measurements are plotted on Plate 2 - Water Table Contours, and the final groundwater contours interpolated from this data set of elevations are also shown on the Yaphank Perchlorate Investigation Plate 1. The contours definitively establish the direction of groundwater flow to the southeast.

An additional analytical quality control (QC) measure to supplement normal laboratory QC was also implemented. Twenty-two (22) well samples reported to contain perchlorate by the SCDHS laboratory were given to the Suffolk County Water Authority (SCWA) laboratory for analysis in a blind test. The water samples were not true split samples, but were collected consecutively at the time of sampling. The table in Appendix E lists the perchlorate results independently reported from the SCDHS and SCWA laboratories. A comparison of the concentrations reported by the two laboratories are consistent, and they confirm that the values are an accurate representation of water quality.

Findings

The two components of the current perchlorate investigation, the facility inspections and the groundwater investigation, were designed to ascertain potential sources of the contamination found in drinking water wells near Yaphank Avenue. The investigation's findings are summarized below:

1. Local groundwater flow direction to the southeast was conclusively determined by twice measuring water table elevations at multiple wells. The flow direction established is consistent with several past groundwater investigations conducted in the area.

2. The perchlorate concentrations detected in monitoring well samples were independently confirmed by analyses at two laboratories - those operated by the SCDHS and the SCWA.

3. The SCDHS facility inspections found that perchlorate was not currently used or handled by any of the businesses examined in the upgradient area on Sills Road or within the Old Dock Road industrial park, with the exception of Fireworks by Grucci.

4. Great Gardens Nursery is not considered a potential source of the perchlorate impacting the drinking water wells because the contamination predated the establishment of the nursery, and the highest perchlorate concentrations detected in groundwater are 2,000 feet upgradient of the nursery property.

5. Groundwater monitoring wells were installed downgradient of four specific sites which may have handled perchlorate in the past: Fireworks by Grucci (fireworks), the Izumi/TRW

plant (vehicle steering wheel assembly with airbags), and two sites formerly and currently occupied by True Green/ChemLawn (chemical fertilizer). Perchlorate was not detected in wells downgradient of the Izumi/TRW plant, or either True Green/ChemLawn location. Several pesticide related compounds were found in the groundwater downgradient of both True Green/ChemLawn sites.

6. The SCDHS laboratory detected perchlorate in the samples collected from the Fireworks by Grucci site, including: the incinerator ash, EOD demolition pile, soak pad water, and the soils adjacent to the soak pad.

7. An area of groundwater impacted by perchlorate was found to extend from the vicinity of the Fireworks by Grucci site to approximately 10,000 feet to the southeast, being 2,000 feet wide immediately downgradient of the site, and with a maximum thickness of 35 feet in the aquifer. The maximum perchlorate concentration of 122 ug/L was detected at well PP15, approximately 1,500 downgradient of the site.

Conclusion & Recommendations

The SCDHS Offices of Water Resources and Pollution Control have conducted an extensive investigation of the potential sources of perchlorate in the groundwater at Yaphank, including: identification of impacted drinking water wells; determination of groundwater flow direction; industrial and commercial facility inspections; monitoring well installation and groundwater testing; soils and materials testing; and, data quality controls.

Prior to 1997, analytical methods to detect the low levels of perchlorate found in Yaphank groundwater did not exist. Therefore, it was not possible for any agency, either regulatory or perchlorate user, to have the ability to identify or track the perchlorate contamination in groundwater that is the subject of this report. Because the report identifies new or emerging issues pertaining to groundwater protection activities and perchlorate use, the information developed will be provided to the United States Environmental Protection Agency (USEPA) Interagency Perchlorate Steering Committee.

The SCDHS recommends:

a) the elimination of the potential upgradient sources of perchlorate, and
b) the extension of public water to the impacted private and non-community wells.

Both of these recommendations are currently being addressed. A representative of the engineering firm of FPM Group, consultant to attorneys for Fireworks by Grucci, has submitted a compliance schedule to the SCDHS that outlines corrective actions that are voluntarily being taken to eliminate potential sources of perchlorate entering the environment, including: upgrading the soak pad area operation, removal of the demolition debris from the former EOD burn chamber, elimination of the rainwater collection system associated with the EOD, and removal of stored incinerator ash. In addition, a follow-up inspection and end point sampling will be conducted by the SCDHS.

The SCDHS has contacted the SCWA and the Brookhaven Community Development Agency and these agencies have begun planning for the extension of public water mains to the properties with perchlorate impacted residential and non-community wells.

APPENDIX A

Private & Non-community Wells Containing Perchlorate

Well	Street	Community	Sample Date	Perchlorate (ug/L)
private #1	Yaphank Ave	Brookhaven	04/06/00	11
private #2	Yaphank Ave	Brookhaven	04/27/00	26
private #3	Yaphank Ave	Brookhaven	04/06/00	24
private #4	Yaphank Ave	Brookhaven	06/26/00	14
private #5	Yaphank Ave	Brookhaven	06/26/00	24
private #6	Yaphank Ave	Brookhaven	06/26/00	11
private #7	Yaphank Ave	Brookhaven	06/26/00	10
private #8	Horseblock Rd	Brookhaven	06/26/00	6
Noisy Oyster Bar & Grill	Montauk Hwy	Brookhaven	09/07/99	5
private #9	Old Barto Rd	Brookhaven	07/06/00	11
private #9	Old Barto Rd	Brookhaven	07/27/00	8
private #9	Old Barto Rd	Brookhaven	07/27/00	8
private #10	Yaphank Ave	Brookhaven	06/29/00	15
private #11	Horseblock Rd	Yaphank	04/06/00	6
Horseblock Rd Shopping Plaza	Horseblock Rd	Yaphank	12/21/98	8
Horseblock Rd Shopping Plaza	Horseblock Rd	Yaphank	02/24/00	7

APPENDIX B

SUFFOLK COUNTY
DEPARTMENT OF HEALTH SERVICES
OFFICE OF POLLUTION CONTROL

REPORT

INSPECTIONS OF INDUSTRIAL FACILITIES
DOCK ROAD AND SILLS ROAD, YAPHANK, NY

FOR THE INVESTIGATION OF PERCHLORATE
CONTAMINATION IN YAPHANK, NY

PREPARED BY:
THE OFFICE OF POLLUTION CONTROL

JANUARY 2001

Suffolk County Department of Health Services
Office of Pollution Control
Yaphank Perchlorate Investigation

Introduction:

As part of the Department's ongoing perchlorate monitoring program, a representative of the Office of Water Resources collected a drinking water sample from a non-community water supply located on Horseblock Road in Yaphank. Laboratory analysis indicated elevated levels of perchlorate in the water supply. In response to these findings, a survey was performed of private and non-community water supplies in the area. Based on the results of this survey, detectable concentrations of perchlorate in 13 private and/or non-community wells, the information was forwarded to the Office of Pollution Control.

Investigation Summary:

The Office of Pollution Control conducted an extensive investigation of industrial sites upgradient of the contaminated wells. Between August 11th and September 12th of this year, 36 industries were inspected along Old Dock Road, Todd Court and Sills Road in Yaphank.

Staff from the Bureau of Environmental Evaluation and Remediation evaluated the industrial processes, chemical storage and discharge practices taking place on each of the commercial properties. In addition, historical information contained in the Department's files was reviewed for evidence of possible perchlorate usage. Based on the information derived from the site inspections and file reviews a priority sampling list was established.

Findings:

Facility inspections revealed no current perchlorate usage at any of the sites. Three locations, the former TRW facility and the former and present TruGreen Chemlawn sites were of concern based on possible historical perchlorate use or storage.

A review of TRW's file did not indicate historic perchlorate usage. To confirm this, samples were collected from leaching pools known to receive industrial discharges while TRW was in operation. Samples were also collected from the sanitary system and a storm drain at the current TruGreen Chemlawn facility.

To date, six sites have been sampled. Although perchlorate was not detected in any of the sample locations, two of the facilities have been directed to perform industrial cleanups based on other contaminants found.

YAPHANK PERCHLORATE SURVEY

COMPANY/CONTACT	INSPECTION DATE	FINDINGS
Old Dock Road		
3 – The Pixel Print Network Scott Convery 345-3914	8/30/00	Digital Printing Waste toner sent to Xerox One gallon of chemical storage
Multi-Occupied Building:		
2 – Long Island Copy Service Jean Snyder 205-1100	9/11/00	Office Support Area for Copy Service No chemical storage
* **4 – VDH Precision Machinery** Tom Hongthong 924-8267	9/11/00	Machinery Cutting oils, solvents
6 – Islandwide Building Service Bob Potko	9/11/00	Office Support for Building Maintenance No chemical storage
10 – Communication Systems Design Inc. Joseph Miceli 924-7474	9/11/00	Computer Program Operation No chemical storage
12 – Paramount Pools Dan Harrison	9/11/00	Telemarketing Sales No chemical storage
14 – Modular Devices Inc.	9/11/00	Warehouse for Electronics No industrial processes
16 – 18 - FEGS (Federation Employment and Guidance Service) Joan Marsh 205-0183	9/11/00	Employment Service No chemical storage
Multi-Occupied Building:		
7a - American Power Cell & Battery Levone Vetry 205-1061	8/30/00	Batteries – No Waste Facility. Lithium batteries used in the repackaging of batteries, not manufactured on site
7b – Firefighter Products	8/30/00	Repeated attempts to inspect. No one available at site.
7c – McDonnell Elec. Corp. Douglas Kane 924-7272	8/30/00	Warehouse for electrical supplies No manufacturing
9 – HB Millwork Tim Hollowell 924-4195	8/30/00	Woodworking Glue and Epoxy (No paint or stain storage)

	Multi-Occupied Building:		
	11. 4 – Quick Flour Corp. David Shapine	9/11/00	Carpet Sales No Chemical Storage
*	**11.5 - Alternative Parts & Service** Russell Drake 345-9500	9/11/00	Machine Operation (oils, solvents, degreasers)
	11.7 - Champion Horse Supply Inc Gary Parlosky 924-5380	9/11/00	Manufacturers of horse and play ground equipment Injection mold equipment, pigments
	11.9 – DNC Overhead Door Deborah Whiffen	9/13/00	Pre-Made Door Warehouse Minimal solvent usage
	11.10 – Peconic Paper Arthur Lasher 205-5100	9/12/00	Distribution of paper products Five (5) cases of bleach, dish detergent, ammonia No Waste Facility
*	**11.11 – Living Doors Inc.** Liz Plant 924-5393	9/12/00	Wood Door Manufacturers 3 quarts of stain, 16 gallons of paint (Delivers unfinished red oak doors)
	17 – Newsday Bill Norton 924-4405	8/30/00	Newsday Advertising Dept. & Delivery Service No Waste Facility
*	**19 - Automatic Transmissions** Tom Mendola 924-7700	8/30/00	Automatic Transmission Remanufacturing (Previous Tenant was Quality Sheet Metal) mineral spirits, transmission fluid 25 cans of paint spray 2-55 gallon drums of antifreeze 100 gallons of waste oil
*	**21 – AARCO Products** Scott Schillinger 924-5461	8/30/00	Manufacturers of Blackboards, Bulletin Boards and Corkboards Paste, Thinners, Lacquer, Paints (Previously located at Hauppauge Industrial Park , Rabro Drive)
*	**23 - Eagle Control Corp.** Frank Zahadka 924-1315	8/30/00	Waterworks and controls for sewage treatment, assembly of parts, spray-on paints, alcohol and acetone
*	**25 - Motion Message** William Sheridan 924-9500	8/30/00	LED Programmable Displays Solder, flax, HCF cleaner, paints motor oil (previously located at 141-143 Brightside Avenue, Central Islip)
	26 - Fiber Shield Inc. Emmanuel Vickers 345-0240	9/01/00	Manufacturer of Fabric Protectors mineral spirits, silicone, latex emulsion, cleaner, alcohol, toluene **Sampled 12/28/00 – No remediation required.**

	28 – Duraclean Stephen Diaz 473-6445	8/30/00	Carpet Cleaners and Restoration Service Soap cleaners, soil cleaners, bleach, tile glue, glass cleaner, degreasers, etc. – **Sampled 9/27/00 – Elevated Levels of Perc and Dichloroethene found in industrial discharge pool. Remediation Required**
*	**30 – Petro** Tom Crawford 686-1968	8/11/00	Heating Oil and Service, Fleet maintenance - Chemical storage, parts cleaner, antifreeze, motor oils, waste oils, fuel oil additives. Article 12 Problems: outdoor drum storage, non compliant tanks
*	**31 - Display Products** Orlando Vizcaino 345-0302	9/01/00	Manufacturers of Retail Displays Acrylic sheet cutting and bending, silk screening, methanol, methylene chloride
*	**35 – Tribology/Tech Lube** Bill Kruse 345-3000	9/05/00	Manufacturer of Lubricants, additives, grease (Previous location – Beech St., Islip)
	52 – Peters Fruits	8/30/00	Fruit Warehouse No processing or chemical treatment
	56 - Searles Graphics Ken Searles 342-9272	9/06/00	Printing/Graphic Designs Fixer-developer solutions, fountain solutions, alcohol, inks, press-wash, etc. – **Sampled 10/4/00 Results showed no elevated contaminant levels.**
*	**82 – JBH Transport** John Benedetto 924-6347	8/30/00	Trucking Operation/Fleet Maintenance Oil, grease, solvent
	82.a– Wastewater Mgt of NY Scott Pannulla 205-1417	9/05/00	C & D Recycling Waste oils, paints washer, mineral spirits, transmission fluid. **Sampled 10/25/00. No remediation required.** **Art. 12: Illegal Tank on site.**
	Todd Court		
	7 - Tru-Green-Chem Lawn Stan Smolewski 924-7200	9/05/00	Lawn Care Service Facility utilizes potassium base fertilizer (hoat oil, orthene, embark, fungicide, insecticides, etc). Company relocated from Sills Road, Yaphank (Asplund Construction) **Sampled 9/13/00 Sanitary System – Ok; Storm Drain – Remediation required due to elevated VOC concentrations. Cleanup performed 1/10/01. Endpoint sample revealed low level Imidacloprid.**

	Sills Road		
*	**95 - Asplund Construction** Mike Quinn 205-9340	9/12/00	Construction Company Article 12 Problems: drum storage and tank registration. Tank Removed. Antifreeze, oils, waste oils, solvents
*	**355 - L.I.R – USA Mfg.**	9/12/00	Injection Molding Article 12 drum storage problem Oil/Water separator discharges via bare ground to storm drain (kerosene, paint, thinners, acetone, inks.

* Possible industrial discharges to be evaluated
** Sample results pending

As of 1/31/01

FACILITY INSPECTION LOCATIONS

APPENDIX C

COUNTY OF SUFFOLK

Robert J. Gaffney
Suffolk County Executive

DEPARTMENT OF HEALTH SERVICES

Clare B. Bradley, M.D., M.P.H.
Commissioner

August 7, 2000

Phil Grucci,
Vice President of Operations
Fireworks by Grucci
1 Grucci Lane
Brookhaven, NY 11719

RE: SCDHS Facility Inspection of August 2, 2000, Facility Reference # 9739

Dear Mr. Grucci;

On the above referenced date, this department conducted an inspection and some field sampling at the premises located at 1 Grucci Lane in Brookhaven. This inspection was conducted primarily for the purpose of determining compliance with Article 12 of the Suffolk County Sanitary Code. A copy of the inspection report is included with this correspondence, as well as supporting documents and tank registration materials. I will be contacting you within 45 days regarding the results of the field samples.

Please review the enclosed report carefully and acknowledge the non-compliance issues and recommendations noted. For your information, deficiencies are allowed 60 days for correction. Items that remain out of compliance upon re-inspection may subject your firm to a legal action and penalty.

This office appreciates your cooperation with respect to our investigation into the off-site perchlorite groundwater contamination. Someone from our water quality bureau will be contacting you in the near future to arrange the discussed geo-probe sampling. In the interim, if you have any questions or problems, please feel free to contact me at 631-344-4157.

Very Truly Yours,

Eileen Governale

Eileen Governale
Public Health Sanitarian

cc: Alex Santino, PE, Bureau of Pollution Control
John Gladysz, Bureau of Pollution Control

15 Horseblock Place Farmingville, N.Y. 11738-1220 Phone (516) 854-2528

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

File Ref # 9739
Art 12 # 2-1311
SPDES # (none)

Facility Inspection Report

page 1

Date: **8/2/00**	Time: **9:00 AM**	Type: *routine /GW investigation*	Eng. Review Requested: ***yes-Art 12, well placements***

Name/Address/Phone:	Contacts:
Fireworks by Grucci	**Christopher Carlino**, Dir.: of Operations
1 Grucci Lane, Brookhaven, NY 11719	**Phil Grucci**, VP of Operations
Phone: 631-286-0088, Fax: 631-286-9036	

General Description: Attachment of black powder fuses to imported, pre-assembled firework shells. Storage of assembled shells is in a series of isolated 'batteries'. Military contract that ended in 1998 involved the mfr. of bomb simulators using perchlorate, aluminum flash powder. Fireworks display shows are designed and assembled at this location. Some field testing and on-site incineration.

I. *Discharge Summary: (see also attached field notes)

Cesspools	1. Septic tank, sanitary pools for office, lunchroom 2. Septic tank, sanitary pool for employee bathroom and utility sink in production building #3.
Drywells	1. Production building #1, utility sink drywell on south side. 2. Production building #2, utility sink drywell on south side.
Surficial	1. Precipitation runoff from waste shell soak pad. (sampled on 8/2/00 for metals only) 2. Show warehouse: utility sink drains to the ground surface on the west side of the building (sampled on 8/2/00 for metals only).

***Note: Located within hydrogeological Zone VI.**

II. *Article 12 Summary: (see also attached field notes)

(Active) Tanks:	1. 275 gal outdoor AST at utility shed near production building #1. 2. 550 gal UST at utility shed on the west side of production building #2. 3. 275 gal AST for the office building and lunch room.
Drum Storage	1. Soaking pad. Waste shells soak in 6- 30 or 55-gallon drums prior to incineration. Drums are open and allowed to accumulate precipitation. 2. Empty Drum storage. Adjacent to soak pad. Drums are covered.
Sumps/pits	Concrete pit for the collection of rainwater seepage off the EOD chamber. Seepage was hardpiped into a 55-gallon drum stored in the pit. Phil Grucci stated that since this collection system was not utilized, the outlet pipe had been sealed years ago. The EOD chamber was demolished on 8/1/00. The pit structure is exposed, but filled with dirt and debris from the demolition.
Other	1. 47 trailers and 2 concrete bunkers for the storage of boxed, pre-assembled firework 'shells', 'salutes', and black powder for fuses. Each trailer is isolated with a 6 to 8 ft. earthen berm. Not considered 'bulk' storage and therefore exempt from SC Article 12 registration and 'bulk storage' building construction standards. 2. Minor volumes of paint, alcohol, Elmer's wood glue, acetone, and nitro cellulose (less than 50 gallons) noted in production buildings and warehouse.

** there are no SC Article 12 registered storage facilities currently*

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

File Ref # 9739
Art 12 # 2-1311
SPDES # (none)

Facility Inspection Report

III. Outdoor Uses: (Descriptions)

1. **Fireworks testing and employee training field:** It is expected that contaminants and propellants would be consumed during firing. Field area vegetation is sparse. Surface samples would determine if there area any accumulation of metals in the soil.
2. **EOD Chamber:** a concrete structure used for the incineration of waste fireworks material. Chamber had deteriorated and was demolished on 8/1/00. Phil Grucci intends to use the demo pile as berm material. A new EOD chamber is being planned.
3. **Fireworks waste soaking pad:** 6 to 8 drums on a flat concrete pad filled with water in which waste fireworks are soaked for several weeks prior to incineration.
4. **Cassone storage trailers:** Friend of Grucci is allowed to use site for empty container storage. Empty units are located in the testing /training field.
5. **Massive open excavation:** Sand is no longer being removed from this area and there is no activity or storage occurring within the excavated area. This pit comprises the largest single portion of the Grucci site.

IV. Recordkeeping

1. Waste streams/Disposal or Scavenger:	a) Incinerator ash: Recently stockpiled due to the demolition of EOD chamber. Should be characterized to determine proper disposal. b) Liquid in soaking drums: May require disposal periodically--should be characterized. To determine proper disposal. c) Empty drums: If accumulated for scrap or recycling, drums must be rendered acceptable to the hauler; often, triple rinsing required. This aqueous material may be considered a hazardous waste.
2. Monitoring Logs	None required at this time.

V. Violations/ Findings/ Recommendations

Violations:

1. Total on-site storage of fuel oil is 1100 g. (2-275 g. AST's, and 1- 550 g. UST). These tanks must be registered as per SC Article 12. (registration materials have been forwarded to firm with this report)

2. A composite sample was obtained from the soaking drums on 8/2/00 for heavy metals and perchlorate. If the sample results indicate that this material is toxic or hazardous under the Article 12 definition, then this open, outside, storage is in violation. This company will be advised accordingly to either eliminate outside drum storage, or to construct a safe and approvable storage facility. A composite soil sample from the edge of the soaking pad was also obtained to determine if pad run-off has impacted the area.

3. Incinerator ash may be toxic and hazardous. Currently this ash is being stored in an open roll-off. Grucci Fireworks must ensure that the roll-off container does not continue to accumulate water or leak until this material is properly disposed of. A sample of the ash was obtained on 8/2/00 and will be analyzed for heavy metals.

4. Field warehouse utility/hand wash sink currently drains to the ground surface. The Suffolk County Sanitary code requires that this drainage not be exposed to the atmosphere. The soil beneath this discharge was sampled for heavy metals on 8/2/00.

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

File Ref # 9739
Art 12 # 2-1311
SPDES # (none)

Facility Inspection Report

Findings and Recommendations:

1. Recently, samples from residential drinking water wells near this firm have shown elevated levels of perchlorates. There are several potential sources of this contaminant, including the municipal landfill. Regarding this firm, we note that perchlorates are present only in very small quantities in fireworks shells, but an earlier, temporary process had required the mixing and repackaging of perchlorate compounds. Grucci Fireworks has given the Suffolk County Department of Health Services permission to install temporary monitoring wells on this property for the investigation of the perchlorate contamination. Such groundwater monitoring may include upgradient locations at the Northern boundary, as well as locations downgradient in and near the test field and on Horseblock Road (see attached sketch).

2. In 1998, two on-site potable supply wells were sampled and found to be free of this compound. These wells should be re-sampled. These wells do not appear to be directly downgradient of a potential point source, however.

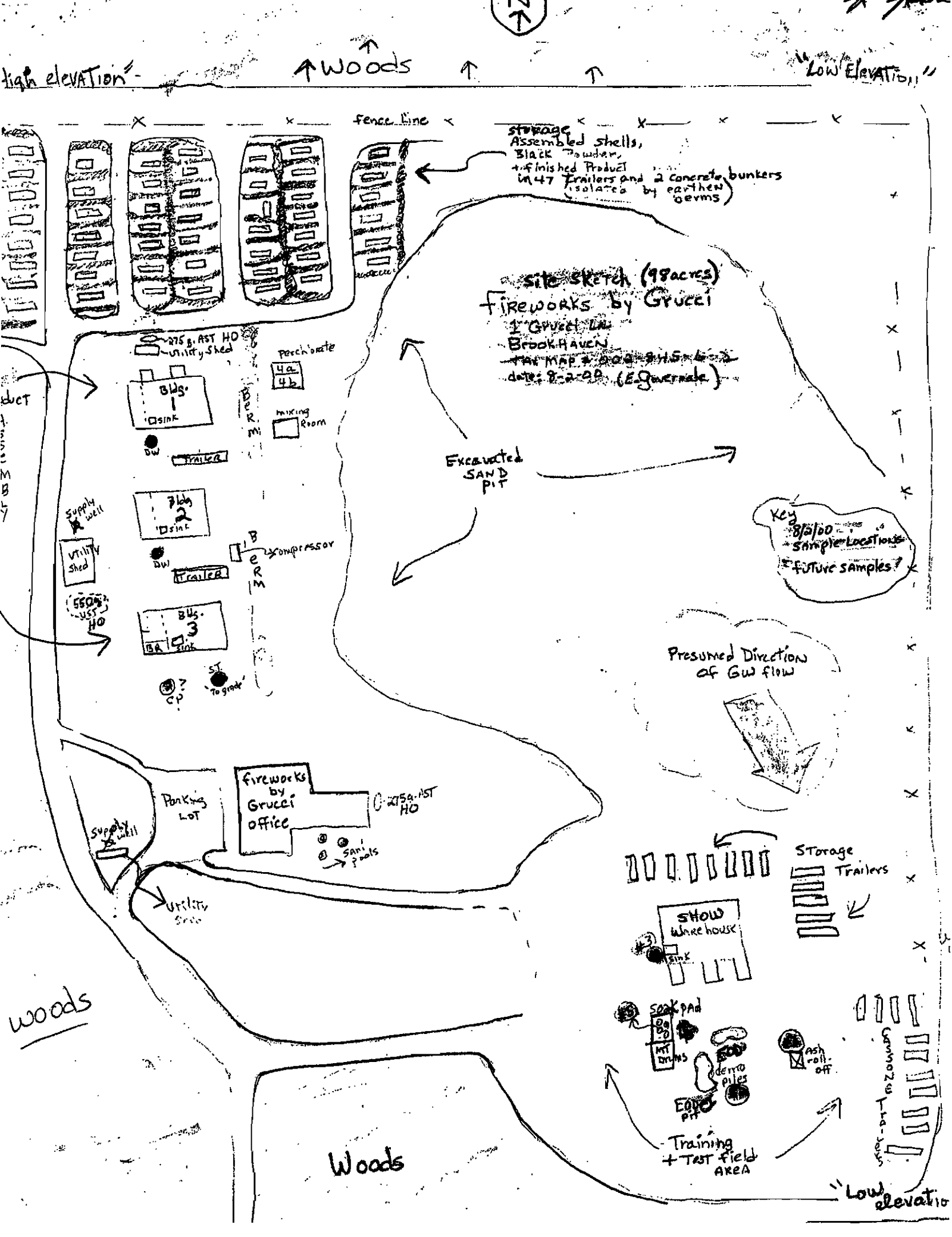
3. Three small prep and assembly buildings have utility sinks that discharge to adjacent drywells. These sinks present a past and future environmental vulnerability for the discharge of waste chemicals or solvents. Therefore, SCDHS requests that the covers of these leaching structures be made accessible for sampling within 30 days.

4. The EOD incineration chamber has recently been demolished due to structural failure. Fireworks by Grucci intends to rebuild this structure. This Firm is advised that most incineration units are subject to air pollution regulations and restrictions. Therefore, before the initiation of construction, this company should contact the NYSDEC regarding the applicable codes and requirements at 631-444- 0205.

5. A composite sample of the soil mixed with the EOD demolition debris was obtained on 8/2/00. This sample will be analyzed for heavy metal contamination.

6. Results of all SCDHS sampling on 8/2/00 will be known within 40 days.

Facility Representative:	Report Date	Inspector
Chris Carlino, Dir. Of Operations **Phil Grucci**, VP Operations	8/4/00	Eileen Governale Eileen Governale, Public Health Sanitarian, Telephone-631-344-4157


"High elevation"
Woods
"Low Elevation"
fence line
storage
Assembled shells,
Black Powder,
+ finished Product
in 47 trailers and 2 concrete bunkers
(isolated by earthen berms)
site sketch (98 acres)
fireworks by Grucci
1 Grucci Ln
Brookhaven
tax map # 200-345-6-2
date: 8-2-00 (E. Governale)
275 g. AST HO
utility shed
Porch/barrate
4a
4b
Bldg. 1
sink
mixing Room
DW
trailer
Bldg 2
sink
Supply well
utility shed
DW
trailer
compressor
550 gal UST HO
Bldg. 3
BR
sink
ST
"To grade"
CP
Excavated SAND PIT
Key
8/2/00 sample Locations
future samples
Presumed Direction of GW flow
Parking LOT
fireworks by Grucci office
275 g. AST HO
Supply well
sani pools
utility shed
Storage Trailers
SHOW warehouse
sink
Soak pad
MT drums
EOD
derrid piles
EOD pit
ash roll-off
Training + Test field AREA
Woods
Woods
"Low elevation"

COUNTY OF SUFFOLK

COPY

ROBERT J. GAFFNEY
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

CLARE B. BRADLEY, M.D., M.P.H.
ACTING COMMISSIONER

August 31, 2000

Mr. Phillip Grucci
Vice President of Operations
Fireworks by Grucci
1 Grucci Lane
Brookhaven, N.Y. 11719

Subject: Storage of Toxic and Hazardous Materials

Dear Mr. Grucci,

A representative of the Department of Health Services conducted an inspection of your site on August 2, 2000.

Based on the inspection report, this office initially requires that you complete the following items:

1) Upgrade your soaking pad area to Article 12 standards thereby eliminating the potential for any perchlorate-contaminated water to be released to the ground.

2) Eliminate the rainwater collection pit when you reconstruct your Explosive Ordinance Disposal (EOD) incinerator. The concrete pit holding a 55 gallon drum which collected rainwater runoff from your old EOD incinerator did not meet Article 12 standards.

3) Register your fuel oil tanks since the total aggregate storage of petroleum product on site is equal to 1,100 gallons.

4) Connect the sink drain from your field warehouse hand wash sink to an appropriately designed sanitary disposal structure and eliminate the surface discharge from this building.

OFFICE OF POLLUTION CONTROL ■ 15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738 ■ FAX (516) 854-2505 ■ TELEPHONE: (516) 854-25

Your environmental consultant, Fanning, Phillips and Molnar, has contacted us and a meeting is scheduled for September 15, 2000 at 9:00 AM, in the office of the Director of the Division of Environmental Quality at 220 Rabro Drive, Hauppauge. The purpose of the meeting is to address the issues discussed above and other issues concerning your facility.

If you have any questions regarding this matter, please contact this office at 854-2529.

Very truly yours,

Alexander M. Santino, P.E.
Acting Chief, Office of Pollution Control

AS/lr

cc: Clare B. Bradley, M.D., M.P.H., Commissioner
Vito Minei, P.E.
Robert Seyfarth
Dennis Gobbi

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL-LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC & ENVIRONMENTAL HEALTH LABORATORY
NYSDOH LAB ID. NUMBER 10528

SAMPLING ANALYSIS REQUEST/CHAIN OF CUSTODY

Field Number: 001348000802 Laboratory Number I W 08 00 001
Collected By: Eileen Governale Assisted By: -
Affiliation: SCDHS Date: 8/2/00 Time: 12 50 AM
Facility/Name: Gucci Fireworks
Location: 1 Gucci Ln Brookhaven
Point of Collection: ash dumpster - composite
Remarks: -

Volatile Organic Bottle Control Number: _____ Sample Matrix _____

Analysis Requested (By Section)

Air Pollution

[ ] Volatile Organic Hydrocarbons
[ ] Asbestos (Bulk)

Hazardous Materials (Organics)

[ ] Volatile Organics (EPA 8260B)
Preservation: [ ] HCL [ ] Cooled to 4°C
Level of Detection: [ ] 4ppb [ ] 40 ppb [ ] 100 ppb
[ ] Semivolatile Organics (EPA 8270C)
Type _____
[ ] Flash Point (EPA 1010)
[ ] TCLP
[ ] Other _____

Industrial Waste (Inorganics)

[X] Metals [X] Preserved
[ ] Radiological
[ ] Mercury
[ ] Phenols
[ ] Cyanide [ ] Preserved
[ ] Chloride, Sulfate
[ ] Fluoride
[ ] Ammonia, Nitrate, Nitrite
[ ] T K N
[ ] Solids (SS, DS, TS)
[ ] MBAS, COD
[ ] Oil & Grease
[ ] TPH
[ ] pH Indicate Field pH: _____

Barium
Strontiu
Aluminu
Copper
Titaniu

Total Number of Sample Containers Submitted 1

Custody Section

Relinquished By:		Received By:	
Name Eileen Governale	Date 8/3/00	Name Scott Mooka	Date 8/3/00
Signature Eileen Governale	Time 6:45 AM	Signature [illegible]	Time 9:45
Name	Date	Name	Date
Signature	Time	Signature	Time
Name	Date	Name	Date
Signature	Time	Signature	Time

1099Chncust/A

Suffolk County Department of Health Services
Division of Medical-Legal Investigations & Forensic Sciences
Public & Environmental Health Laboratory
(Industrial Waste Solid Samples)

FIELD
Field No. 001 348 000 802

Laboratory
Lab No. IW 0800 001

Date Completed 8/16/00

Name of Firm Grucci

Address or Location

Remarks/ Instructions

	TEST	RESULT		TEST	RESULT ug/g (PPM)		TEST	RESULT ug/g (PPM)
	pH (Field)			COD			Potassium	15000
	pH (Lab)			Cyanide			➢Selenium	<10.
	TEST	RESULT		Phenols			➢Silver	4.
		ug/g (PPM)		METALS			Sodium	1800.
	Chloride			Aluminum	22000.		Thallium	<25
	Fluoride			Antimony	<10.		Vanadium	20.
	Sulfate			➢Arsenic	<10.		Zinc	430.
	Sulfite			➢Barium	3500.		STRONTIUM	1600.
	Sulfide			Beryllium	<1.		EP Toxicity	
	MBAS			➢Cadmium	<2.		TCLP	
	TOC			Calcium	47000.			
	Nitrate - N			➢Chromium	35.		Perchlorate	24.6
	Nitrite - N			Cobalt	<10.			
	Ammonia - N			Copper	5500.			
	TKN			Iron	7700.			
	Total Solids			➢Lead	290.			
	Susp. Solids			Magnesium	6900.			
	Diss. Solids			Manganese	190.			
	TPH			Molybdenum	<10			
	Oil & Grease			Nickel	20.			

EP Toxicity and TCLP includes all metals marked with ➢

INDSOIL.SAM

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL-LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC & ENVIRONMENTAL HEALTH LABORATORY
NYSDOH LAB ID. NUMBER 10528

SAMPLING ANALYSIS REQUEST/CHAIN OF CUSTODY

Field Number: 002748 000802 Laboratory Number I W 08 00 002
Collected By: Eileen Governale Assisted By:
Affiliation: SCDHS Date: 8/2/00 Time: 1:05 pm
Facility/Name Gucci Fireworks
Location: 1 Gucci Ln, Brookhaven
Point of Collection: EOD chamber demo pile - composite
Remarks:

Volatile Organic Bottle Control Number: Sample Matrix Soil

Analysis Requested (By Section)

Air Pollution

[ ] Volatile Organic Hydrocarbons
[ ] Asbestos (Bulk)

Hazardous Materials (Organics)

[ ] Volatile Organics (EPA 8260B)
Preservation: [ ] HCL [ ] Cooled to 4°C
Level of Detection: [ ] 4ppb [ ] 40 ppb [ ] 100 ppb
[ ] Semivolatile Organics (EPA 8270C)
Type
[ ] Flash Point (EPA 1010)
[ ] TCLP
[ ] Other

Industrial Waste (Inorganics)

[X] Metals [ ] Preserved
[ ] Radiological
[ ] Mercury
[ ] Phenols
[ ] Cyanide [ ] Preserved
[ ] Chloride, Sulfate
[ ] Fluoride
[ ] Ammonia, Nitrate, Nitrite
[ ] TKN
[ ] Solids (SS, DS, TS)
[ ] MBAS, COD
[ ] Oil & Grease
[ ] TPH
[ ] pH Indicate Field pH:

Barium
Strontium
Aluminum
Cu, Zn

Total Number of Sample Containers Submitted 1

Custody Section

Relinquished By:		Received By:	
Name Eileen Governale	Date 8/3/00	Name Scott Mrakek	Date 8/3/00
Signature Eileen Governale	Time 9:45 A	Signature	Time 9:45
Name	Date	Name	Date
Signature	Time	Signature	Time
Name	Date	Name	Date
Signature	Time	Signature	Time

1099Chncust/A

Suffolk County Department of Health Services
Division of Medical-Legal Investigations & Forensic Sciences
Public & Environmental Health Laboratory
(Industrial Waste Soil Sample)

FIELD
Field No. 002348000 802

Laboratory
Lab No. 08-00 002

Date Completed 8/10/00

Name of Firm Gucci

Address or Location

Remarks/ Instructions

	TEST	RESULT		TEST	RESULT ug/g (PPM)		TEST	RESULT ug/g (PPM)
	pH (Field)			COD			Potassium	500.
	pH (Lab)			Cyanide			>Selenium	<10.
	TEST	RESULT		Phenols			>Silver	<2.
		ug/g (PPM)		METALS			Sodium	<100
	Chloride			Aluminum	3800.		Thallium	<25.
	Fluoride			Antimony	<10.		Vanadium	10.
	Sulfate			>Arsenic	<10.		Zinc	80.
	Sulfite			>Barium	110.		STRONTIUM	53.
	Sulfide			Beryllium	<1.		EP Toxicity	
	MBAS			>Cadmium	<2.		TCLP	
	TOC			Calcium	5800.			
	Nitrate - N			>Chromium	15.			
	Nitrite - N			Cobalt	<10.		Perchlorate	0.138
	Ammonia - N			Copper	1500.			
	TKN			Iron	5200.			
	Total Solids			>Lead	35.			
	Susp. Solids			Magnesium	600.			
	Diss. Solids			Manganese	50.			
	TPH			Molybdenum	<10.			
	Oil & Grease			Nickel	15.			

EP Toxicity and TCLP includes all metals marked with >

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL-LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC & ENVIRONMENTAL HEALTH LABORATORY
NYSDOH LAB ID. NUMBER 10528

SAMPLING ANALYSIS REQUEST/CHAIN OF CUSTODY

Field Number: 003 348 000802 Laboratory Number I W 08 00 003
Collected By: Eileen Governale Assisted By:
Affiliation: SCDHS Date: 8/2/00 Time: 1:20 pm
Facility/Name Gucci Fireworks
Location: 1 Gucci Pa, BKHN
Point of Collection: Soil beneath slop sink drain - ~ west side of field Wa n
Remarks:

Volatile Organic Bottle Control Number: - -
Sample Matrix Soil

Analysis Requested (By Section)

Air Pollution

[ ] Volatile Organic Hydrocarbons
[ ] Asbestos (Bulk)

Hazardous Materials (Organics)

[ ] Volatile Organics (EPA 8260B)
Preservation: [ ] HCL [ ] Cooled to 4°C
Level of Detection: [ ] 4ppb [ ] 40 ppb [ ] 100 ppb
[ ] Semivolatile Organics (EPA 8270C)
Type
[ ] Flash Point (EPA 1010)
[ ] TCLP
[ ] Other

Industrial Waste (Inorganics)

[X] Metals [ ] Preserved
[ ] Radiological
[ ] Mercury
[ ] Phenols
[ ] Cyanide [ ] Preserved
[ ] Indicate analysis to be performed
___Ammonia, Nitrate, Nitrite
___Chloride ___ Sulfate ___pH
[ ] T K N
[ ] Solids (SS, DS, TS)
[ ] ___MBAS ___ COD
[ ] Oil & Grease
[ ] TPH
Indicate Field pH:

Total Number of Sample Containers Submitted 1

Custody Section

Relinquished By:		Received By:	
Name Eileen Governale	Date 8/3/00	Name Scott Mirabella	Date 8/3/00
Signature Eileen Governale	Time 9:45 AM	Signature	Time 9:45
Name	Date	Name	Date
Signature	Time	Signature	Time
Name	Date	Name	Date
Signature	Time	Signature	Time

1099Chncust/A

Suffolk County Department of Health Services
Division of Medical-Legal Investigations & Forensic Sciences
Public & Environmental Health Laboratory
(Industrial Waste Solid Samples)

FIELD
Field No. 003 3048 00 802

Laboratory
Lab No. IW 08 00 003

Date Completed 8/10/00

Name of Firm Gucci

Address or Location

Remarks/ Instructions

	TEST	RESULT		TEST	RESULT ug/g (PPM)		TEST	RESULT ug/g (PPM)
	pH (Field)			COD			Potassium	280.
	pH (Lab)			Cyanide			➢Selenium	<10.
	TEST	RESULT		Phenols			➢Silver	<2.
		ug/g (PPM)		METALS			Sodium	<100
	Chloride			Aluminum	3700.		Thallium	<25.
	Fluoride			Antimony	<10.		Vanadium	<10.
	Sulfate			➢Arsenic	<10.		Zinc	100.
	Sulfite			➢Barium	25.		STRONTIUM	<10.
	Sulfide			Beryllium	<1.		EP Toxicity	
	MBAS			➢Cadmium	<2.		TCLP	
	TOC			Calcium	1200.			
	Nitrate - N			➢Chromium	<10.			
	Nitrite - N			Cobalt	<10.		Perchlorate	<0.1
	Ammonia - N			Copper	75.			
	TKN			Iron	7600.			
	Total Solids			➢Lead	<20.			
	Susp. Solids			Magnesium	1100.			
	Diss. Solids			Manganese	55.			
	TPH			Molybdenum	<10.			
	Oil & Grease			Nickel	<10.			

EP Toxicity and TCLP includes all metals marked with ➢

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL-LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC & ENVIRONMENTAL HEALTH LABORATORY
NYSDOH LAB ID. NUMBER 10528

SAMPLING ANALYSIS REQUEST/CHAIN OF CUSTODY

Field Number: 004 348 000802 Laboratory Number I W 08 co 004
Collected By: Eileen G Assisted By:
Affiliation: SCDHS Date: 8/2/00 Time: 1 40 pm
Facility/Name: Gucci Fireworks
Location: 1 Gucci La, BKHN
Point of Collection: Soil at end of shell soak pad - composite
Remarks: metals - aluminum, barium, titanium, strontium, copper

Volatile Organic Bottle Control Number: - - Sample Matrix soil

Analysis Requested (By Section)

Air Pollution

[ ] Volatile Organic Hydrocarbons
[ ] Asbestos (Bulk)

Hazardous Materials (Organics)

[ ] Volatile Organics (EPA 8260B)
Preservation: [ ] HCL [ ] Cooled to 4°C
Level of Detection: [ ] 4ppb [ ] 40 ppb [ ] 100 ppb
[ ] Semivolatile Organics (EPA 8270C)
Type
[ ] Flash Point (EPA 1010)
[ ] TCLP
[ ] Other

Industrial Waste (Inorganics)

[X] Metals [ ] Preserved
[ ] Radiological
[ ] Mercury
[ ] Phenols
[ ] Cyanide [ ] Preserved
[ ] Chloride, Sulfate
[ ] Fluoride
[ ] Ammonia, Nitrate, Nitrite
[ ] T.K.N
[ ] Solids (SS, DS, TS)
[ ] MBAS, COD
[ ] Oil & Grease
[ ] TPH
[ ] pH Indicate Field pH:

Total Number of Sample Containers Submitted 1

Custody Section

Relinquished By:		Received By:	
Name Eileen Governale	Date 8/3/00	Name Scott Miralle	Date 8/3/00
Signature Eileen Governale	Time 9:45 p	Signature	Time 945
Name	Date	Name	Date
Signature	Time	Signature	Time
Name	Date	Name	Date
Signature	Time	Signature	Time

1099Chncust/A

Suffolk County Department of Health Services
Division of Medical-Legal Investigations & Forensic Sciences
Public & Environmental Health Laboratory
(Industrial Waste Solid Samples)

FIELD
Field No. 004348000 802

Laboratory
Lab No. IC 08 00 00

Name of Firm Gucci

Date Completed 8/10/00

Address or Location

Remarks/ Instructions

	TEST	RESULT		TEST	RESULT ug/g (PPM)		TEST	RESULT ug/g (PPM)
	pH (Field)			COD			Potassium	600.
	pH (Lab)			Cyanide			➢Selenium	<10.
	TEST	RESULT		Phenols			➢Silver	<2.
		ug/g (PPM)		METALS			Sodium	<100.
	Chloride			Aluminum	3500.		Thallium	<25.
	Fluoride			Antimony	35.		Vanadium	<10.
	Sulfate			➢Arsenic	<10.		Zinc	160.
	Sulfite			➢Barium	700.		STRONTIUM	140.
	Sulfide			Beryllium	<1.		EP Toxicity	
	MBAS			➢Cadmium	<2.		TCLP	
	TOC			Calcium	280.			
	Nitrate - N			➢Chromium	30.			
	Nitrite - N			Cobalt	<10.		Perchlorate	22.3
	Ammonia - N			Copper	460.			
	TKN			Iron	8400.			
	Total Solids			➢Lead	<20.			
	Susp. Solids			Magnesium	660.			
	Diss. Solids			Manganese	45.			
	TPH			Molybdenum	<10.			
	Oil & Grease			Nickel	<10.			

EP Toxicity and TCLP includes all metals marked with ➢

INDSOIL.SAM

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL-LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC & ENVIRONMENTAL HEALTH LABORATORY
NYSDOH LAB ID. NUMBER 10528

SAMPLING ANALYSIS REQUEST/CHAIN OF CUSTODY

Field Number: 005 348 00 080 2 Laboratory Number I W 08 00 005

Collected By: Eileen G Assisted By: —

Affiliation: SCDHS Date: 8-2-00 Time: 1:45 pm

Facility/Name Gucci Fireworks

Location: Gucci Fa, BKHN

Point of Collection: - Open drums of water (with shells) on soak pad.

Remarks: - Sample for perchlorates + metals

Volatile Organic Bottle Control Number: _____ Sample Matrix liquid

Analysis Requested (By Section)

Air Pollution

[ ] Volatile Organic Hydrocarbons
[ ] Asbestos (Bulk)

Hazardous Materials (Organics)

[ ] Volatile Organics (EPA 8260B)
Preservation: [ ] HCL [ ] Cooled to 4°C
Level of Detection: [ ] 4ppb [ ] 40 ppb [ ] 100 ppb
[ ] Semivolatile Organics (EPA 8270C)
Type _____
[ ] Flash Point (EPA 1010)
[ ] TCLP
[ ] Other _____

Industrial Waste (Inorganics)

[X] Metals [ ] Preserved
[ ] Radiological
[ ] Mercury
[ ] Phenols
[ ] Cyanide [ ] Preserved
[ ] Chloride, Sulfate
[ ] Fluoride
[ ] Ammonia, Nitrate, Nitrite
[ ] TKN
[ ] Solids (SS, DS, TS)
[ ] MBAS, COD
[ ] Oil & Grease
[ ] TPH
[ ] pH Indicate Field pH: _____

Total Number of Sample Containers Submitted 1

Custody Section

Relinquished By:		Received By:	
Name Eileen Governale	Date 8/3/00	Name Scott [illegible]	Date 8/3/00
Signature Eileen Governale	Time 9:45 am	Signature [illegible]	Time 9:45
Name	Date	Name	Date
Signature	Time	Signature	Time
Name	Date	Name	Date
Signature	Time	Signature	Time

1099Chncust/A

Suffolk County Department of Health Services
Division of Medical-Legal Investigations & Forensic Sciences
Public & Environmental Health Laboratory
(Industrial Waste Liquid Samples)

FIELD
Field No. 005 348 000 802

Laboratory
Lab No. I W 08 00 005

Date Completed 8/10/00

Name of Firm Grucci

Address or Location

Remarks/ Instructions

	TEST	RESULT		TEST	RESULT Mg/L (PPM)		TEST	RESULT Mg/L (PPM)
	pH (Field)			COD			Nickel	<.1
	pH (Lab)			Cyanide			Potassium	4400.
	TEST	RESULT		Phenols			➢Selenium	<.1
		Mg/L (PPM)		METALS			Silicon	31.
	Chloride			Aluminum	17		➢Silver	<.02
	Fluoride			Antimony	4.6		Sodium	110.
	Sulfate			➢Arsenic	<.1		Thallium	<.25
	Sulfite			➢Barium	7.		Titanium	.10.
	Sulfide			Beryllium	<.01		Vanadium	<.1
	MBAS			Boron	.05		Zinc	1.6
	TOC			➢Cadmium	<.02		STRONTIUM	15.
	Nitrate - N			Calcium	65.		Cr^{+6}	
	Nitrite - N			➢Chromium	1.9			
	Ammonia - N			Cobalt	<.1		EP Toxicity	
	TKN			Copper	3.4		TCLP	
	Total Solids			Iron	29.			
	Susp. Solids			➢Lead	.2		Perchlorate	1600
	Diss. Solids			Magnesium	70.			
	TPH			Manganese	.5			
	Oil & Grease			Molybdenum	<.1			

EP Toxicity and TCLP includes all metals marked with ➢

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APPENDIX D

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-1					PP-2				PP-3			
Sample Date	080900					081000				081100			
Depth Below Land Surface	15-20	25-30	35-40	45-50	55-60	15-20	25-30	35-40	45-50	15-20	25-30	35-40	45-50
INORGANICS													
perchlorate	21	34	10	<4	<4	7	12	21	<4	10	20	22	<4
nitrate	0.4	0.7	1.6	<0.2	<0.2	<0.2	<0.2	1.1	<0.2	<0.2	<0.2	1.4	<0.2
VOLATILE ORGANICS													
1,1 dichloroethane	nd	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	1	nd	nd	2	1	1	nd	nd	2	2	nd	nd	2
1,1,1 trichloroethane	0.5	3	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	1	nd
PESTICIDES													
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-4					PP-5					PP-6					
Sample Date	081500					081600					082200					
Depth Below Land Surface	15-20	25-30	35-40	45-50	55-60	15-20	25-30	35-40	45-50	55-60	65-70	75-80	85-90	95-100	105-110	115-120
INORGANICS																
perchlorate	27.	9.	10.	2.	<2	5.	12.	99.	3.	<2	<2	<2	<2	<2	<2	<2
nitrate	0.3	0.3	2.5	0.6	1.1	<0.2	<0.2	0.3	0.2	<0.2	0.3	1.3	1.5	1.5	1.3	0.3
VOLATILE ORGANICS																
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	3	nd	nd	2	1	2	3	nd	2	2	2	nd	nd	nd	nd	2
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES																
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-7					PP-8					PP-9				
Sample Date	082300					091200					082900				
Depth Below Land Surface	65-70	75-80	85-90	95-100	105-110	65-70	75-80	85-90	95-100	105-110	65-70	75-80	85-90	95-100	105-110
INORGANICS															
perchlorate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
nitrate	1.8	7.3	4.4	2.2	6.9	<0.2	1.8	2.9	0.8	0.5	6.8	6.4	0.5	2.4	6.4
VOLATILE ORGANICS															
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	nd	nd	nd	nd	nd	1	nd	nd	nd	1	nd	1	2	nd	nd
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.7	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.8	5	nd	0.6
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES															
chlorinated pesticides	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd
Imidacloprid	0.48	5.98	0.96	<0.2	<0.2						nd	nd	nd	nd	nd
bis 2-ethylhexyl adipate	0.6	0.51	-	<0.5	<0.5						nd	nd	nd	nd	nd
bis 2-ethylhexyl phthalate	2.6	3.7	-	<2	<2						nd	nd	nd	nd	nd
iprodione	<0.5	2.2	-	<0.5	<0.5	semi-volatile organics					nd	nd	nd	nd	nd
carbaryl*	nd	0.34	nd	nd	nd	carbamate pesticides					nd	nd	nd	nd	nd
TCPA	nd	nd	nd	nd	nd						nd	nd	nd	nd	nd

* reportable minimum detection limit 0.5 ug/L

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-10					PP-11						PP-12	PP-13	PP-14	PP-15
Sample Date	090600					083100						090500	090500	090500	090500
Depth Below Land Surface	70-75	80-85	90-95	100-105	110-115	55-60	65-70	75-80	85-90	95-100	105-110	35-40	35-40	35-40	35-40
INORGANICS															
perchlorate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	71	98	77	122
nitrate	0.5	1.7	2.0	10.7	13.7	1.1	2.3	1.3	1.8	2.3	2.9	0.4	0.2	0.3	0.5
VOLATILE ORGANICS															
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	2
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.5	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES															
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Imidacloprid*	nd	0.1	0.1	nd	nd	nd	nd	nd	nd	nd	nd				
atrazine	<0.2	<0.2	<0.2	0.23	<0.2	nd	nd	nd	nd	nd	nd				
iprodione**	<0.5	0.17	0.52	<0.5	<0.5	nd	nd	nd	nd	nd	nd				
bis 2-ethylhexyl phthalate	<2	2.38	-	<2	-	nd	nd	nd	nd	nd	nd				
metolachlor	nd	0.23	0.16	nd	nd	nd	nd	nd	nd	nd	nd				
TCPA	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd				
Carbamates	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd				

* reportable minimum detection limit 0.2 ug/L

**reportable minimum detection limit 0.5 ug/L

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-16						PP-17					PP-18				
Sample Date	092000						092200					092100				
Depth Below Land Surface	15-20	25-30	35-40	45-50	55-60	65-70	20-25	25-30	35-40	45-50	55-60	15-20	25-30	35-40	45-50	55-60
INORGANICS																
perchlorate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	32	4	3	<2	<2
nitrate	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.4	0.9	<0.2	<0.2	<0.2	<0.2	0.5	1.7	<0.2
VOLATILE ORGANICS																
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	2	3	4	1	2	3	2	1	nd	2	2	4	2	1	nd	2
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
toluene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES																
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-19							PP-20						S-68042
Sample Date	092500							092800						071200
Depth Below Land Surface	15-20	25-30	35-40	45-50	55-60	75-80	95-100	25-30	35-40	45-50	55-60	65-70	85-90	15-20
INORGANICS														
perchlorate	<4	<4	<4	16	12	5	<4	43	<2	<2	<2	<2	<2	<20
nitrate	<0.2	<0.2	<0.2	0.2	0.4	0.8	<0.2	0.2	<0.2	<0.2	<0.2	0.5	0.4	0.3
VOLATILE ORGANICS														
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	3	3	4	2	2	2	nd	2	3	3	2	nd	nd	2
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
toluene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.5
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES														
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-21						PP-22					PP-23					
Sample Date	092900						100300					100400					
Depth Below Land Surface	35-40	45-50	55-60	65-70	75-80	85-90	45-50	55-60	65-70	75-80	85-90	35-40	45-50	55-60	65-70	75-80	85-90
INORGANICS																	
perchlorate	9	<2	<2	<2	<2	<2	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
nitrate	na	na	na	na	na	na	<0.2	<0.2	<0.2	0.8	1.0	<0.2	<0.2	<0.2	0.4	1.7	1.6
VOLATILE ORGANICS																	
1,1 dichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chloroform	2	3	2	2	nd	nd	3	3	3	2	1	2	2	3	1	nd	nd
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
tetrachloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
carbon disulfide	nd	nd	nd	nd	nd	nd	nd	2	nd	nd	nd	0.5	nd	nd	nd	nd	nd
toluene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MTBE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PESTICIDES																	
chlorinated pesticides	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
EDB/DBCP	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

YAPHANK PERCHLORATE DATA SUMMARY

Well #	PP-24											Soil Sample #1	Soil Sample #2
Sample Date	100500											101600	101600
Depth Below Land Surface	35-40	45-50	55-60	65-70	75-80	85-90						surface at 21 & 22	surface at PP-20
INORGANICS													
perchlorate	<2	<2	<2	<2	<2	<2						<20	<20
nitrate	<0.2	<0.2	0.6	1.6	1.6	1.7							
VOLATILE ORGANICS													
1,1 dichloroethane	nd	nd	nd	nd	nd	nd							
chloroform	1	1	1	nd	nd	nd							
1,1,1 trichloroethane	nd	nd	nd	nd	nd	nd							
trichloroethene	nd	nd	nd	nd	nd	nd							
tetrachloroethene	nd	nd	nd	nd	nd	nd							
cis 1,2 dichloroethene	nd	nd	nd	nd	nd	nd							
carbon disulfide	nd	0.6	nd	nd	nd	nd							
toluene	nd	nd	nd	nd	nd	nd							
MTBE	nd	nd	nd	nd	nd	nd							
PESTICIDES													
chlorinated pesticides	nd	nd	nd	nd	nd	nd							
EDB/DBCP	nd	nd	nd	nd	nd	nd							

YAPHANKdata.wpd

APPENDIX E

Perchlorate Concentrations in Micrograms per Liter

Well #	Depth	Sample Date	SCWA	SCDHS
PP1	35-40	08/09/00	10.9	10.
PP1	25-30	08/09/00	39.6	34.
PP1	15-20	08/09/00	25.5	21.
PP3	35-40	08/10/00	27.9	22.
PP3	25-30	08/10/00	24.0	20.
PP3	15-20	08/10/00	9.3	10.
PP2	35-40	08/10/00	28.3	21.
PP2	25-30	08/10/00	14.8	12.
PP2	15-20	08/10/00	8.6	7.
PP12	35-40	09/05/00	89.6	71.
PP13	35-40	09/05/00	120.3	98.
PP14	35-40	09/05/00	93.7	77.
PP15	35-40	09/05/00	138.5	122.
PP18	35-40	09/21/00	<3.0	3.
PP18	25-30	09/21/00	4.2	4.
PP18	15-20	09/21/00	38.9	32.
PP19	75-80	09/25/00	7.4	5.
PP19	55-60	09/25/00	12.6	12.
PP19	45-50	09/25/00	19.4	16.
PP20	25-30	09/28/00	53.0	43.
PP21	35-40	09/29/00	8.0	9.
PP22	45-50	10/03/00	3.2	3.

Plate 1
Yaphank Perchlorate Investigation

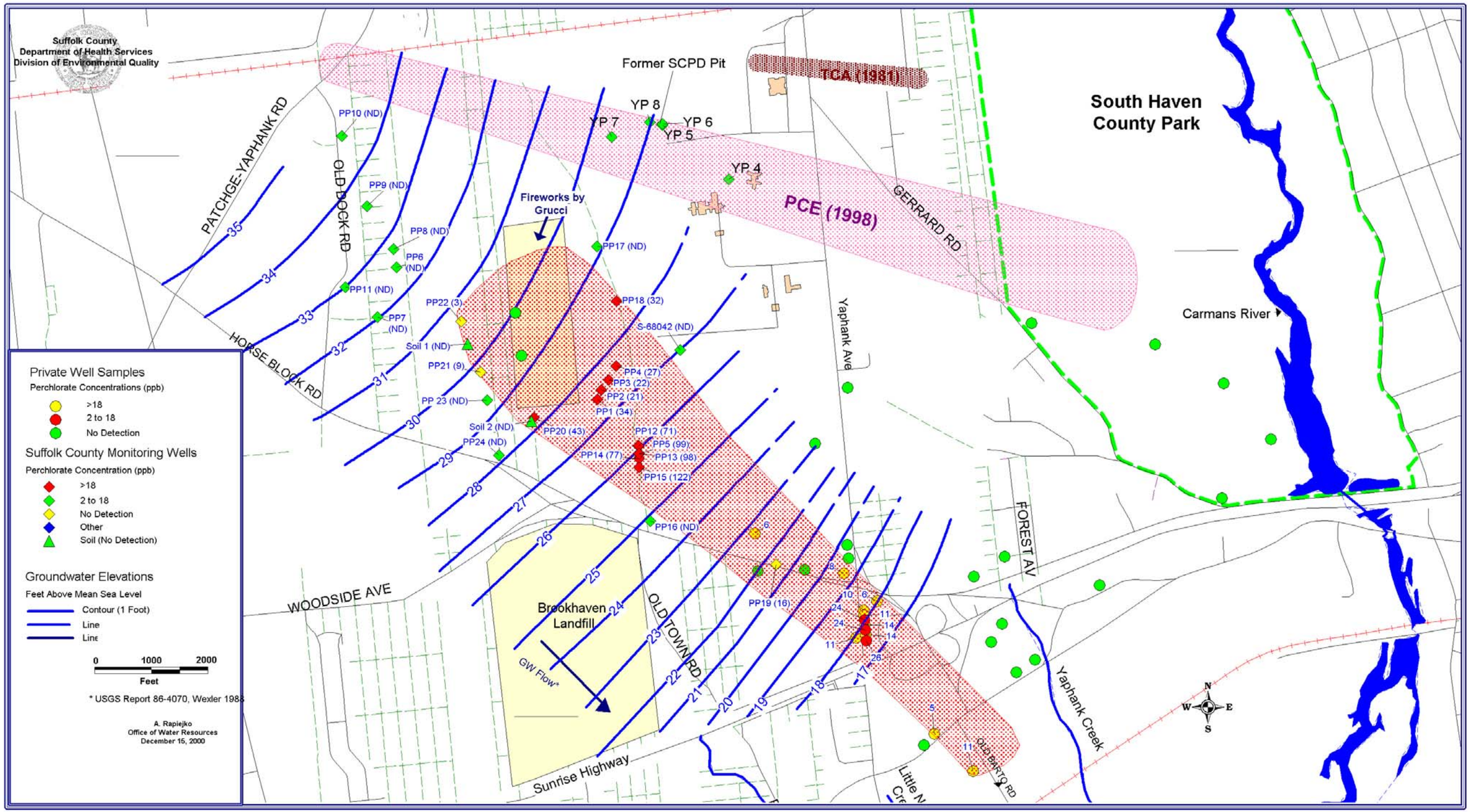
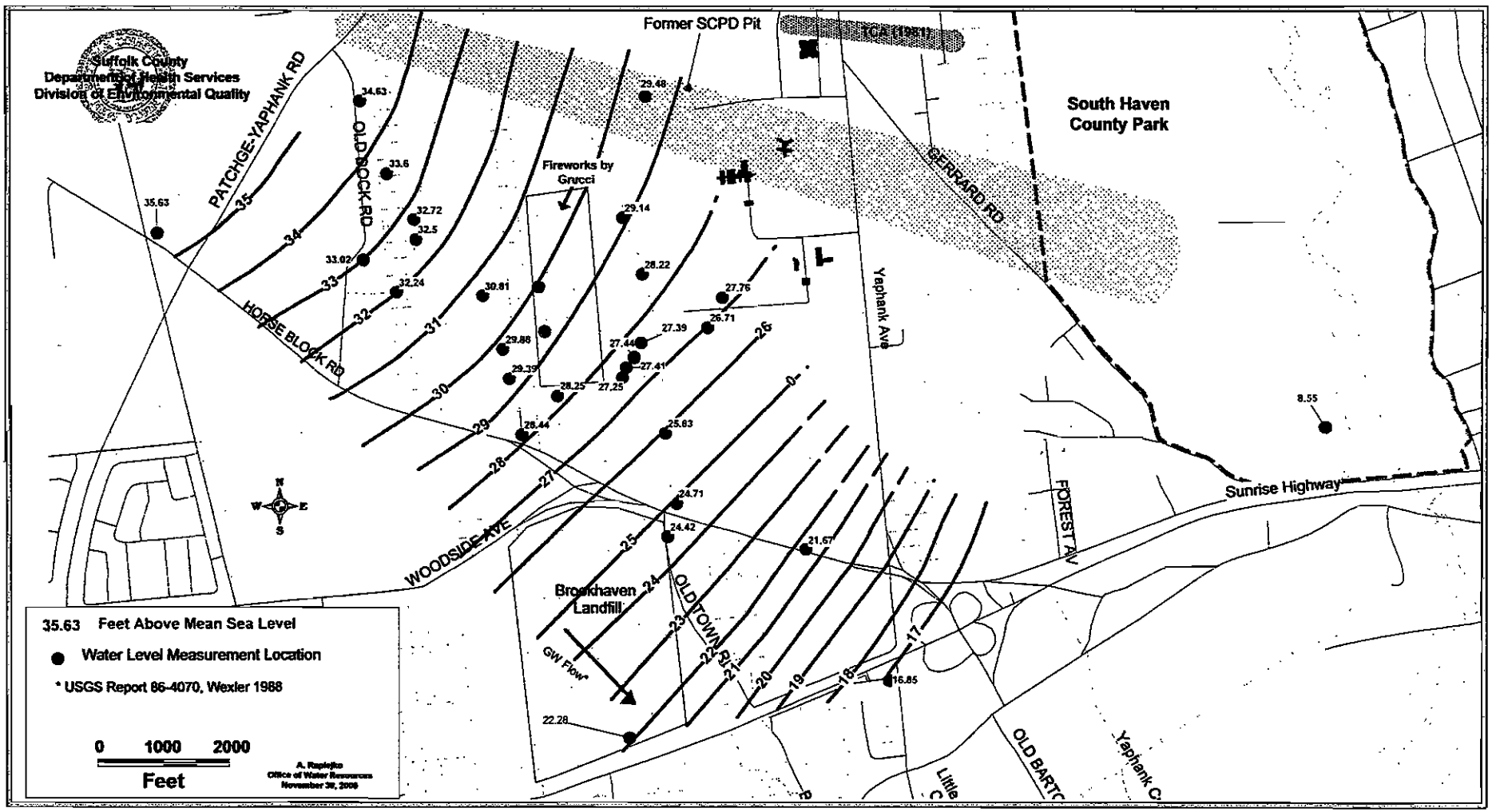


Plate 2
Water Table Contours



URGENT and **CONFIDENTIAL** FAX BACK TO **(631)-756-8901**

ENVIRONMENTAL QUESTIONNAIRE for PHASE I ESA

AS REQUIRED by ASTM Standard E1527-05

Site Name: Parcel C (31.9 acres)

Address: Yaphank Ave., Yaphank, NY 11980

Tax Identification (Section/ Block/ Lot): 200-815-1-4.4, 6.2

The Site Owner/ Client/ Key Site Manager should provide the following information. Please fill in this form to the best of your ability, explaining any Yes answers on a separate sheet of paper. Without these answers, our report would have to note that the Phase One is incomplete, and your Landowner Liability Protections could be at risk. We need these answers before we conduct the site visit.

1. **Reasoning.** Why is the Phase I ESA being performed (i.e. sale, purchase, refinance, exchange, etc)?

   Surplus designation, sale and development proposal

2. **Identification.** Who is the subject property contact and how the contact and be reached?

   Thomas Isles, Director, Suffolk County Department of Planning

   631-853-5191

3. **Future Plans.** What are the future plans for the subject property? (remain as is, demolition, construction, etc). If development changes are to be completed please include a site plan/survey.

   Sports Fields and Field Annex

4. **Environmental Cleanup Liens.** ASTM requires the User to check for environmental liens that may be filed or recorded against the subject property under federal, tribal, state or local law. Such liens might be listed in the "exceptions to coverage" in the property's title insurance commitment or policy. Failure to check for these liens could put your Landowner Liability Protections at risk.

   Have you checked for these environmental cleanup liens? ☐ Yes ☒ No
   Are you aware of any such liens against the subject property? ☐ Yes ☒ No

5. **Activity and Use Limitations (AULs).** These include engineering controls (e.g., slurry walls, caps) and land use restrictions or institutional controls (e.g., deed restrictions, covenants) that may be in place at the site or filed under federal, tribal, state or local law. The title commitment or policy might also list AULs.

   Are you aware of any possible AULs involving the subject site? ☐ Yes ☒ No

6. **Specialized Knowledge.** This involves personal knowledge or experience related to the subject property or nearby properties. For example, if you are involved in the same line of business as the current or former occupants of the property or an adjoining property, you would probably know of any chemicals, oil, degreasers, gasoline, or other hazardous substances commonly used in that type of business.

   Do you have any specialized knowledge that might indicate the past or present use or release of such substances on the subject or nearby properties? ☒ Yes ☐ No

7. **Fair Market Value (FMV).** A purchase price significantly below FMV may indicate an environmental problem. Please note that this question does not require an appraisal of the property. If the price is significantly below FMV, the User should consider whether it might be because contamination may be present at the property.

   Is the purchase price significantly below fair market value? ☒ UNKNOWN ☐ Yes ☐ No

8. **Obvious Indicators.** This involves past or present spills, stains, releases, cleanups, etc. on or near the site.

   Do you know of any obvious indicators of possible contamination on or near the site? ☒ Yes ☐ No

9. **Common Knowledge.** Please use a separate sheet if necessary.

   a. Describe the past uses of the property: Vacant Woodland

   b. Describe any specific chemicals that may have been present at the property: Unknown

   c. Describe any historical releases, leaking tanks, hazardous material responses, flooding, or fires at the subject property: Unknown

   d. Describe any other information that may help us identify possible contamination: SCDHS Reports - Investigation Summary: Perchlorate Contamination in Yaphank, Suffolk County, NY (Jan. 2001) Investigation Summary: Groundwater Contamination by Tetrachloroethene in Yaphank, Suffolk County, NY (Feb. 1999)

10. **Previous Owners/Occupants of the Property.** Please list previous owners, operators, and/or occupants and their contact information, if available. Unknown

11. **Historical underground storage tanks (USTs) at the Property.**

    Have there been any USTs at the property in the past? ☒ UNKNOWN ☐ Yes ☐ No

12. **Historical aboveground storage tanks (ASTs) at the Property.**

    Have there been any ASTs at the property in the past? ☒ UNKNOWN ☐ Yes ☐ No

13. **Historical Water Use Wells at the Property.**

    Have there been groundwater monitoring wells or water use wells at the property? ☒ UNKNOWN ☐ Yes ☐ No

14. **Artificial fill or dumping at the Property.**

    Has artificial fill or dumping taken place at the property? ☒ UNKNOWN ☐ Yes ☐ No

15. **Historical Utilities at the Property.**

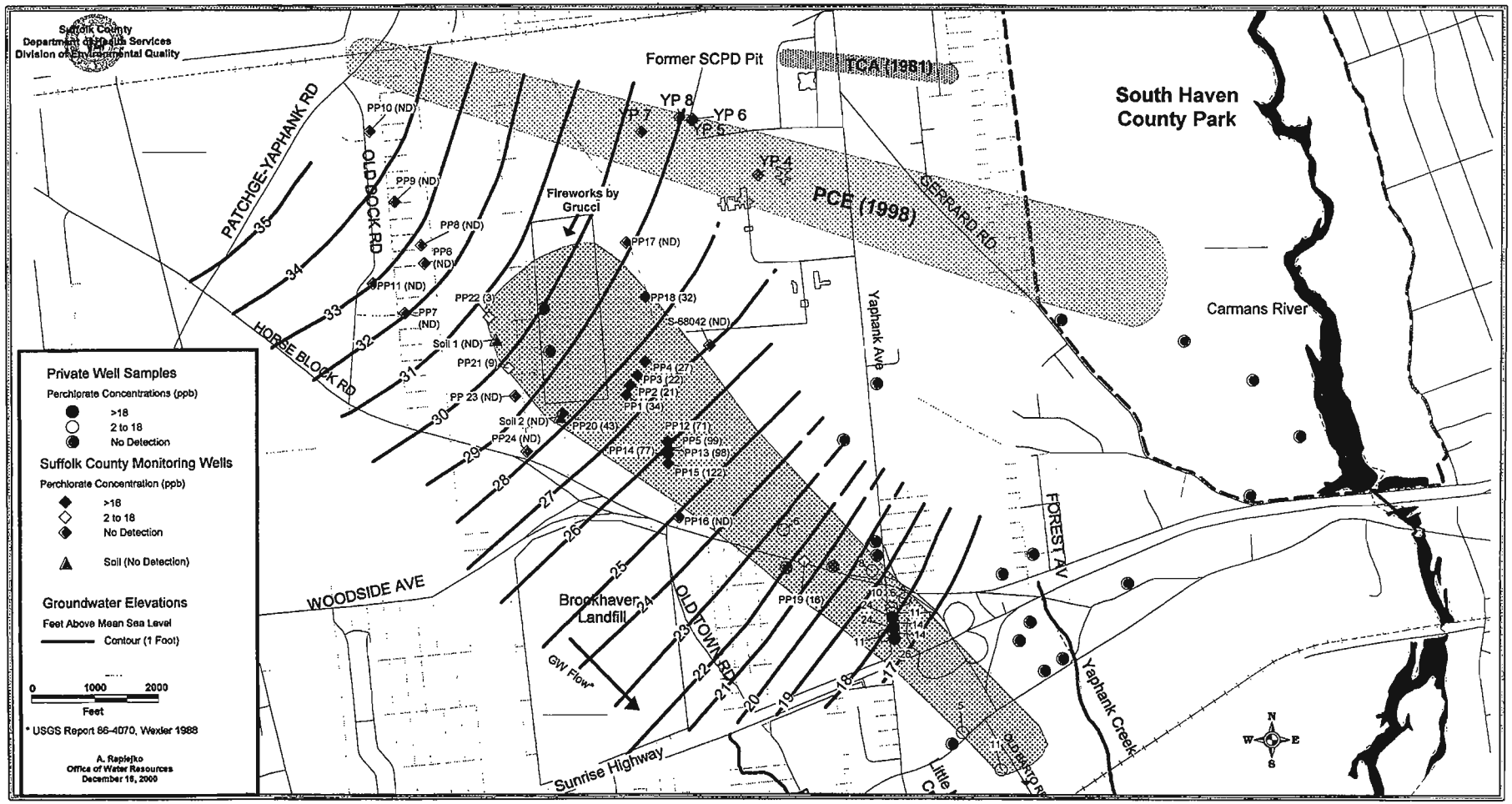
    Have utilities changed at the property (i.e. septic system or private well)? ☒ UNKNOWN ☐ Yes ☐ No

Your Signature _____ **Date** 11/5/10

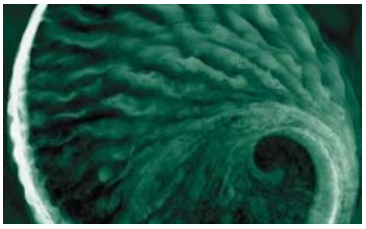
# of separate sheets attached: _____

Explain Yes answers on a separate sheet.

Plate 1
Yaphank Perchlorate Investigation



Appendix D
EDR Database Search



Suffolk County Yaphank Center Parcels B and C
Yaphank Avenue
Yaphank, NY 11980

Inquiry Number: 2843813.6s
August 12, 2010

The EDR Radius Map™ Report with GeoCheck®

Prepared using the EDR FieldCheck® System

EDR® Environmental Data Resources Inc

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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EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). ERM, INC. used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by ERM, INC.. 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

YAPHANK AVENUE
YAPHANK, NY 11980

COORDINATES

Latitude (North):	40.818200 - 40˚ 49' 5.5''
Longitude (West):	72.931100 - 72˚ 55' 52.0''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	674485.1
UTM Y (Meters):	4520424.0
Elevation:	54 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	40072-G8 BELLPORT, NY
Most Recent Revision:	1967

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2006, 2008
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites

EXECUTIVE SUMMARY

NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

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

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

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

Federal institutional controls / engineering controls registries

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

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS ..... Inactive Hazardous Waste Disposal Sites in New York State
VAPOR REOPENED ..... Vapor Intrustion Legacy Site List

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

CBS UST ..... Chemical Bulk Storage Database
MOSF UST ..... Major Oil Storage Facilities Database
AST ..... Petroleum Bulk Storage
CBS AST ..... Chemical Bulk Storage Database
MOSF AST ..... Major Oil Storage Facilities Database
CBS ..... Chemical Bulk Storage Site Listing
INDIAN UST ..... Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

FEMA UST ..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS ..... Registry of Engineering Controls
INST CONTROL ..... Registry of Institutional Controls
RES DECL ..... Restrictive Declarations Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Agreements

State and tribal Brownfields sites

ERP ..... Environmental Restoration Program Listing
BROWNFIELDS ..... Brownfields Site List

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
SWTIRE ..... Registered Waste Tire Storage & Facility List
SWRCY ..... Registered Recycling Facility List
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
DEL SHWS ..... Delisted Registry Sites
US HIST CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ..... Historical Petroleum Bulk Storage Database
HIST AST ..... Historical Petroleum Bulk Storage Database

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LUCIS ..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
NY Spills ..... Spills Information Database
NY Hist Spills ..... SPILLS Database

Other Ascertainable Records

DOT OPS ..... Incident and Accident Data

EXECUTIVE SUMMARY

DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
MINES	Mines Master Index File
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
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
HSWDS	Hazardous Substance Waste Disposal Site Inventory
DRYCLEANERS	Registered Drycleaners
NPDES	State Pollutant Discharge Elimination System
AIRS	Air Emissions Data
E DESIGNATION	E DESIGNATION SITE LISTING
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
COAL ASH DOE	Sleam-Electric Plan Operation Data
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
COAL ASH	Coal Ash Disposal Site Listing
FINANCIAL ASSURANCE	Financial Assurance Information Listing

EDR PROPRIETARY RECORDS

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.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: 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.

An online review and analysis by ERM, INC. of the RCRA-CESQG list,
as provided by EDR, and dated 02/17/2010 has revealed that there is 1 RCRA-CESQG site
within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
YAPHANK JAIL	15 GLOVER DR	E 0 - 1/8 (0.030 mi.)	A3	9

State and tribal landfill and/or solid waste disposal site lists

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.

An online review and analysis by ERM, INC. of the SWF/LF list,
as provided by EDR, and dated 07/14/2010 has revealed that there are 2 SWF/LF sites
within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DECHIARO ASSOCIATES CORP. (LOT	LOTS 2; 2A GRUCCI LANE	S 1/4 - 1/2 (0.404 mi.)	B7	16
DECHIARO ASSOCIATES CORP. (LOT	LOT 4; 4A GRUCCI LANE	S 1/4 - 1/2 (0.404 mi.)	B8	17

State and tribal leaking storage tank lists

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

An online review and analysis by ERM, INC. of the LTANKS list,
as provided by EDR, and dated 05/24/2010 has revealed that there is 1 LTANKS site
within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUFFOLK COUNTY POLICE DEPT Date Closed: 7/1/1992	***YAPHANK AVE***	***E 1/8 - 1/4 (0.176 mi.)***	***5***	***11***

EXECUTIVE SUMMARY

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.

An online review and analysis by ERM, INC. of the HIST LTANKS list,
as provided by EDR, and dated 01/01/2002 has revealed that there is 1 HIST LTANKS site
within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUFFOLK COUNTY POLICE DEPT	***YAPHANK AVE***	***E 1/8 - 1/4 (0.176 mi.)***	***5***	***11***
Date Closed: 07/01/92				

State and tribal registered storage tank lists

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

An online review and analysis by ERM, INC. of the UST list,
as provided by EDR, and dated 06/17/2010 has revealed that there are 2 UST sites
within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUFFOLK COUNTY SKILLED NURSING	GLOVER DR	E 0 - 1/8 (0.029 mi.)	A1	7
SUFFOLK COUNTY POLICE DEPT	***YAPHANK AVE***	***E 1/8 - 1/4 (0.176 mi.)***	***5***	***11***

MOSF: These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

An online review and analysis by ERM, INC. of the MOSF list,
as provided by EDR, and dated 06/17/2010 has revealed that there is 1 MOSF site
within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAITHNESS LONG ISLAND ENERGY C	50 ZORN BOULEVARD	W 1/4 - 1/2 (0.301 mi.)	6	16

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable 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.

An online review and analysis by ERM, INC. of the RCRA-NonGen list,
as provided by EDR, and dated 02/17/2010 has revealed that there are 2 RCRA-NonGen sites
within approximately 0.25 miles of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUFFOLK COUNTY SKILLED NSG FAC	***14 GLOVER DR***	***E 0 - 1/8 (0.029 mi.)***	***A2***	***7***
SUFFOLK COUNTY POLICE DEPT	***YAPHANK AVE***	***E 1/8 - 1/4 (0.176 mi.)***	***5***	***11***

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

An online review and analysis by ERM, INC. of the MANIFEST list,
as provided by EDR, and dated 04/30/2010 has revealed that there is 1 MANIFEST site
within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
YAPHANK JAIL	15 GLOVER DR	E 0 - 1/8 (0.030 mi.)	A4	10

EXECUTIVE SUMMARY

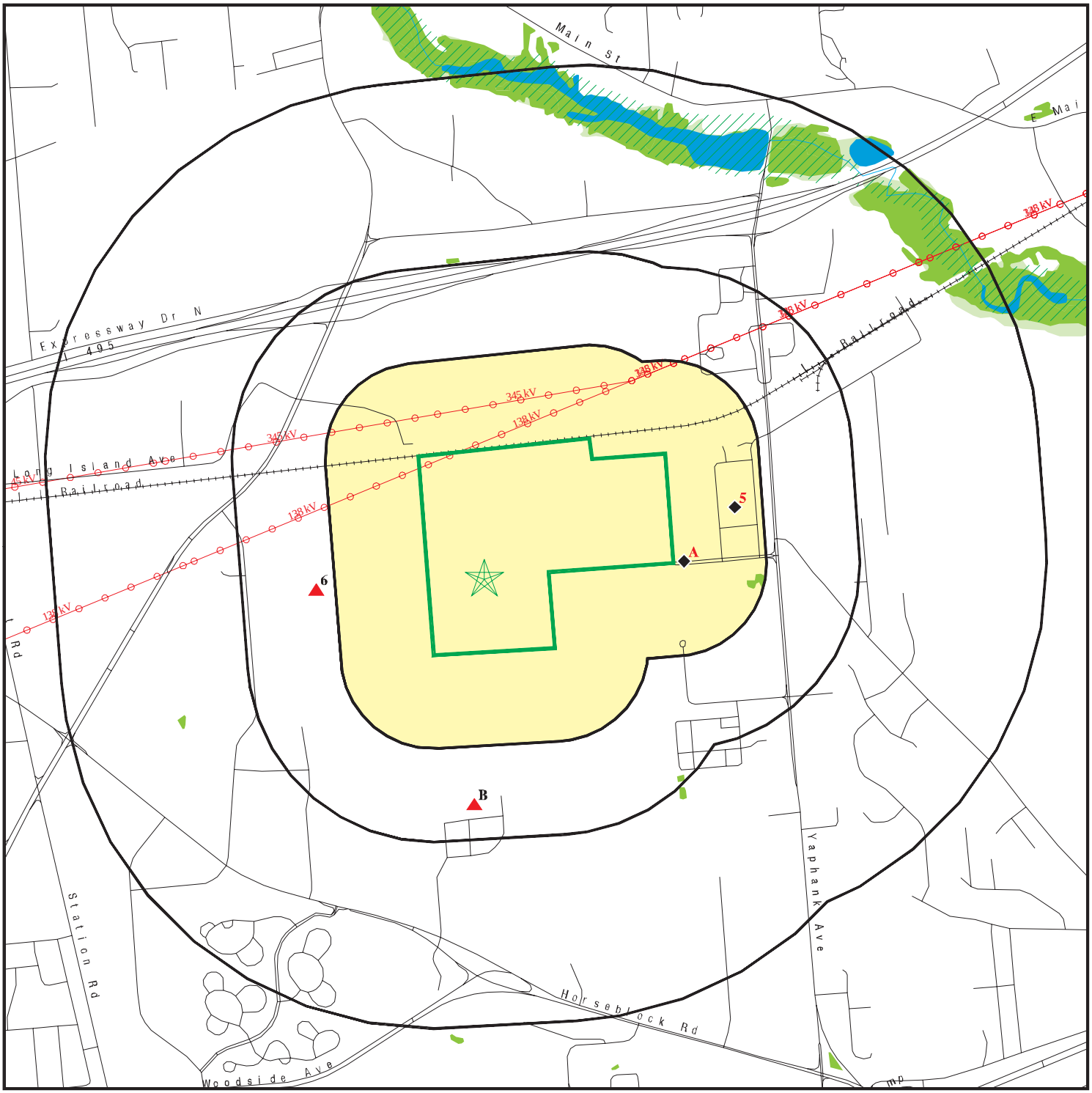
Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
YCC-YAPHANK COUNTY CENTER	CBS UST, CBS
UNIVERSAL SERVICE OF AMERICA	RCRA-NonGen, FINDS, MANIFEST
NYSDEC SPILLS REGION 1	MANIFEST
NYSDEC - SPILLS	MANIFEST
NYSDEC	MANIFEST
SUFFOLK COUNTY DEPT PUBLIC WORKS	MANIFEST
S C D H - SUFFOLK COUNTY EX INFIRMARY	RCRA-CESQG, FINDS, MANIFEST
S C D H - YAPHANK MINIMUM CORRECTIONAL	RCRA-NonGen, FINDS, MANIFEST
SUFFOLK COUNTY VECTOR CONTROL	RCRA-NonGen, FINDS, MANIFEST
SUFFOLK COUNTY GENERAL SERVICES	RCRA-CESQG, FINDS, MANIFEST
SUFFOLK COUNTY DEPT PUBLIC WORK	RCRA-NonGen, FINDS, MANIFEST
NYSDOT - BIN 1064160	MANIFEST
SCSD YAPHANK CO CENTER STP	FINDS, NPDES
MILL POND ESTATES	NPDES
BROOKHAVEN ENERGY	FINDS, NPDES
BROOKHAVEN (T) SD#2	NPDES
FROG HOLLOW INDUSTRIES; INC.	SWF/LF
ECKERT RESIDENCE	LTANKS, HIST LTANKS
BOHEMIAN ENTERPRISE	LTANKS
SUFFOLK CTY YAPHANK INFIR	LTANKS
YAPHANK POLICE DEPARTMENT	LTANKS, HIST LTANKS
SUFFOLK COUNTY GENERAL SERVICES BLD	UST
SUFFOLK COUNTY INFIRMARY GARAGE C14	UST, AST
SUFFOLK COUNTY DPW	UST
SUFFOLK COUNTY DPW LAB	UST
SUFFOLK COUNTY GROUP HOUSE BLDG C57	UST
SUFFOLK COUNTY DEPT WEIGHTS & MEASU	UST
SUFFOLK COUNTY DPW GARAGE BLDG C342	UST, AST
SUFFOLK COUNTY STORAGE BARN BLDG C5	UST, AST
SUFFOLK COUNTY YAPHANK POLICE HDQRS	UST
SUFFOLK COUNTY YAPHANK STP	UST
SUFFOLK COUNTY FARM C0012	UST, AST
SUFFOLK COUNTY PROBATION BLDG C110	UST
SUFFOLK COUNTY POLICE GARAGE	UST
SUFFOLK COUNTY YAPHANK PUMP HOUSE C	UST
SUFFOLK COUNTY DPW	UST
SUFFOLK COUNTY GROUNDSMAN GARAGE BG	UST
SUFFOLK COUNTY FARM BLDG C56	UST
SUFFOLK COUNTY DPW LAB BLDG C66	UST, AST
SUFFOLK COUNTY DPW WATERWAYS BLDG C	UST
SUFFOLK COUNTY DPW BLDG C503	UST
SUFFOLK COUNTY DPW REPAIR SHOP	UST
SUFFOLK COUNTY INFIRMARY BLDG C14	UST
SUFFOLK COUNTY CORRECTIONAL FAC HOU	UST
SUFFOLK COUNTY BOARD OF ELECTIONS B	UST
SUFFOLK COUNTY DPW BLDG C357	UST

M M C INTERSTATE TRUCKING CORP	UST, AST
SCHRAEDER GROUP HOME	UST
ADESA RECON BUILDING	UST
SUFFOLK COUNTY POLICE MUSEUM	UST
S C DEPT EMERGENCY PREPAREDNES	UST, AST
SUFFOLK COUNTY DPW DOCTORS BLDG C01	UST
SUFFOLK COUNTY CARPENTERS SHOP BLDG	AST
SUFFOLK COUNTY VECTOR CONTROL	AST
SUFFOLK COUNTY DPW MAINTENANCE YARD	AST
SUFFOLK COUNTY VECTOR GARAGE BLDG C	AST
ADESA RECON BUILDING	AST
SUFFOLK COUNTY DEPT OF HEALTH	RCRA-NonGen, FINDS
J.D. GAFFNEY INC.	RCRA-NonGen, FINDS
SUFFOLK COUNTY DPW BIN 3364539	RCRA-CESQG
YAPHANK AVE	ERNS
335 YAPHANK AVE BUILDING CO 823	ERNS
YAPHANK POLICE GARAGE (C850)	FINDS
SUFFOLK COUNTY PROBATION C110	FINDS
SUFFOLK COUNTY PROBATION BLDG C110	FINDS
SUFFOLK (CO) SCSD YAPHANKCOMM.C.STP	FINDS
YAPHANK STP	FINDS
POLICE HEADQUARTERS	FINDS
YAPHANK FUELING FACILITY C342	FINDS
VEEB (FIRE ACADEMY) C-551	FINDS
YAPHANK GARAGE C342	FINDS
SUFFOLK COUNTY DPW BIN 3364539	FINDS
FIREMATICS TRAINING CENTER	FINDS
NATIONAL GARBAGE CARTING	NY Spills, NY Hist Spills
UNK	NY Spills, NY Hist Spills
UNK	NY Spills, NY Hist Spills
WHISPERING PINES DEVLOPMT	NY Spills
LONG ISLAND AVE/RTE 101	NY Spills, NY Hist Spills
LILCO	NY Spills, NY Hist Spills
UNK	NY Spills, NY Hist Spills
LAIDLAW TRANSIT	NY Spills, NY Hist Spills
OLD INFIMARY GENERATOR ST	NY Spills
OLD DOCK RD / RTE 101	NY Spills, NY Hist Spills
LILCO	NY Spills, NY Hist Spills
SUFFOLK COUNTY FIREMATICS	NY Spills
ASPLUNDH	NY Spills
WIND RIVER ENVIRONMENTAL	NY Spills
SUFFOLK CO FIRE TRAINING	NY Spills, NY Hist Spills
SC DPW YARD	NY Spills, NY Hist Spills
COUNTY OFFICE 14	NY Spills
YAPHANK STATION	NY Spills, NY Hist Spills
SUFFOLK COUNTY FIRE ACADE	NY Spills, NY Hist Spills
NY TEL	NY Spills, NY Hist Spills
S C DEPT GEN SVCS	NY Spills, NY Hist Spills
POLICE PROPERTY BUREAU	NY Spills, NY Hist Spills
SUFFOLK CO PROBATION BLD	NY Spills
SC PROBATION BUILDING	NY Spills
SUFFOLK COUNTY JAIL	NY Spills, NY Hist Spills
UNKNOWN	NY Spills
SCDPW	NY Spills, NY Hist Spills
SC DIV WEIGHTS & MEASURE	NY Spills, NY Hist Spills

UNK	NY Spills, NY Hist Spills
POLICE HEADQUARTERS	NY Spills
SC WEIGHTS & MEASURE	NY Spills, NY Hist Spills
SCDPW	NY Spills
SC FIREMATICS	NY Spills, NY Hist Spills
LIRR (MTA) YARD	NY Spills, NY Hist Spills
SCDPW	NY Spills, NY Hist Spills
GETTY	NY Spills, NY Hist Spills
UNK	NY Spills, NY Hist Spills
UNK	NY Spills, NY Hist Spills
SUFFOLK COUNTY DPW	NY Hist Spills
TRW STEERING WHEEL SYS.	ICIS
SUFFOLK CITY OF DPW	ICIS

OVERVIEW MAP - 2843813.6s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Suffolk County Yaphank Center Parcels B and C	CLIENT: ERM, Inc.
ADDRESS: Yaphank Avenue Yaphank NY 11980	CONTACT: C Oleary INQUIRY #: 2843813.6s
LAT/LONG: 40.8182 / 72.9311	DATE: August 12, 2010 5:13 pm

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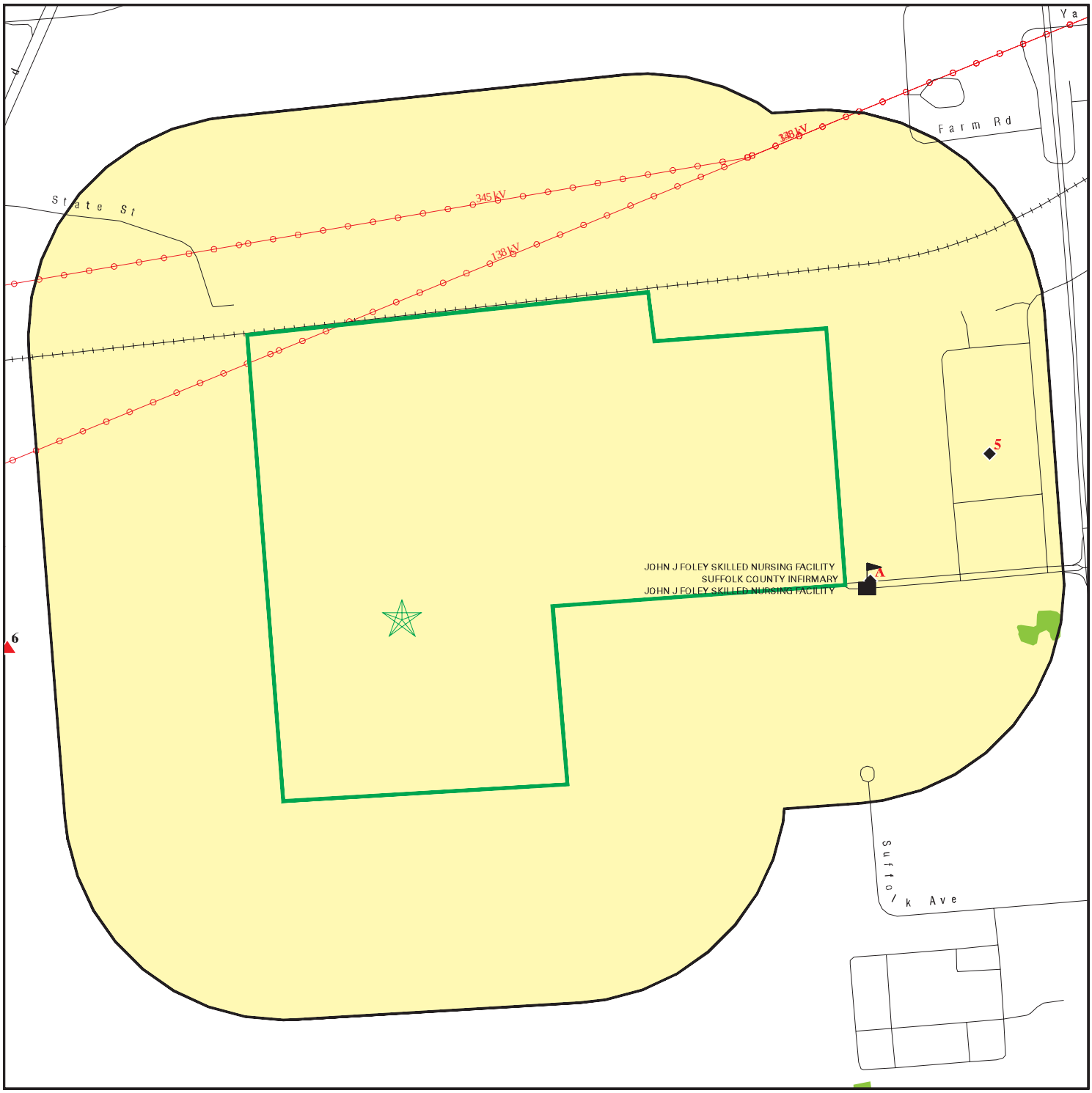
DETAIL MAP - 2843813.6s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Suffolk County Yaphank Center Parcels B and C ADDRESS: Yaphank Avenue Yaphank NY 11980 LAT/LONG: 40.8182 / 72.9311	CLIENT: ERM, Inc. CONTACT: C Oleary INQUIRY #: 2843813.6s DATE: August 12, 2010 5:16 pm

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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
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	0	NR	NR	NR	0
RCRA-CESQG		0.250	1	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS		1.000	0	0	0	0	NR	0
VAPOR REOPENED		1.000	0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	2	NR	NR	2
State and tribal leaking storage tank lists								
LTANKS		0.500	0	1	0	NR	NR	1
HIST LTANKS		0.500	0	1	0	NR	NR	1
INDIAN LUST		0.500	0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST		0.250	1	1	NR	NR	NR	2

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
CBS UST		0.250	0	0	NR	NR	NR	0
MOSF UST		0.500	0	0	0	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
CBS AST		0.250	0	0	NR	NR	NR	0
MOSF AST		0.500	0	0	0	NR	NR	0
MOSF		0.500	0	0	1	NR	NR	1
CBS		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
RES DECL		0.125	0	NR	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
State and tribal Brownfields sites								
ERP		0.500	0	0	0	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
DEL SHWS		1.000	0	0	0	0	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST		0.250	0	0	NR	NR	NR	0
HIST AST		TP	NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0

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
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
NY Spills		0.125	0	NR	NR	NR	NR	0
NY Hist Spills		0.125	0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	1	1	NR	NR	NR	2
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
HSWDS		0.500	0	0	0	NR	NR	0
MANIFEST		0.250	1	0	NR	NR	NR	1
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
NPDES		TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
E DESIGNATION		0.125	0	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
COAL ASH		0.500	0	0	0	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
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

A1 East < 1/8 0.029 mi. 152 ft. | **SUFFOLK COUNTY SKILLED NURSING FACI** | **UST** | **1004323979** | **N/A**
GLOVER DR
YAPHANK, NY 11980

Site 1 of 4 in cluster A

Relative: Lower

Actual: 46 ft.

SUFFOLK CO. UST:

Facility ID:	4398
Facility Reference #:	14830
Region:	SUFFOLK
Official Use:	Permitted Tank. Permit Runs Out. 99
Tank Count:	1
Owner Name:	SUFFOLK COUNTY
Owner Address:	335 YAPHANK AVE
Owner City,St,Zip:	YAPHANK, NY 11980
Permit to Operate:	091994
Township:	BROOKHAVEN
Tax Map No:	0200 000.00 000 000.000
Tank ID:	1
Location:	UNDER, OUT
Installed:	92
Capacity:	0000008000
Content:	#2 FUEL OIL
Construction:	FRP / FRP
Dispenser:	SUCTION
Fill Type:	PUMPED
Date Removed:	Not reported
Tank Key:	12201

A2 East < 1/8 0.029 mi. 152 ft. | **SUFFOLK COUNTY SKILLED NSG FACILITY** | **RCRA-NonGen FINDS** | **1004759808** | **NYR000021741**
14 GLOVER DR
YAPHANK, NY 11980

Site 2 of 4 in cluster A

Relative: Lower

Actual: 46 ft.

RCRA-NonGen:

Date form received by agency:	01/01/2007
Facility name:	SUFFOLK COUNTY SKILLED NSG FACILITY
Facility address:	14 GLOVER DR YAPHANK, NY 119809741
EPA ID:	NYR000021741
Mailing address:	GLOVER DR YAPHANK, NY 119809741
Contact:	HELEN PROUD
Contact address:	GLOVER DR YAPHANK, NY 119809741
Contact country:	US
Contact telephone:	(516) 852-4404
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:	SUFFOLK COUNTY
Owner/operator address:	UNKNOWN HAUPPAUGE, NY 11788
Owner/operator country:	US

SUFFOLK COUNTY SKILLED NSG FACILITY (Continued) **1004759808**

Owner/operator telephone: (516) 852-4404
Legal status: County
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SUFFOLK COUNTY
Owner/operator address: UNKNOWN
HAUPPAUGE, NY 11788
Owner/operator country: US
Owner/operator telephone: (516) 852-4404
Legal status: County
Owner/Operator Type: Operator
Owner/Op start date: Not reported
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: Unknown
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
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: 01/01/2006
Facility name: SUFFOLK COUNTY SKILLED NSG FACILITY
Classification: Not a generator, verified

Date form received by agency: 04/02/1996
Facility name: SUFFOLK COUNTY SKILLED NSG FACILITY
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004523640

Environmental Interest/Information System
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.

A3 East < 1/8 0.030 mi. 160 ft. | **YAPHANK JAIL**
15 GLOVER DR
YAPHANK, NY 11980

Site 3 of 4 in cluster A | **RCRA-CESQG** | **1010566661**
NYR000153080

Relative: Lower

Actual: 46 ft.

RCRA-CESQG:

Date form received by agency:	12/11/2007
Facility name:	YAPHANK JAIL
Facility address:	15 GLOVER DR YAPHANK, NY 11980
EPA ID:	NYR000153080
Mailing address:	NEW HWY FARMINGDALE, NY 11735
Contact:	MARTIN V MCMORROW
Contact address:	NEW HWY FARMINGDALE, NY 11735
Contact country:	US
Contact telephone:	(631) 852-4391
Contact email:	MARTIN.MCMORROW@CO.SUFFOLK.NY.US
EPA Region:	02
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	SUFFOLK COUNTY
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	County
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not reported

Owner/operator name:	SUFFOLK COUNTY
Owner/operator address:	YAPHANK AVE YAPHANK, NY 11980
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	County
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not reported

YAPHANK JAIL (Continued) **1010566661**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
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:	12/10/2007
Facility name:	YAPHANK JAIL
Classification:	Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:

Waste code:	F003
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

A4
East
< 1/8
0.030 mi.
160 ft.

YAPHANK JAIL **MANIFEST** **S109375575**
15 GLOVER DR **N/A**
YAPHANK, NY 11980

Site 4 of 4 in cluster A

Relative:
Lower

Actual:
46 ft.

NY MANIFEST:

EPA ID:	NYR000153080
Country:	USA
Mailing Name:	YAPHANK JAIL
Mailing Contact:	YAPHANK JAIL
Mailing Address:	15 GLOVER DR
Mailing Address 2:	Not reported
Mailing City:	YAPHANK
Mailing State:	NY
Mailing Zip:	11980
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	631-852-4391

YAPHANK JAIL (Continued) **S109375575**

Document ID:	Not reported
Manifest Status:	Not reported
Trans1 State ID:	NJD986807380
Trans2 State ID:	Not reported
Generator Ship Date:	2008-10-22
Trans1 Recv Date:	2008-10-22
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	2008-10-27
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYR000153080
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID:	SCD036275626
Waste Code:	Not reported
Quantity:	150.0
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	3.0
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1.0
Year:	08
Manifest Tracking Num:	004795118JJK
Import Ind:	N
Export Ind:	N
Discr Quantity Ind:	N
Discr Type Ind:	N
Discr Residue Ind:	N
Discr Partial Reject Ind:	N
Discr Full Reject Ind:	N
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	H061

5
East
1/8-1/4
0.176 mi.
927 ft.

SUFFOLK COUNTY POLICE DEPT
YAPHANK AVE
YAPHANK, NY 11980

RCRA-NonGen **1000229873**
FINDS **NYD981082191**
LTANKS
HIST LTANKS
UST

Relative:
Lower

Actual:
47 ft.

RCRA-NonGen:

Date form received by agency:	01/01/2007
Facility name:	SUFFOLK COUNTY POLICE DEPT
Facility address:	YAPHANK AVE YAPHANK, NY 11980
EPA ID:	NYD981082191
Contact:	Not reported
Contact address:	YAPHANK AVE YAPHANK, NY 11980
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

SUFFOLK COUNTY POLICE DEPT (Continued) **1000229873**

Owner/Operator Summary:

Owner/operator name:	Not reported
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	(212) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	Not reported
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	(212) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
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:	Unknown
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
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:	01/01/2006
Facility name:	SUFFOLK COUNTY POLICE DEPT
Classification:	Not a generator, verified

Date form received by agency:	07/08/1999
Facility name:	SUFFOLK COUNTY POLICE DEPT
Classification:	Not a generator, verified

Date form received by agency:	05/03/1985
Facility name:	SUFFOLK COUNTY POLICE DEPT
Classification:	Large Quantity Generator

Violation Status: No violations found

FINDS:

SUFFOLK COUNTY POLICE DEPT (Continued) **1000229873**

Registry ID: 110008017902

Environmental Interest/Information System
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.

LTANKS:

Site ID:	277363
Spill No:	8908067
Spill Date:	11/14/1989
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Spill Closed Dt:	7/1/1992
Facility Addr2:	Not reported
Cleanup Ceased:	7/1/1992
Cleanup Meets Standard:	True
SWIS:	5200
Investigator:	MIRZA
Referred To:	Not reported
Reported to Dept:	11/14/1989
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	Penalty Not Recommended
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	11/15/1989
Spill Record Last Update:	7/1/1997
Spiller Name:	Not reported
Spiller Company:	SUFFOLK COUNTY
Spiller Address:	225 RABRO DRIVE
Spiller City,St,Zip:	HAUPPAUGE, NY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	225445
DEC Memo:	Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MIRZA WELL"
Remarks:	2K FAILED TANK ALONE

Material:

Site ID:	277363
Operable Unit ID:	935555
Operable Unit:	01
Material ID:	444834
Material Code:	0001

SUFFOLK COUNTY POLICE DEPT (Continued) **1000229873**

Material Name:	#2 Fuel Oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	0
Units:	Gallons
Recovered:	No
Resource Affected:	Not reported
Oxygenate:	False

Tank Test:

Site ID:	277363
Spill Tank Test:	1536397
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	0
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	10/1/2004
Test Method:	Unknown

HIST LTANKS:

Region of Spill:	1
Spill Number:	8908067
Spill Date:	11/14/1989
Spill Time:	13:45
Spill Cause:	Tank Test Failure
Resource Affectd:	Groundwater
Water Affected:	Not reported
Spill Source:	Other Non Commercial/Industrial
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Spill Closed Dt:	07/01/92
Cleanup Ceased:	07/01/92
Cleanup Meets Standard:	True
Investigator:	MIRZA WELL
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
Reported to Department Date:	11/14/89
Reported to Department Time:	13:53
SWIS:	47
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
Spiller Name:	SUFFOLK COUNTY
Spiller Address:	225 RABRO DRIVE
Spiller City,St,Zip:	HAUPPAUGE, NY
Spiller Cleanup Date:	/ /
Facility Contact:	Not reported

SUFFOLK COUNTY POLICE DEPT (Continued) **1000229873**

Facility Phone: (516) 348-2894
Facility Extention: Not reported
Spill Notifier: Responsible Party
PBS Number: Not reported
Last Inspection: / /
Recommended Penalty: Penalty Not Recommended
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Date Region Sent Summary to Central Office: / /
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 11/15/89
Time Spill Entered In Computer Data File: Not reported
Spill Record Last Update: 07/01/97
Is Updated: False

Tank:
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:
Material Class Type: Petroleum
Quantity Spilled: 0
Unkonwn Quantity Spilled: False
Units: Gallons
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
DEC Remarks: Not reported
Spill Cause: 2K FAILED TANK ALONE

SUFFOLK CO. UST:
Facility ID: 3656
Facility Reference #: 10245
Region: SUFFOLK
Official Use: Removed Tank. 98
Tank Count: 2
Owner Name: SUFFFOLK COUNTY
Owner Address: VETS HWY
Owner City,St,Zip: HAUPPAUGE, NY 11788
Permit to Operate: Not reported
Township: BROOKHAVEN
Tax Map No: 0200 742.00 001 001.000

Tank ID: 1
Location: UNDER, OUT
Installed: 83
Capacity: 0000008000
Content: #2 FUEL OIL

SUFFOLK COUNTY POLICE DEPT (Continued) **1000229873**

Construction:	STEEL
Dispenser:	SUCTION
Fill Type:	PUMPED
Date Removed:	051498
Tank Key:	10355

Tank ID:	2
Location:	UNDER, OUT
Installed:	Not reported
Capacity:	0000008000
Content:	#2 FUEL OIL
Construction:	FRP / FRP
Dispenser:	Not reported
Fill Type:	Not reported
Date Removed:	Not reported
Tank Key:	10356

6
West
1/4-1/2
0.301 mi.
1587 ft.

CAITHNESS LONG ISLAND ENERGY CENTER **MOSF** **S109528214**
50 ZORN BOULEVARD **N/A**
YAPANK, NY 11980

Relative:
Higher

Actual:
100 ft.

MOSF:

Facility ID:	1-3343
Program Type:	MOSF
Dec Region:	1
Expiration Date:	2011/03/31
Tank Status:	Active
UTMX:	Not reported
UTMY:	Not reported

B7
South
1/4-1/2
0.404 mi.
2132 ft.

DECHIARO ASSOCIATES CORP. (LOT 2 & 2A) **SWF/LF** **S108640098**
LOTS 2; 2A GRUCCI LANE **N/A**
YAPHANK, NY 11980

Site 1 of 2 in cluster B

Relative:
Higher

Actual:
57 ft.

SWF/LF:

Flag:	ACTIVE
Region Code:	1
Phone Number:	6313748084
Owner Name:	DeChiaro Associates Corp.
Owner Type:	Private
Owner Address:	305-2 Knickerbocker Ave
Owner Addr2:	Not reported
Owner City,St,Zip:	Bohemia, NY 11716
Owner Email:	Not reported
Owner Phone:	6315639232
Contact Name:	Joseph DeChiaro
Contact Address:	305-2 Knickerbocker Ave
Contact Addr2:	Not reported
Contact City,St,Zip:	Bohemia, NY 11716
Contact Email:	Not reported
Contact Phone:	6315639232

DECHIARO ASSOCIATES CORP. (LOT 2 & 2A) (Continued) **S108640098**

Activity Desc:	C&D processing - registered
Activity Number:	52W133R
Active:	Yes
East Coordinate:	674459
North Coordinate:	4519655
Accuracy Code:	4.3 - Utilization of Digital Orthophoto Quads
Regulatory Status:	Registration
Waste Type:	Asphalt;Brick;Concrete;Rock;Soil (Clean)
Authorization #:	52W133R
Authorization Date:	5/18/2007
Expiration Date:	Not reported

B8
South
1/4-1/2
0.404 mi.
2132 ft.

DECHIARO ASSOCIATES CORP. (LOT 4 AND 4A) **SWF/LF** **S108640099**
LOT 4; 4A GRUCCI LANE **N/A**
YAPHANK, NY 11980

Site 2 of 2 in cluster B

Relative:
Higher

Actual:
57 ft.

SWF/LF:

Flag:	ACTIVE
Region Code:	1
Phone Number:	6313748084
Owner Name:	DeChiaro Associates Corp.
Owner Type:	Private
Owner Address:	305-2 Knickerbocker Ave
Owner Addr2:	Not reported
Owner City,St,Zip:	Bohemia, NY 11716
Owner Email:	Not reported
Owner Phone:	6315639232
Contact Name:	Joseph DeChiaro
Contact Address:	305-2 Knickerbocker Ave
Contact Addr2:	Not reported
Contact City,St,Zip:	Bohemia, NY 11716
Contact Email:	Not reported
Contact Phone:	6315639232
Activity Desc:	C&D processing - registered
Activity Number:	52W134
Active:	Yes
East Coordinate:	674459
North Coordinate:	4519655
Accuracy Code:	4.3 - Utilization of Digital Orthophoto Quads
Regulatory Status:	Registration
Waste Type:	Asphalt;Brick;Concrete;Rock;Soil (Clean)
Authorization #:	52W134R
Authorization Date:	5/18/2007
Expiration Date:	Not reported

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RIVERHEAD	1000431070	UNIVERSAL SERVICE OF AMERICA	310 RIVERLEIGH AVE	11901	RCRA-NonGen, FINDS, MANIFEST
YAPHANK	1009235511	NYSDEC SPILLS REGION 1	RTE 101 / LI AVE		MANIFEST
YAPHANK	1009235487	NYSDEC - SPILLS	RT 102		MANIFEST
YAPHANK	S104284564	NATIONAL GARBAGE CARTING	ROUTE 16/ROUTE 101		NY Spills, NY Hist Spills
YAPHANK	1012277796	YAPHANK POLICE GARAGE (C850)	CR 21 YAPHANK AVENUE	11980	FINDS
YAPHANK	1012293357	SUFFOLK COUNTY PROBATION C110	CR 21 YAPHANK AVENUE	11980	FINDS
YAPHANK	S104784007	UNK	RTE 27 BY EXIT 57		NY Spills, NY Hist Spills
YAPHANK	U003843724	SUFFOLK COUNTY GENERAL SERVICES BLD	BLD 352 CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	1004570450	SCSD YAPHANK CO CENTER STP	PO BOX 59	11980	FINDS, NPDES
YAPHANK	A100196159	SUFFOLK COUNTY CARPENTERS SHOP BLDG	CNTY RD 21 YAPHANK AVE	11980	AST
YAPHANK	U003842937	SUFFOLK COUNTY VECTOR CONTROL	CNTY RD 21 YAPHANK AVE	11980	AST
YAPHANK	U003842934	SUFFOLK COUNTY INFIRMARY GARAGE C14	CNTY RD 21 YAPHANK AVE	11980	UST, AST
YAPHANK	U003842933	SUFFOLK COUNTY DPW	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003536193	SUFFOLK COUNTY DPW LAB	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	A100196405	SUFFOLK COUNTY DPW MAINTENANCE YARD	CNTY RD 21 YAPHANK AVE	11980	AST
YAPHANK	U003843992	SUFFOLK COUNTY GROUP HOUSE BLDG C57	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843987	SUFFOLK COUNTY DEPT WEIGHTS & MEASU	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003844658	SUFFOLK COUNTY DPW GARAGE BLDG C342	CNTY RD 21 YAPHANK AVE	11980	UST, AST
YAPHANK	U003843905	SUFFOLK COUNTY STORAGE BARN BLDG C5	CNTY RD 21 YAPHANK AVE	11980	UST, AST
YAPHANK	A100196322	SUFFOLK COUNTY VECTOR GARAGE BLDG C	CNTY RD 21 YAPHANK AVE	11980	AST
YAPHANK	U003843840	SUFFOLK COUNTY YAPHANK POLICE HDQRS	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003842679	SUFFOLK COUNTY YAPHANK STP	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003535570	SUFFOLK COUNTY FARM C0012	CNTY RD 21 YAPHANK AVE	11980	UST, AST
YAPHANK	U003535568	SUFFOLK COUNTY PROBATION BLDG C110	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003960901	SUFFOLK COUNTY POLICE GARAGE	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843751	SUFFOLK COUNTY YAPHANK PUMP HOUSE C	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003844863	SUFFOLK COUNTY DPW	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843733	SUFFOLK COUNTY GROUNDSMAN GARAGE BG	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843658	SUFFOLK COUNTY FARM BLDG C56	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843650	SUFFOLK COUNTY DPW LAB BLDG C66	CNTY RD 21 YAPHANK AVE	11980	UST, AST
YAPHANK	U003843651	SUFFOLK COUNTY DPW WATERWAYS BLDG C	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843648	SUFFOLK COUNTY DPW BLDG C503	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843649	SUFFOLK COUNTY DPW REPAIR SHOP	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843641	SUFFOLK COUNTY INFIRMARY BLDG C14	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843640	SUFFOLK COUNTY CORRECTIONAL FAC HOU	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843621	SUFFOLK COUNTY BOARD OF ELECTIONS B	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003843619	SUFFOLK COUNTY DPW BLDG C357	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	U003844137	M M C INTERSTATE TRUCKING CORP	68 A CNTY RD 21 YAPHANK RD	11980	UST, AST
YAPHANK	U003843838	SCHRAEDER GROUP HOME	CNTY RD 21 YAPHANK AVE	11980	UST
YAPHANK	S109943824	MILL POND ESTATES	CORAM YAPHANK RD	11980	NPDES
YAPHANK	1011423640	SUFFOLK COUNTY PROBATION BLDG C110	COUNTY RD 21, YAPHANK AVE	11980	FINDS
YAPHANK	1011616482	TRW STEERING WHEEL SYS.	445 COUNTY RD. 101 YAPHANK NY 11980	11980	ICIS
YAPHANK	1000229867	SUFFOLK COUNTY DEPT OF HEALTH	FIREMATIC CENTER YAPHANK AVE	11980	RCRA-NonGen, FINDS

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
YAPHANK	1009231360	NYSDEC	L I AVE / RT 101		MANIFEST
YAPHANK	S104785768	UNK	LIE / WILLIAM FLOYD PKWY		NY Spills, NY Hist Spills
YAPHANK	S106125231	WHISPERING PINES DEVLOPMT	LIE EXIT 68/WILLIAM FLOYD PKWY		NY Spills
YAPHANK	S104650446		LONG ISLAND AVE/RTE 101		NY Spills, NY Hist Spills
YAPHANK	S105841861	FROG HOLLOW INDUSTRIES; INC.	EAST MAIN ST.	11980	SWF/LF
YAPHANK	S102097745	LILCO	MAIN ST E/O YAPHANK AVE		NY Spills, NY Hist Spills
YAPHANK	S104784023	UNK	MAIN ST / YAPHANK ROCKY		NY Spills, NY Hist Spills
YAPHANK	1000140385	J.D. GAFFNEY INC.	MEDBROOK INDUSTRIAL PK RT 101	11980	RCRA-NonGen, FINDS
YAPHANK	S102400947	LAIDLAW TRANSIT	MID ISLAND YAPHANK ROAD		NY Spills, NY Hist Spills
YAPHANK	S106469649	OLD INFIMARY GENERATOR ST	W/S OF YAPHANK AV N/O LIE		NY Spills
YAPHANK	S104643567		OLD DOCK RD / RTE 101		NY Spills, NY Hist Spills
YAPHANK	U003961277	ADESA RECON BUILDING	PATCHOGUE YAPHANK RD	11980	UST
YAPHANK	A100265293	ADESA RECON BUILDING	PATCHOGUE YAPHANK RD	11980	AST
YAPHANK	S102095258	LILCO	PATCHOGUE-YAPHANK ROAD		NY Spills, NY Hist Spills
YAPHANK	S109826925	SUFFOLK COUNTY FIREMATICS	RADIO/PINE OFF YAPHANK AVE		NY Spills
YAPHANK	1010046436	BROOKHAVEN ENERGY	SILLS RD, S OF RTE 495	11980	FINDS, NPDES
YAPHANK	S106002165	ASPLUNDH	E/B SUNRISE HWY/EXIT 57		NY Spills
YAPHANK	S109207115	WIND RIVER ENVIRONMENTAL	SUNRISE HWY WESTBOUND X 27	11980	NY Spills
YAPHANK	S110367563	BROOKHAVEN (T) SD#2	WILLIAM FLOYD PKWY	11980	NPDES
YAPHANK	1000548976	YCC-YAPHANK COUNTY CENTER	YAPANK AVENUE	11980	CBS UST, CBS
YAPHANK	S105058607	SUFFOLK CO FIRE TRAINING	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	U003844967	SUFFOLK COUNTY POLICE MUSEUM	YAPHANK AVE	11980	UST
YAPHANK	S110049424	SUFFOLK COUNTY DEPT PUBLIC WORKS	335 YAPHANK AVENUE	11980	MANIFEST
YAPHANK	S103479396	ECKERT RESIDENCE	78 YAPHANK AVENUE		LTANKS, HIST LTANKS
YAPHANK	S102097420	SC DPW YARD	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	1012248457	SUFFOLK (CO) SCSD YAPHANKCOMM.C.STP	YAPHANK AVENUE	11980	FINDS
YAPHANK	1012277497	YAPHANK STP	YAPHANK AVE	11980	FINDS
YAPHANK	1012278396	POLICE HEADQUARTERS	YAPHANK AVENUE	11980	FINDS
YAPHANK	S106971500	COUNTY OFFICE 14	360 YAPHANK AVENUE		NY Spills
YAPHANK	1010787541	SUFFOLK COUNTY DPW BIN 3364539	YAPHANK AVE OVER LIRR	11980	RCRA-CESQG
YAPHANK	1000446631	S C D H - SUFFOLK COUNTY EX INFIRMARY	14 YAPHANK AVE	11980	RCRA-CESQG, FINDS, MANIFEST
YAPHANK	1000446632	S C D H - YAPHANK MINIMUM CORRECTIONAL	YAPHANK AVE	11980	RCRA-NonGen, FINDS, MANIFEST
YAPHANK	S102237176	YAPHANK STATION	YAPHANK STATION		NY Spills, NY Hist Spills
YAPHANK	S103829806	SUFFOLK COUNTY FIRE ACADE	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	S106124389	BOHEMIAN ENTERPRISE	44 YAPHANK AVENUE		LTANKS
YAPHANK	2001554055	YAPHANK AVE	YAPHANK AVE	0	ERNS
YAPHANK	S102090319	NY TEL	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	1012278287	YAPHANK FUELING FACILITY C342	335 YAPHANK AVENUE	11980	FINDS
YAPHANK	S102092719	S C DEPT GEN SVCS	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	S103275225	POLICE PROPERTY BUREAU	30 YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	S106126594	SUFFOLK CO PROBATION BLD	110 YAPHANK AVENUE		NY Spills
YAPHANK	S106126589	SC PROBATION BUILDING	110 YAPHANK AVENUE		NY Spills
YAPHANK	1012292956	VEEB (FIRE ACADEMY) C-551	YAPHANK AVENUE	11980	FINDS
YAPHANK	S104952243	SUFFOLK COUNTY JAIL	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	S109828076	UNKNOWN	133 YAPHANK AVENUE		NY Spills
YAPHANK	S102237872	SUFFOLK COUNTY DPW	YAPHANK ROAD		NY Hist Spills
YAPHANK	1000789881	SUFFOLK COUNTY VECTOR CONTROL	YAPHANK AVE BLDG 62	11980	RCRA-NonGen, FINDS, MANIFEST

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
YAPHANK	S106972498	SUFFOLK CTY YAPHANK INFIR	YAPHANK AVENUE		LTANKS
YAPHANK	1000458040	SUFFOLK COUNTY GENERAL SERVICES	YAPHANK AVE - DPW BLDG	11980	RCRA-CESQG, FINDS, MANIFEST
YAPHANK	S102092661	SCDPW	335 YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	1012278088	YAPHANK GARAGE C342	3435 YAPHANK AVENUE	11980	FINDS
YAPHANK	S102098731	SC DIV WEIGHTS & MEASURE	YAPHANK AVE		NY Spills, NY Hist Spills
YAPHANK	1011407192	SUFFOLK COUNTY DPW BIN 3364539	YAPHANK AVE OVER LIRR	11980	FINDS
YAPHANK	1012278400	FIREMATICS TRAINING CENTER	YAPHANK AVENUE	11980	FINDS
YAPHANK	1011576057	SUFFOLK CITY OF DPW	YAPHANK AVE YAPHANK NY 11980	11980	ICIS
YAPHANK	U003535530	S C DEPT EMERGENCY PREPAREDNES	YAPHANK AVE	11980	UST, AST
YAPHANK	92289807	335 YAPHANK AVE BUILDING CO 823	335 YAPHANK AVE BUILDING CO 823	11980	ERNS
YAPHANK	S104784712	UNK	YAPHANK AVENUE		NY Spills, NY Hist Spills
YAPHANK	S101340141	YAPHANK POLICE DEPARTMENT	YAPHANK		LTANKS, HIST LTANKS
YAPHANK	1000125392	SUFFOLK COUNTY DEPT PUBLIC WORK	335 YAPHANK AVE	11980	RCRA-NonGen, FINDS, MANIFEST
YAPHANK	U003843647	SUFFOLK COUNTY DPW DOCTORS BLDG C01	YAPHANK AVE	11980	UST
YAPHANK	S109060134	POLICE HEADQUARTERS	30 YAPHANK AVENUE	11980	NY Spills
YAPHANK	S102091868	SC WEIGHTS & MEASURE	YAPHANK AVE YAPHANK GARAG		NY Spills, NY Hist Spills
YAPHANK	S110309360	SCDPW	YAPHANK ROAD		NY Spills
YAPHANK	S102096782	SC FIREMATICS	YAPHANK ROAD		NY Spills, NY Hist Spills
YAPHANK	S104787163	LIRR (MTA) YARD	YAPHANK ROAD		NY Spills, NY Hist Spills
YAPHANK	U003536374	SCDPW	YAPHANK AVE/SUNRISE / LIE		NY Spills, NY Hist Spills
YAPHANK	S109584777	NYSDOT - BIN 1064160	YAPHANK AVE I495	11980	MANIFEST
YAPHANK	S103827321	GETTY	YAPHANK MIDDLE ISLAND RD		NY Spills, NY Hist Spills
YAPHANK	S104784572	UNK	YAPHANK ROAD		NY Spills, NY Hist Spills
YAPHANK	S104785524	UNK	YAPHANK MORICHES ROAD		NY Spills, NY Hist Spills

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.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

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: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/14/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
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: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/14/2010
Next Scheduled EDR Contact: 10/25/2010
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: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

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: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/14/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Quarterly

Federal CERCLIS list

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: 01/29/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/11/2010
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPAa??s Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 01/15/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/21/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

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: 06/23/2009
Date Data Arrived at EDR: 09/02/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 19

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2010
Date Data Arrived at EDR: 03/31/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, 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: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Quarterly

Federal RCRA generators list

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: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
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: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
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: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
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: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

Federal ERNS list

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: 12/31/2009
Date Data Arrived at EDR: 01/22/2010
Date Made Active in Reports: 02/11/2010
Number of Days to Update: 20

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

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: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

VAPOR REOPENED: Vapor Intrustion Legacy Site List

"Vapor intrusion" refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying or adjacent buildings. The subsurface source can either be contaminated groundwater or contaminated soil which releases vapors into the pore spaces in the soil.Improvements in analytical techniques and knowledge gained from site investigations in New York and other states has led to an increased awareness of soil vapor as a medium of concern and of the potential for exposures from the soil vapor intrusion pathway. Based on this additional information, New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 02/02/2010
Date Data Arrived at EDR: 02/24/2010
Date Made Active in Reports: 03/17/2010
Number of Days to Update: 21

Source: Department of Environmenal Conservation
Telephone: 518-402-9814
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

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: 07/14/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 25

Source: Department of Environmental Conservation
Telephone: 518-457-2051
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

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: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
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

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/19/2010
Date Data Arrived at EDR: 05/21/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

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: 05/27/2010
Date Data Arrived at EDR: 05/28/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
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: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

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: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/04/2009
Date Data Arrived at EDR: 05/04/2010
Date Made Active in Reports: 07/07/2010
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/15/2010
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: 05/24/2010
Date Data Arrived at EDR: 05/27/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 74

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

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: 06/17/2010
Date Data Arrived at EDR: 06/18/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 53

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/18/2010
Next Scheduled EDR Contact: 10/18/2010
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

AST: Petroleum Bulk Storage
Registered Aboveground Storage Tanks.

Date of Government Version: 06/17/2010
Date Data Arrived at EDR: 06/18/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 53

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/18/2010
Next Scheduled EDR Contact: 10/18/2010
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

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: 06/17/2010
Date Data Arrived at EDR: 06/18/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 53

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/18/2010
Next Scheduled EDR Contact: 10/18/2010
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: 06/17/2010
Date Data Arrived at EDR: 06/18/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 53

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/18/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/19/2010
Date Data Arrived at EDR: 05/21/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/27/2010
Date Data Arrived at EDR: 05/28/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 73

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/27/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 74

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/19/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Registry of Engineering Controls
Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls
Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
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: 06/25/2010
Next Scheduled EDR Contact: 10/11/2010
Data Release Frequency: No Update Planned

State and tribal voluntary cleanup sites

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: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/08/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a $200 million Environmental Restoration or Brownfields Fund as part of the $1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

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: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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. 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: 03/02/2010
Date Data Arrived at EDR: 03/23/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/25/2010
Next Scheduled EDR Contact: 10/11/2010
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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

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: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/28/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Varies

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: 07/30/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Annually

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 07/14/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 25

Source: Department of Environmental Conservation
Telephone: 518-402-8705
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
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: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US 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: 08/19/2009
Date Data Arrived at EDR: 12/29/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 43

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/08/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Quarterly

DEL SHWS: Delisted Registry Sites
A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 03/26/2010
Date Data Arrived at EDR: 03/26/2010
Date Made Active in Reports: 04/28/2010
Number of Days to Update: 33

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

US HIST CDL: National Clandestine Laboratory Register
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: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

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

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

Local Land Records

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: 05/06/2010
Date Data Arrived at EDR: 05/11/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
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: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 04/06/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 50

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
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: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
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

Other Ascertainable Records

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: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 07/09/2010
Next Scheduled EDR Contact: 10/18/2010
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

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

Date of Government Version: 01/12/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Varies

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: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
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: 12/31/2008
Date Data Arrived at EDR: 09/30/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 62

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/12/2010
Next Scheduled EDR Contact: 09/27/2010
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: 04/11/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 28

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/08/2010
Next Scheduled EDR Contact: 10/18/2010
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: 04/29/2010
Date Data Arrived at EDR: 05/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/16/2010
Next Scheduled EDR Contact: 09/27/2010
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: 01/05/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/08/2009
Number of Days to Update: 1

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Varies

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: 02/12/2010
Date Data Arrived at EDR: 03/10/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 68

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/09/2010
Next Scheduled EDR Contact: 09/20/2010
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: 12/31/2008
Date Data Arrived at EDR: 01/13/2010
Date Made Active in Reports: 02/18/2010
Number of Days to Update: 36

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/13/2010
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: 07/07/2010
Next Scheduled EDR Contact: 10/11/2010
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: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
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: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
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: 12/31/2008
Date Data Arrived at EDR: 01/06/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 08/03/2010
Next Scheduled EDR Contact: 11/15/2010
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: 04/24/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 06/25/2010
Next Scheduled EDR Contact: 10/11/2010
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: 02/01/2010
Date Data Arrived at EDR: 04/22/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 109

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/30/2010
Next Scheduled EDR Contact: 11/01/2010
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: 03/18/2010
Date Data Arrived at EDR: 04/06/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 51

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
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: 07/13/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/14/2010
Next Scheduled EDR Contact: 10/25/2010
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: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (212) 637-3000
Last EDR Contact: 07/07/2010
Next Scheduled EDR Contact: 09/27/2010
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: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
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: 12/31/2007
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 05/12/2010
Number of Days to Update: 76

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Biennially

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: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
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: 04/30/2010
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 06/21/2010
Number of Days to Update: 39

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Annually

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 03/25/2010
Date Made Active in Reports: 05/06/2010
Number of Days to Update: 42

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 06/21/2010
Next Scheduled EDR Contact: 10/04/2010
Data Release Frequency: Varies

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: 07/19/2010
Date Data Arrived at EDR: 07/19/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 22

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 07/19/2010
Next Scheduled EDR Contact: 11/01/2010
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: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Annually

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: 05/25/2010
Date Data Arrived at EDR: 07/06/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 35

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 06/24/2010
Next Scheduled EDR Contact: 10/11/2010
Data Release Frequency: Varies

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: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 02/10/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 11/09/2009
Date Data Arrived at EDR: 12/18/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: N/A

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/21/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 07/14/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 25

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Varies

FINANCIAL ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/31/2008
Date Data Arrived at EDR: 11/25/2008
Date Made Active in Reports: 12/11/2008
Number of Days to Update: 16

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Varies

FINANCIAL ASSURANCE: Financial Assurance Information Listing
Financial assurance information.

Date of Government Version: 07/13/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/10/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

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.

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

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

CORTLAND COUNTY:

Cortland County Storage Tank Listing
A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 04/22/2010
Date Data Arrived at EDR: 04/22/2010
Date Made Active in Reports: 05/10/2010
Number of Days to Update: 18

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

Cortland County Storage Tank Listing
A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 04/22/2010
Date Data Arrived at EDR: 04/22/2010
Date Made Active in Reports: 05/10/2010
Number of Days to Update: 18

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
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: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 04/13/2010
Date Data Arrived at EDR: 06/23/2010
Date Made Active in Reports: 06/28/2010
Number of Days to Update: 5

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
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: 07/12/2010
Next Scheduled EDR Contact: 10/25/2010
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 04/13/2010
Date Data Arrived at EDR: 06/23/2010
Date Made Active in Reports: 06/28/2010
Number of Days to Update: 5

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
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: 06/25/2010
Date Data Arrived at EDR: 06/25/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 46

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database
A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 06/25/2010
Date Data Arrived at EDR: 06/25/2010
Date Made Active in Reports: 08/10/2010
Number of Days to Update: 46

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
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: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
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: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
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: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
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: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
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: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 02/05/2010
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 11/03/2009
Date Data Arrived at EDR: 02/12/2010
Date Made Active in Reports: 02/22/2010
Number of Days to Update: 10

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 03/29/2010
Date Data Arrived at EDR: 05/14/2010
Date Made Active in Reports: 06/22/2010
Number of Days to Update: 39

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 07/26/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/06/2010
Date Made Active in Reports: 07/26/2010
Number of Days to Update: 20

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/21/2010
Next Scheduled EDR Contact: 10/04/2010
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: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

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 2003 & 2009 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

SUFFOLK COUNTY YAPHANK CENTER PARCELS B AND C
YAPHANK AVENUE
YAPHANK, NY 11980

TARGET PROPERTY COORDINATES

Latitude (North):	40.81820 - 40˚ 49' 5.5''
Longitude (West):	72.9311 - 72˚ 55' 52.0''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	674485.1
UTM Y (Meters):	4520424.0
Elevation:	54 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	40072-G8 BELLPORT, NY
Most Recent Revision:	1967

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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).

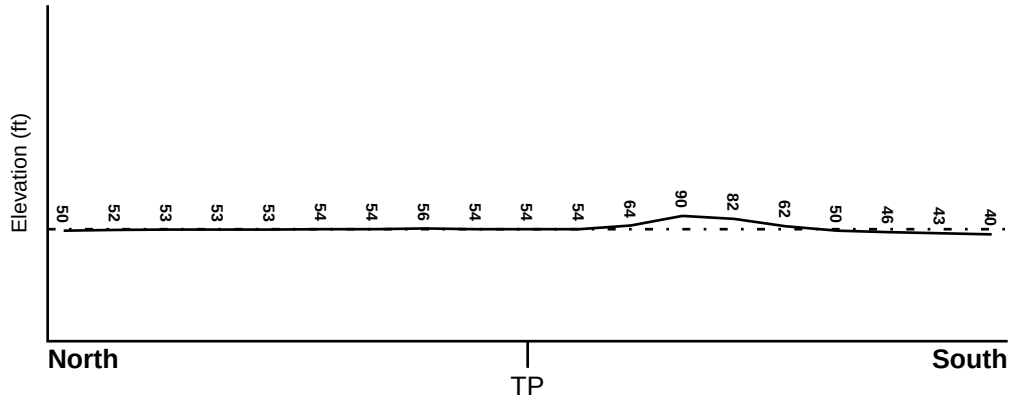
TOPOGRAPHIC INFORMATION

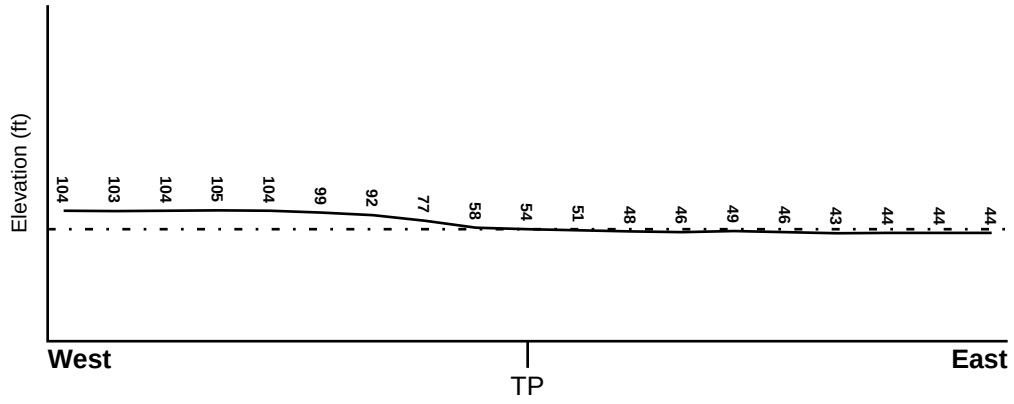
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

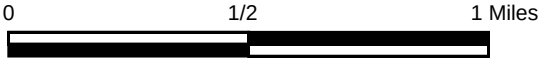
General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 54 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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

Target Property County	FEMA Flood Electronic Data
SUFFOLK, NY	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	36103C0710G - FEMA Q3 Flood data
Additional Panels in search area:	36103C0705G - FEMA Q3 Flood data 36103C0715G - FEMA Q3 Flood data 36103C0716G - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic 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.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

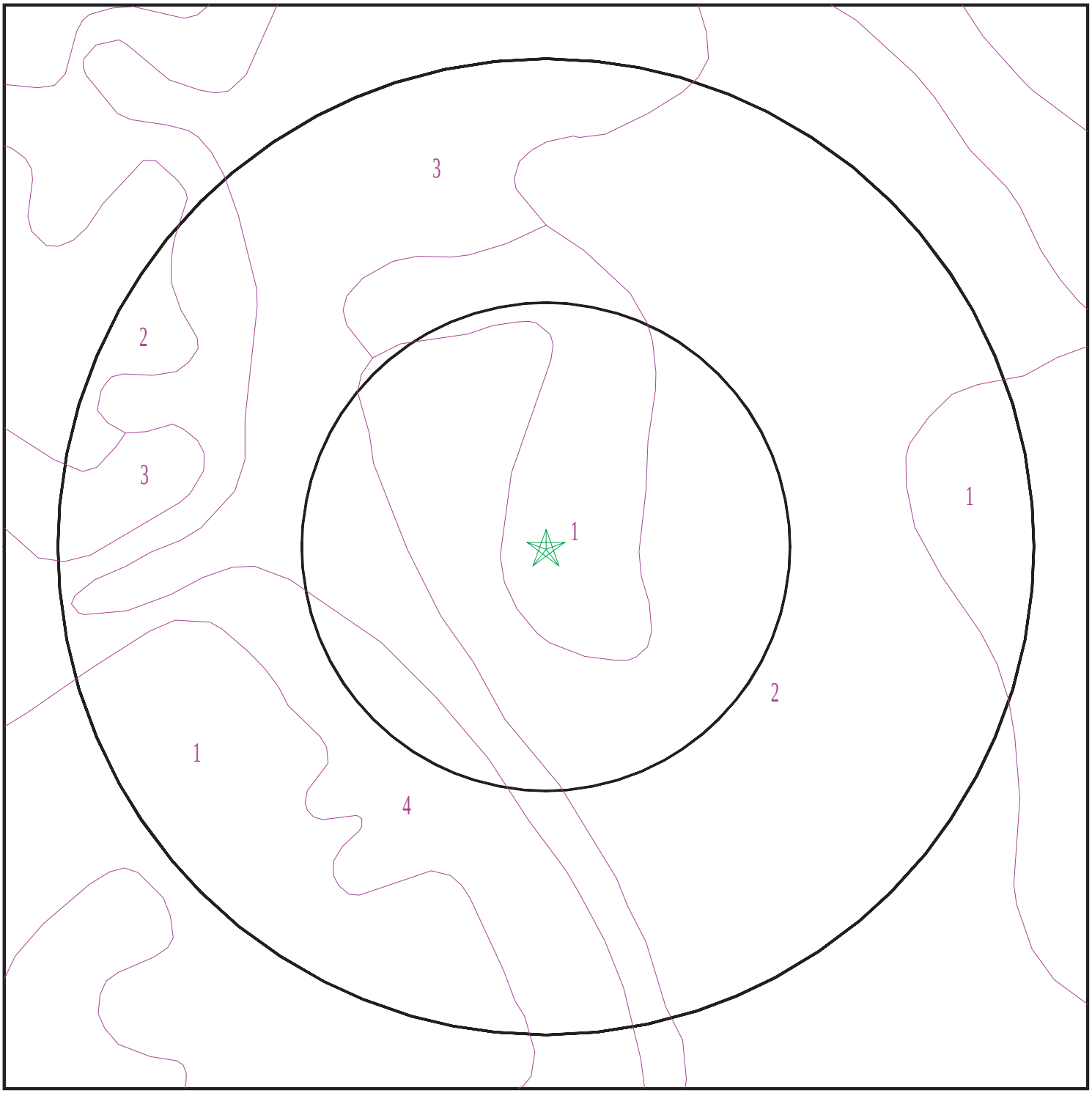
Era:	Cenozoic
System:	Quaternary
Series:	Pleistocene
Code:	Qp *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

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 - 2843813.6s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Suffolk County Yaphank Center Parcels B and C ADDRESS: Yaphank Avenue Yaphank NY 11980 LAT/LONG: 40.8182 / 72.9311	CLIENT: ERM, Inc. CONTACT: C Oleary INQUIRY #: 2843813.6s DATE: August 12, 2010 5:17 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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: 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							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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 Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
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
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: 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			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
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
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: 4

Soil Component Name: Plymouth

Soil Surface Texture: sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine 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	sand	Granular materials (35 pct. or less passing No. 200), Fine 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), Fine 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	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS2095532	1/4 - 1/2 Mile NNW
2	USGS2095678	1/2 - 1 Mile SSE
3	USGS2095478	1/2 - 1 Mile SE
4	USGS2095537	1/2 - 1 Mile ENE
5	USGS2095506	1/2 - 1 Mile East
6	USGS2095669	1/2 - 1 Mile SSE
7	USGS2095521	1/2 - 1 Mile West
A8	USGS2095482	1/2 - 1 Mile SE
A9	USGS2095483	1/2 - 1 Mile SE
A10	USGS2095481	1/2 - 1 Mile SE
11	USGS2095488	1/2 - 1 Mile ESE
12	USGS2095497	1/2 - 1 Mile ESE
C17	USGS2095379	1/2 - 1 Mile NE
C18	USGS2095376	1/2 - 1 Mile NE
19	USGS2095661	1/2 - 1 Mile SSW
20	USGS2095510	1/2 - 1 Mile West
21	USGS2095655	1/2 - 1 Mile SSW
22	USGS2095576	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

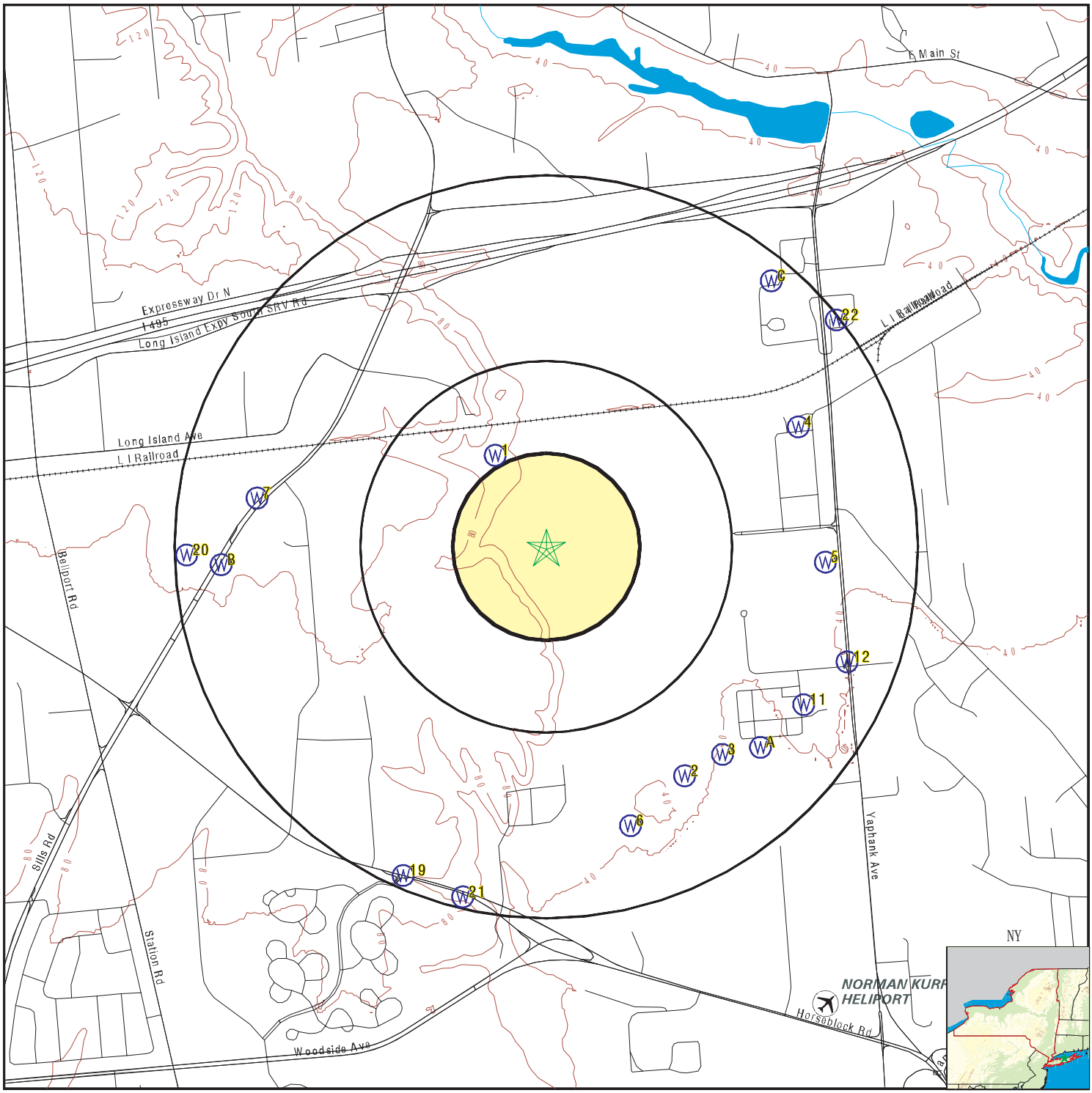
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B13	NYWS006012	1/2 - 1 Mile West
B14	NYWS006013	1/2 - 1 Mile West
B15	NYWS006010	1/2 - 1 Mile West
B16	NYWS006011	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 2843813.6s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME: Suffolk County Yaphank Center Parcels B and C	CLIENT: ERM, Inc.
ADDRESS: Yaphank Avenue Yaphank NY 11980	CONTACT: C Oleary INQUIRY #: 2843813.6s
LAT/LONG: 40.8182 / 72.9311	DATE: August 12, 2010 5:17 pm

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Map ID Direction Distance Elevation		Database	EDR ID Number
1 **NNW** **1/4 - 1/2 Mile** **Higher**		**FED USGS**	**USGS2095532**

Agency cd:	USGS	Site no:	404918072560301
Site name:	S 3530. 1		
Latitude:	404918	EDR Site id:	USGS2095532
Longitude:	0725603	Dec lat:	40.82176524
Dec lon:	-72.93371599	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2092 5213	Map scale:	Not Reported
Altitude:	65.6		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	45.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1907-03-08	Ground water data end date:	2004-03-24
Ground water data count:	315		

Ground-water levels, Number of Measurements: 315

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-03-24		33.66	2003-03-25		32.40
2002-04-05		30.60	2001-03-21		32.11
2000-03-24		31.78	1999-03-30		33.59
1997-03-19		33.95	1996-08-29		32.52
1996-06-07		32.64	1996-03-14		31.10
1995-08-23		30.51	1995-03-16		31.46
1994-04-01		33.28	1992-03-16		32.67
1991-03-20		34.25	1990-09-07		35.37
1990-08-02		35.26	1990-03-29		35.29
1989-02-13		30.62	1988-03-24		31.65
1987-11-03		31.64	1987-03-19		31.97
1986-12-04		30.24	1986-09-16		30.80
1986-06-30		31.24	1986-03-20		31.79
1985-12-09		31.49	1985-10-04		32.79
1985-07-12		32.98	1985-03-28		33.73

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1985-01-09		34.47
1984-06-14		37.08
1983-09-27		33.79
1983-06-15		34.92
1982-12-29		32.21
1982-06-16		33.69
1981-12-15		30.10
1981-06-17		31.59
1981-01-14		32.09
1980-06-24		34.52
1979-12-26		35.22
1979-06-27		36.67
1979-04-05		37.06
1979-01-04		34.26
1978-10-05		34.56
1978-04-17		36.07
1978-01-11		33.53
1977-09-29		32.67
1977-04-04		33.52
1976-09-23		33.30
1976-04-13		34.34
1975-11-03		33.30
1975-04-07		33.58
1974-07-16		34.16
1973-12-27		33.67
1973-04-09		35.06
1973-01-03		33.76
1972-07-11		33.66
1971-12-20		31.12
1971-03-17		32.40
1970-03-10		33.02
1969-04-28		33.01
1968-04-24		32.70
1967-04-27		31.12
1966-04-29		30.47
1965-04-21		32.07
1964-04-28		33.28
1963-04-26		33.82
1962-05-01		35.31
1961-10-31		34.35
1961-01-04		32.91
1960-07-06		33.94
1959-10-26		33.94
1958-12-15		35.04
1957-12-18		32.39
1957-07-02		33.72
1956-10-03		34.50
1955-12-22		34.90
1955-06-21		34.26
1954-10-26		33.92
1954-06-30		33.32
1953-12-21		33.19
1953-11-09		33.58
1953-08-24		34.74
1953-06-23		35.46

Date	Feet below Surface	Feet to Sealevel
1984-09-27		36.17
1984-04-03		34.89
1983-09-21		33.87
1983-03-30		32.72
1982-09-24		33.45
1982-03-16		31.52
1981-09-15		30.63
1981-03-30		31.72
1980-09-23		33.55
1980-03-17		33.48
1979-10-02		34.89
1979-04-12		36.94
1979-02-02		35.89
1978-10-17		34.40
1978-06-21		36.03
1978-04-04		35.97
1977-10-25		31.87
1977-06-29		32.87
1977-01-07		33.12
1976-06-24		35.98
1975-12-31		33.33
1975-07-01		34.55
1974-12-24		32.47
1974-04-02		34.15
1973-09-21		35.17
1973-04-05		34.95
1972-10-04		33.14
1972-03-27		31.95
1971-09-24		31.77
1970-10-21		32.70
1969-10-29		31.84
1969-04-08		31.80
1967-10-27		32.00
1966-10-27		29.82
1965-11-04		31.08
1964-10-27		32.08
1963-10-30		32.27
1962-11-08		33.45
1962-01-04		33.87
1961-07-07		34.92
1960-11-14		32.88
1960-01-05		33.43
1959-06-15		34.78
1958-06-25		36.83
1957-10-25		32.53
1956-12-20		33.62
1956-06-20		35.66
1955-09-30		33.19
1954-12-23		33.96
1954-09-29		33.92
1954-03-29		32.79
1953-11-30		33.28
1953-10-06		34.05
1953-08-03		35.01
1953-05-25		35.41

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1953-04-28		34.92
1952-12-29		32.72
1952-11-03		33.36
1952-08-26		34.14
1952-06-24		34.53
1952-04-23		33.77
1952-02-26		32.88
1951-12-22		31.75
1951-11-01		31.91
1951-08-30		32.51
1951-06-28		32.98
1951-05-01		32.91
1951-02-26		31.82
1950-12-30		31.43
1950-11-02		31.83
1950-09-07		32.32
1950-06-28		32.75
1950-04-24		32.59
1950-02-27		32.39
1950-01-27		32.23
1949-12-29		32.59
1949-12-02		32.95
1949-11-03		33.35
1949-10-06		33.72
1949-09-09		34.09
1949-08-12		34.49
1949-07-14		34.82
1949-06-21		35.10
1949-05-24		35.22
1949-04-27		35.19
1949-03-30		35.02
1949-03-09		34.81
1949-02-10		34.35
1949-01-13		34.10
1948-12-07		33.31
1948-09-29		34.11
1948-08-04		34.66
1948-05-27		34.12
1948-04-02		33.50
1947-10-28		31.83
1947-09-02		32.31
1947-07-09		32.69
1947-05-07		32.77
1947-02-11		32.34
1946-12-02		33.00
1946-07-30		33.04
1946-06-12		32.89
1946-04-11		32.63
1946-02-13		32.60
1945-11-30		31.87
1945-10-04		32.41
1945-08-01		32.92
1945-05-30		32.89
1945-03-29		32.62
1944-12-27		32.19

Date	Feet below Surface	Feet to Sealevel
1953-04-03		34.11
1952-12-01		33.04
1952-09-23		33.87
1952-07-22		34.44
1952-05-27		34.01
1952-03-25		33.38
1952-01-25		32.41
1951-11-30		31.84
1951-10-01		32.23
1951-07-26		32.80
1951-06-04		32.87
1951-04-04		32.41
1951-01-25		31.40
1950-11-30		31.61
1950-10-11		32.05
1950-07-27		32.60
1950-05-26		32.29
1950-03-29		32.44
1950-02-14		32.10
1950-01-13		32.40
1949-12-15		32.58
1949-11-17		33.16
1949-10-21		33.52
1949-09-22		33.91
1949-08-26		34.26
1949-07-26		34.68
1949-06-28		35.00
1949-06-08		35.13
1949-05-11		35.20
1949-04-13		35.09
1949-03-16		34.96
1949-02-21		34.50
1949-01-26		34.47
1948-12-30		33.18
1948-10-28		33.74
1948-08-27		34.48
1948-07-02		34.56
1948-04-29		34.00
1947-11-24		32.04
1947-10-02		32.05
1947-07-29		32.55
1947-06-04		32.72
1947-03-05		32.25
1947-01-07		32.60
1946-08-29		33.77
1946-07-05		33.14
1946-05-08		32.62
1946-03-13		32.65
1945-12-27		32.09
1945-10-30		32.19
1945-09-06		32.67
1945-06-27		33.08
1945-05-02		32.55
1945-01-30		32.30
1944-11-29		31.68

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1944-11-01		31.97	1944-09-28		32.29
1944-08-29		32.54	1944-07-28		32.80
1944-06-28		32.89	1944-05-31		33.03
1944-04-28		32.68	1944-03-31		32.32
1944-01-31		32.11	1943-12-30		31.73
1943-11-29		31.99	1943-10-28		32.33
1943-09-24		32.72	1943-09-02		32.93
1943-08-02		33.17	1943-06-28		33.43
1943-05-27		33.26	1943-04-30		33.24
1943-03-31		33.11	1943-02-25		32.85
1942-12-31		32.25	1942-11-30		31.99
1942-11-02		32.18	1942-09-28		32.48
1942-09-18		32.57	1942-09-11		32.60
1942-09-04		32.56	1942-08-28		32.45
1942-08-21		32.31	1942-08-14		31.85
1942-08-07		32.29	1942-07-31		32.32
1942-07-24		32.34	1942-07-17		32.36
1942-07-10		32.39	1942-07-06		32.40
1942-06-26		32.40	1942-06-19		32.43
1942-06-12		32.46	1942-06-05		32.51
1942-05-29		32.54	1942-05-22		32.59
1942-05-15		32.62	1942-05-08		32.67
1942-04-30		32.73	1942-04-24		32.78
1942-04-17		32.84	1909-12-08		31.93
1909-11-10		32.18	1909-10-12		32.46
1909-08-16		32.95	1909-07-06		33.20
1909-06-07		33.30	1909-04-19		32.87
1909-03-17		32.67	1909-02-24		32.26
1909-01-13		32.68	1908-11-11		33.50
1908-10-07		33.96	1908-08-05		34.78
1907-08-02		34.56	1907-06-20		34.59
1907-06-08		34.58	1907-04-27		34.41
1907-03-08		33.60			

2
SSE **FED USGS** **USGS2095678**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	404833072552801
Site name:	S 68042. 1		
Latitude:	404833	EDR Site id:	USGS2095678
Longitude:	0725528	Dec lat:	40.80926524
Dec lon:	-72.92399369	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2119	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
SE **FED USGS** **USGS2095478**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	404836072552101
Site name:	S 87638. 1		
Latitude:	404836	EDR Site id:	USGS2095478
Longitude:	0725521	Dec lat:	40.81009858
Dec lon:	-72.92204918	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2129	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-03-21	Ground water data end date:	1994-03-22
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1994-03-22		29.96	1990-03-21		31.70

4
ENE **FED USGS** **USGS2095537**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	404922072550701
Site name:	S112574. 1		
Latitude:	404922	EDR Site id:	USGS2095537
Longitude:	0725507	Dec lat:	40.82287637
Dec lon:	-72.91816	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SM2153	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	30	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1998-06-29
Water quality data end date:	1998-06-29	Water quality data count:	1
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

5
East **FED USGS** **USGS2095506**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	404903072550201
Site name:	S 70928. 1		
Latitude:	404903	EDR Site id:	USGS2095506
Longitude:	0725502	Dec lat:	40.81759859
Dec lon:	-72.91677115	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2156	Map scale:	Not Reported
Altitude:	45.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19810512
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	18.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1987-11-03	Ground water data end date:	1987-11-03
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1987-11-03		24.56

6
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS2095669**

Agency cd:	USGS	Site no:	404826072553801
Site name:	S 72129. 1		
Latitude:	404826	EDR Site id:	USGS2095669
Longitude:	0725538	Dec lat:	40.80732079
Dec lon:	-72.92677158	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SO2100	Map scale:	Not Reported
Altitude:	42.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19811204
Date inventoried:	Not Reported	Mean greenwich time offset:	EST

Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	44.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

7
West **FED USGS** **USGS2095521**
1/2 - 1 Mile
Higher

Agency cd:	USGS	Site no:	404912072564701
Site name:	S 72114. 1		
Latitude:	404912	EDR Site id:	USGS2095521
Longitude:	0725647	Dec lat:	40.82009855
Dec lon:	-72.94593857	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2051	Map scale:	Not Reported
Altitude:	108.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	91.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1982-03-02	Ground water data end date:	1983-04-28
Ground water data count:	7		

Ground-water levels, Number of Measurements: 7

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1983-04-28		35.40	1982-11-22		36.19
1982-09-14		36.97	1982-08-18		37.11
1982-07-08		36.35	1982-04-13		34.18
1982-03-02		33.55			

A8
SE
1/2 - 1 Mile
Lower

FED USGS **USGS2095482**

Agency cd:	USGS	Site no:	404837072551402
Site name:	S 87636. 1		
Latitude:	404837	EDR Site id:	USGS2095482
Longitude:	0725514	Dec lat:	40.81037636
Dec lon:	-72.92010468	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2129	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-03-14	Ground water data end date:	1994-03-22
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1994-03-22		28.81	1990-03-14		30.49

A9
SE
1/2 - 1 Mile
Lower

FED USGS **USGS2095483**

Agency cd:	USGS	Site no:	404837072551403
Site name:	S 87637. 1		
Latitude:	404837	EDR Site id:	USGS2095483
Longitude:	0725514	Dec lat:	40.81037636
Dec lon:	-72.92010468	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2129	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-03-14	Ground water data end date:	1994-03-22
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1994-03-22		28.94	1990-03-14		31.05

A10
SE
1/2 - 1 Mile
Lower

FED USGS **USGS2095481**

Agency cd:	USGS	Site no:	404837072551401
Site name:	S 87635. 1		
Latitude:	404837	EDR Site id:	USGS2095481
Longitude:	0725514	Dec lat:	40.81037636
Dec lon:	-72.92010468	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2129	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-03-14	Ground water data end date:	1994-03-22
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1994-03-22		29.08	1990-03-14		30.83

11
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS2095488**

Agency cd:	USGS	Site no:	404843072550601
Site name:	S 18129. 1		
Latitude:	404843	EDR Site id:	USGS2095488
Longitude:	0725506	Dec lat:	40.81204303
Dec lon:	-72.91788237	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2138 5261	Map scale:	Not Reported
Altitude:	40.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	80.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
12 **ESE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS2095497**

Agency cd:	USGS	Site no:	404849072545801
Site name:	S 72139. 1		
Latitude:	404849	EDR Site id:	USGS2095497
Longitude:	0725458	Dec lat:	40.8137097
Dec lon:	-72.91566006	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2148	Map scale:	Not Reported
Altitude:	44.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19811203
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	40.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1982-03-02	Ground water data end date:	1990-09-07
Ground water data count:	10		

Ground-water levels, Number of Measurements: 10

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1990-09-07		27.61	1990-08-02		27.19
1989-04-11		25.25	1987-03-26		25.09
1983-04-26		28.35	1982-11-22		24.77
1982-09-16		25.67	1982-07-08		27.06
1982-04-13		25.05	1982-03-02		25.11

B13 **West** **1/2 - 1 Mile** **Higher**	**NY WELLS**	**NYWS006012**

Well Id:	NY5110526	System name:	SUFFOLK COUNTY WATER AUTHORITY
System Id:	221	Well name:	PATCHOGUE YAPHANK ROAD WELL # 1 S-52944
Type:	Well	Active?:	Active
County:	SUFFOLK COUNTY	Latitude:	404903 000
Longitude:	725652 000	Slec_type_:	AC
Agency:	RANDAZZO, KAREN		
Address:	PO BOX 18043		
City/State/Zip:	HAUPPAUGUE NY 11788		
Phone:	631-563-0258		

B14
West
1/2 - 1 Mile
Higher

NY WELLS **NYWS006013**

Well Id:	NY5110526	System name:	SUFFOLK COUNTY WATER AUTHORITY
System Id:	221	Well name:	PATCHOGUE YAPHANK ROAD WELL # 1 S-52944
Type:	Well	Active?:	Active
County:	SUFFOLK COUNTY	Latitude:	404903 000
Longitude:	725652 000	Slec_type_:	AC
Agency:	MURRAY, ROBERT L.		
Address:	180 Fifth Avenue		
City/State/Zip:	BAYSHORE NY 11706		
Phone:	631-665-0662		

B15
West
1/2 - 1 Mile
Higher

NY WELLS **NYWS006010**

Well Id:	NY5110526	System name:	SUFFOLK COUNTY WATER AUTHORITY
System Id:	222	Well name:	PATCHOGUE YAPHANK ROAD WELL # 2 S-52945
Type:	Well	Active?:	Active
County:	SUFFOLK COUNTY	Latitude:	404903 000
Longitude:	725652 000	Slec_type_:	AC
Agency:	MURRAY, ROBERT L.		
Address:	180 Fifth Avenue		
City/State/Zip:	BAYSHORE NY 11706		
Phone:	631-665-0662		

B16
West
1/2 - 1 Mile
Higher

NY WELLS **NYWS006011**

Well Id:	NY5110526	System name:	SUFFOLK COUNTY WATER AUTHORITY
System Id:	222	Well name:	PATCHOGUE YAPHANK ROAD WELL # 2 S-52945
Type:	Well	Active?:	Active
County:	SUFFOLK COUNTY	Latitude:	404903 000
Longitude:	725652 000	Slec_type_:	AC
Agency:	RANDAZZO, KAREN		
Address:	PO BOX 18043		
City/State/Zip:	HAUPPAUGUE NY 11788		
Phone:	631-563-0258		

Map ID Direction Distance Elevation	Database	EDR ID Number
C17 **NE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS2095379**

Agency cd:	USGS	Site no:	404943072551301
Site name:	S 933. 1		
Latitude:	404943	EDR Site id:	USGS2095379
Longitude:	0725513	Dec lat:	40.8287097
Dec lon:	-72.91982663	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2150 5261	Map scale:	Not Reported
Altitude:	55.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	106.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

C18 **NE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS2095376**

Agency cd:	USGS	Site no:	404942072551101
Site name:	S 28383. 1		
Latitude:	404942	EDR Site id:	USGS2095376
Longitude:	0725511	Dec lat:	40.82843193
Dec lon:	-72.91927107	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2151 5261	Map scale:	Not Reported

Altitude:	55.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	111.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

19
SSW **FED USGS** **USGS2095661**
1/2 - 1 Mile
Higher

Agency cd:	USGS	Site no:	404819072562001
Site name:	S 3527. 1		
Latitude:	404819	EDR Site id:	USGS2095661
Longitude:	0725620	Dec lat:	40.80537632
Dec lon:	-72.9384386	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2059	Map scale:	Not Reported
Altitude:	87.5		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	89.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

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Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1907-03-07
Ground water data end date: 1962-05-01
Ground water data count: 218

Ground-water levels, Number of Measurements: 218

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1962-05-01		35.14	1962-01-04		33.71
1961-10-31		34.40	1961-07-07		34.94
1961-01-04		32.35	1960-11-14		32.75
1960-07-06		33.94	1960-01-05		33.28
1959-10-26		34.12	1959-06-15		33.91
1958-12-16		34.81	1958-06-25		37.17
1957-12-18		31.84	1957-10-25		32.49
1957-07-02		33.71	1956-12-18		33.77
1956-10-03		34.91	1956-06-20		35.89
1955-12-22		34.49	1955-09-30		33.28
1955-08-23		33.61	1955-06-21		34.16
1955-03-23		34.41	1954-12-23		33.58
1954-10-27		33.54	1954-09-29		33.26
1954-06-30		33.08	1954-03-26		32.08
1953-12-17		33.19	1953-12-01		33.46
1953-11-09		33.88	1953-10-08		34.53
1953-08-24		35.26	1953-08-05		35.53
1953-06-23		35.75	1953-05-25		35.18
1953-04-28		33.83	1953-03-31		32.45
1952-12-29		32.70	1952-12-01		33.16
1952-11-03		33.62	1952-09-23		34.19
1952-08-25		34.43	1952-07-22		34.57
1952-06-24		34.20	1952-05-27		33.86
1952-04-22		33.22	1952-03-25		32.40
1952-02-26		31.65	1952-01-25		31.27
1951-12-19		31.37	1951-11-27		31.57
1951-10-31		31.85	1951-10-01		32.19
1951-08-30		32.47	1951-07-26		32.71
1951-06-28		32.85	1951-06-04		32.69
1951-05-01		31.90	1951-04-04		31.36
1951-02-26		30.81	1951-01-25		30.97
1950-11-30		31.50	1950-10-27		31.87
1950-10-11		32.07	1950-09-07		32.33
1950-07-27		32.31	1950-06-28		31.89
1950-05-26		31.58	1950-04-24		31.43
1950-03-29		31.44	1950-02-27		31.63
1950-02-14		31.86	1950-01-27		32.04
1950-01-13		32.30	1949-12-29		32.54
1949-12-15		32.78	1949-12-02		33.02
1949-11-17		33.30	1949-11-03		33.54
1949-10-21		33.78	1949-10-06		34.04
1949-09-22		34.29	1949-09-09		34.51
1949-08-25		34.72	1949-08-12		34.91
1949-07-27		35.11	1949-07-15		35.23
1949-06-21		35.47	1949-06-08		35.52
1949-05-24		35.51	1949-05-11		35.44
1949-04-27		35.32	1949-04-13		35.09
1949-03-30		34.77	1949-03-16		34.50
1949-03-09		34.32	1949-02-21		33.98
1949-02-10		33.68	1949-01-26		33.45

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1949-01-13		33.26
1947-11-24		31.51
1947-10-02		31.97
1947-07-29		32.40
1947-06-04		31.89
1947-04-04		31.41
1947-02-11		31.99
1946-12-02		32.81
1946-09-27		33.23
1946-07-30		32.97
1946-06-12		32.23
1946-04-11		31.91
1946-02-13		31.53
1945-11-30		31.76
1945-10-04		32.42
1945-08-01		31.92
1945-05-30		32.33
1945-03-30		31.90
1945-01-30		31.44
1944-11-29		31.54
1944-09-28		32.36
1944-07-28		32.88
1944-05-31		32.28
1944-03-31		31.32
1944-01-31		31.47
1943-11-29		32.02
1943-09-24		32.71
1943-08-02		33.13
1943-05-27		33.05
1943-03-31		32.59
1943-01-30		31.86
1942-11-30		31.82
1942-09-28		31.97
1942-09-11		32.03
1942-08-28		32.05
1942-08-14		32.01
1942-07-31		32.09
1942-07-17		32.15
1942-07-06		32.19
1942-06-19		32.20
1942-06-05		32.10
1942-05-22		31.95
1942-05-08		31.75
1942-04-24		31.57
1942-04-10		31.41
1909-12-08		31.92
1909-10-12		32.65
1909-07-06		33.19
1909-04-19		31.78
1909-02-24		32.11
1908-11-11		33.86
1908-08-14		35.24
1908-06-04		35.69
1908-04-08		34.95
1908-02-05		33.47

Date	Feet below Surface	Feet to Sealevel
1947-12-23		31.38
1947-10-28		31.71
1947-09-02		32.23
1947-07-09		32.29
1947-05-06		31.50
1947-03-05		31.76
1947-01-07		32.42
1946-10-25		33.10
1946-08-29		33.25
1946-07-05		32.56
1946-05-08		32.08
1946-03-13		31.71
1945-12-27		31.50
1945-10-30		32.14
1945-09-06		32.69
1945-06-27		32.63
1945-05-02		32.10
1945-02-28		31.68
1944-12-28		31.43
1944-11-01		31.83
1944-08-29		32.58
1944-06-28		32.81
1944-04-28		31.55
1944-03-01		31.29
1943-12-30		31.64
1943-10-28		32.42
1943-09-02		32.95
1943-06-28		33.14
1943-04-30		32.83
1943-02-25		32.27
1942-12-31		31.75
1942-11-02		31.92
1942-09-18		32.00
1942-09-04		32.08
1942-08-21		32.04
1942-08-07		32.04
1942-07-24		32.12
1942-07-10		32.21
1942-06-26		32.16
1942-06-12		32.15
1942-05-29		32.03
1942-05-15		31.85
1942-04-30		31.64
1942-04-17		31.49
1942-04-02		31.35
1909-11-10		32.26
1909-08-21		33.15
1909-06-07		32.52
1909-03-17		31.97
1909-01-13		32.78
1908-10-07		35.44
1908-07-01		35.62
1908-05-06		35.36
1908-03-04		34.10
1908-01-03		33.33

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1907-12-05		33.60	1907-11-07		33.96
1907-09-05		34.78	1907-08-07		35.05
1907-06-08		34.55	1907-04-27		34.14
1907-03-27		33.69	1907-03-07		33.29

20
West
1/2 - 1 Mile
Higher

FED USGS **USGS2095510**

Agency cd:	USGS	Site no:	404904072570002
Site name:	S 48424. 1		
Latitude:	404904	EDR Site id:	USGS2095510
Longitude:	0725700	Dec lat:	40.81787632
Dec lon:	-72.94954982	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2032	Map scale:	Not Reported
Altitude:	102.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	MAGOTHY AQUIFER		
Well depth:	810.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1973-11-06
Water quality data end date:	1973-12-06	Water quality data count:	3
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

21
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS2095655**

Agency cd:	USGS	Site no:	404816072560901
Site name:	S 72121. 1		
Latitude:	404816	EDR Site id:	USGS2095655
Longitude:	0725609	Dec lat:	40.80454299
Dec lon:	-72.93538297	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SO2060	Map scale:	Not Reported
Altitude:	69.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	66.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1982-10-26
Water quality data end date:	1987-11-17	Water quality data count:	2
Ground water data begin date:	1982-03-02	Ground water data end date:	1990-09-06
Ground water data count:	17		

Ground-water levels, Number of Measurements: 17

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1990-09-06		32.60	1990-08-02		32.57
1990-06-20		32.60	1990-03-28		32.16
1990-01-17		32.58	1989-11-13		32.66
1989-10-30		32.61	1989-07-14		32.11
1989-06-08		31.11	1989-04-14		27.72
1983-04-26		30.06	1982-11-22		29.17
1982-09-14		30.31	1982-08-18		30.71
1982-07-07		31.05	1982-04-13		28.26
1982-03-02		27.73			

22
NE
1/2 - 1 Mile
Lower

FED USGS **USGS2095576**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	404937072550001
Site name:	S 17668. 1		
Latitude:	404937	EDR Site id:	USGS2095576
Longitude:	0725500	Dec lat:	40.82704304
Dec lon:	-72.91621545	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	103
Country:	US	Land net:	Not Reported
Location map:	SN2161 5261	Map scale:	Not Reported
Altitude:	50.0		
Altitude method:	Level or other surveying method		
Altitude accuracy:	0.1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Southern Long Island. New York. Area = 1660 sq.mi.		
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:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GLACIAL AQUIFER,UPPER		
Well depth:	69.	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

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
11980	2	1 (50%)	1 (50%)	0 (0%)	3.75	6.9

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 2003 & 2009 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[R] 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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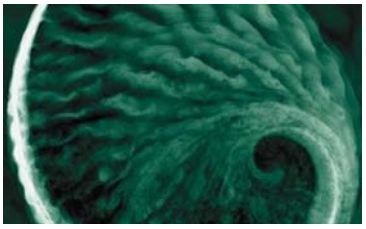
Appendix E
Professional Profiles



James A. Perazzo, P.G.

Principal-In-Charge

Mr. Perazzo has 30 years of experience in the environmental field. His experience in formulating strategies to investigate legacy environmental problems, analyze data, and develop solutions to impaired assets enables client to manage environment risks and comply with disclosure obligations. He has directed projects to address CERCLA, RCRA, and TSCA and other federal and state obligations while evaluating environmental liability costs to assist sellers and purchasers in making business decisions. Mr. Perazzo brings a broad understanding of legacy problems to projects, which consider regulatory burdens, project life cycle, concept and engineering remedial estimates and operating cash flows. He has worked with clients to determine realistic cash flows as projects have matured into the remedial implementation phase enabling client's to establish proper reserves for legacy problems in conformance with financial reporting guidelines. Mr. Perazzo works with regulators and stakeholders to accurately communicate information and assist clients in meeting business goals. He routinely provides strategic guidance, conducts negotiations, and serves as an expert, giving testimony in private litigations and mediations.

Registrations & Professional Affiliations

- Professional Geologist in Pennsylvania

Fields of Competence

- CERCLA RI/FS and removal actions
- RCRA (RFA, RFI CMS and CMI)
- UST assessment and hydrocarbon remediation
- Indirect/direct investigative techniques
- Soil and ground water investigations
- Hydrogeological assessments
- Regulatory negotiation and strategic guidance
- Expert witness

Education

- M.B.A. , Long Island University (C.W. Post), New York, 2006
- M.S. Earth Science, Adelphi University, New York, 1981
- B.S. Geology, The State University of New York at Stony Brook, 1978

Publications/Presentations

"Financial Reporting of Environmental Matters & the Influence on a Company's Sustainable Business Strategy" AWMA/NYEWA Seminar, Rochester Institute of Technology Conference Center, February 12, 2009.

"CERCLA - The Technical Perspective," Environmental Regulations Course, Executive Enterprises, Inc., June '95, October '95, and February '96.

"Remedial Investigation and Feasibility Study Process," New York Hazardous Regulation Course, Executive Enterprises, Inc., November 16-17, 1990.

"Groundwater Remediation; Performance Goals," Haztech International, Cleveland, Ohio, September 20-22, 1988.

"Remedial Design Needs to Consider in Planning Hazardous Waste Site Investigations," with J. Iannone and J. Mack; Haztech International, St. Louis, Missouri, August 26-27, 1987.

"Long Term Confidence in Ground Water Monitoring Systems," Groundwater Monitoring Review, Vol. 4, No. 4, all 1984.

Sample Projects

Project Principal for responsible for a former industrial facility requiring completion of an RI/FS at a NYS Superfund site. Secured a ROD that was used to facilitate transfer of the property into the NYS Brownfield Cleanup Program and, combined with a finite risk insurance policy enabled the responsible party to cap environmental liabilities.

Project Manager for large Superfund site containing lead. Project responsibilities included work plan preparation, RI implementation, coordination of human health risk and ecological assessments, a feasibility study, and remedial design and construction of the remediation action.

Provided expert testimony in matter involving the origin and subsequent migration of petroleum contamination as it related to on-site and off-site impacts.

Developed a tank management program for 36 locations in New York and Connecticut. Planned site assessments and remedial programs. Formulated monitoring programs for early warning of potential environmental problems. Negotiated financial estimates and justification for outstanding environmental liability allowing owner to divest with protection against future liabilities.

Served as a technical expert for one airline in litigation with multiple airlines over a claim of $100 MM in environmental cleanup costs at JFK airport. Engaged in mediation on behalf of client setting out technical positions to apply to cost allocation in pursuit of settlement.

Completed cleanup obligations at NYC manufacturing site under the Voluntary Cleanup Program as part of its conversion to a multi-tenant commercial space. The project involved disassembly of manufacturing lines, and soil/ground water remediation (combined ex-situ and in-situ) beneath an existing facility adjacent the East River.

Project Director for three removal actions pursuant to an ACO under 106 provisions at two separate Superfund sites that were in receivership. Performed removal of anhydrous ammonia vessel, ASTs, laboratory chemicals, drums, PCB oils, transformers, and closure of USTs. Also directed a radiological survey with a health physicist to locate and remove materials exhibiting anomalous levels of radiation. These efforts were done on behalf of a savings and loan in receivership.

Project Director for development and implementation of remedial system to extract chlorinated VOCs from soil and ground water from a source area at a Superfund site. Coordinated program involving dewatering and vacuum extraction. Established basis for performance analysis and effectiveness evaluation to determine proper time for system termination.

Assessed alleged environmental liabilities at a commercial resort built on a former shipyard to facilitate a Chapter 11 bankruptcy work-out on Long Island, NY.

Conducted reviews and critiques of RI and RODs, the latter in support of petitions to amend. These efforts resulted in modifications to remedies that were consistent with the NCP.

Assisted clients in securing approval for reimbursement of response costs from the Superfund

Planned and implemented activities to secure abandoned manufacturing facilities and negotiated with NYS DOL on behalf of financial institutions to allow assets to be removed as part of a Chapter 7 bankruptcy.

Developed technical approach to ongoing cases for the New York Sate Environmental Protection Bureau of the Attorney General's office. Prepared scientific reports and represented the Attorney General in adversarial discussions, public meetings, and court hearings.

As part of a multi-disciplined technical team, developed a comprehensive remedial program at a dioxin-contaminated landfill in western New York. The program involved collection and treatment of dissolved and non-aqueous phase liquids (NAPLs) in overburden and bedrock.

Technical representative for the government in developing a comprehensive soil and aquifer remediation project in Nassau County, New York. The project involved a soil and ground water remediation program including installation of a slurry wall via the vibrating beam technique, soil flushing system and staged ground water recovery from a shallow and deep aquifer. Maintained a key role in establishing performance criteria for cleanup and effectiveness monitoring.

Richard Nichols

Mr. Nichols has over 10 years of diverse environmental consulting experience for private industry. As a consultant, he has performed a variety of multi-media permitting and assessment projects, compliance audits, Phase I/II assessments and remediation oversight. He also has experience managing air emission stack testing and preparing facility compliance plans including SPCC Plans.

Fields of Competence

- Title V/Minor Facility Compliance
- Environmental Compliance Auditing
- Pre-Acquisition/Pre-Divestiture Site Assessments
- Investigation and Remediation Management
- Facility Compliance Plans
- NPDES/SPDES Permitting
- Storm water/Wastewater Management

Education

- Masters Degree, Environmental Science, University of New Haven, Connecticut, 2006
- B.S. Environmental Science, The State University of New York at Buffalo, 1999
- OSHA 40-Hour HAZWOPER

Key Projects

Manages the environmental audit program for an international pharmaceutical device manufacturing corporation. Works directly with the client corporate audit team to perform comprehensive environmental, health & safety (EH&S) compliance audits at manufacturing facilities in the United States. Serve as a liaison between the client and ERM auditors worldwide to coordinate EH&S audits at international manufacturing facilities.

Worked on and managed numerous environmental due diligence transactions associated with corporate mergers, acquisitions, and divestitures. Routinely incorporated compliance auditing tasks within the more traditional ASTM site assessment scope. Coordinated and managed follow-up investigations and remediation, including underground storage tank investigations and removal, soil and groundwater sampling, asbestos surveys, and underground injection control (UIC) structure investigation and remediation.

Obtained various air emission and water discharge permits for industrial clients in the northeast region. Specific permitting experience includes New Source Review (NSR), Title V and synthetic minor air permits. Additional permitting work includes NPDES/SPDES surface water discharge permitting and technical oversight of Title V stack testing in accordance with EPA Protocols. Assisted with the entire permit process from the completion of permit applications to regulatory negotiations and permit issuance

Serve as an extension to Northville Industries Corp.'s staff providing on-call air compliance support for Northville's three bulk petroleum storage facilities in Long Island, NY. In addition, Mr. Nichols performs routine compliance tasks including preparation of Title V and State facility permit applications, periodic auditing and preparation of annual Title V compliance certifications, emission control equipment implementation and stack testing, and preparation of quarterly reports for the continuous emissions monitoring system.

Provide air permitting and air compliance support for Sprague Energy's bulk petroleum storage terminal in Long Island, NY since 2003. Specific tasks have included air permit applicability determinations, preparation of State Facility permit applications, and certification of marketable emission reduction credits (ERCs) associated with the shutdown of emission units.

Provided technical assistance to multiple industrial clients located in New Jersey with fulfilling ISRA requirements associated with planned property transactions. Project work included preparation of Preliminary Assessments (PA) in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-3.1.

Managed the pre-sale cleanup and/or closure of over 50 storm water drywells and former sanitary septic systems at five properties on Long Island in accordance with Nassau County Department of Health and EPA protocols.

Provided environmental regulatory compliance services for diverse industrial clients in the northeast region including storm water and industrial wastewater monitoring and reporting, air emission inventories, and SARA Title III reporting.

Conducted numerous Title V compliance inspections to evaluate compliance with facility-wide air emission permits and prepared associated compliance certification and monitoring reports. Served as project coordinator for air emissions stack tests to demonstrate compliance with permitted limits.

Served as Field Team Leader for the investigation and remediation of a Federal Superfund Site on Long Island. Responsible for the day to day management and coordination of field staff and subcontractors during the investigation and remediation. Prepared a Removal Action Report (RAR) documenting the outcome of the remedial activities and the Site.

Prepared numerous regulatory compliance plans including Spill Prevention Control and Countermeasure (SPCC) and Storm Water Pollution Prevention (SWPPP)

Plans for clients in the asphalt production, mineral processing and bulk petroleum storage industries. Helped with the development and implementation of effective spill control and storm water best management practices (BMPs) at the facility level. Worked on a petroleum release risk evaluations for a major bulk petroleum storage and distribution client to identify the terminals with the highest risk of a release and containment system failure. Enabled client to focus its resources to effectively mitigate the potential for uncontrolled releases.

Prepared customized environmental regulatory tracking software to assist industrial environmental managers in tracking regulatory compliance obligations. Representative project work includes the preparation of regulatory compliance tracking systems for two new power plants in Massachusetts and Pennsylvania.

Christopher J. O'Leary

Mr. O'Leary has over four years of experience in the field of environmental consulting. As a consultant, he has performed and managed over 200 Phase I Environmental Site Assessments (ESAs). Mr. O'Leary has designed over 75 Phase II ESA Subsurface Investigation Work/Sampling plans. He also has an in-depth knowledge of federal, state, city and local regulations of Underground Storage Tanks (USTs) protocals.

Mr. O'Leary has written numerous Remedial Action Work Plans (RAWPs) and Construction Health and Safety Plans (CHASPs) for authorization by the New York City Department of Environmental Protection (NYCDEP).

Mr. O'Leary has also began mediating with clients and the New York City Department of Environmental Protection (NYCDEP) and NYC Office of Environmental Remediation (OER) on e-designated "haz-mat lots" to receive "notice to proceed" approval from the New York City Department of Buildings.

In addition, Mr. O'Leary has also facilitated records on behalf of the Emergency Planning and Community Right-To-Know Act (EPCRA) otherwise known as Title III of Superfund Amendments and Reauthorization Act (SARA) (40 CFR 300-355). The program helps to collect, process, and disseminates the chemical inventory, environmental release, and materials accounting data for individual sites. He assists clients with federal (USEPA) and state (New Jersey and New York) reporting of chemical inventory and hazards. The information is used by the public, emergency planners, and first responders to determine the potential hazards in the community.

Fields of Competence

- Phase I & II Environmental Site Assessments (ESAs);
- Phase II ESA Investigation/Work Plans;
- Investigation and Remediation Management;
- In-depth knowledge of federal, state, city and local regulations of Underground Storage Tanks (USTs) protocals;
- NYC DEP e-designated "haz-mat lots";
- Remedial Action Work Plans (RAWPs);
- Construction Health and Safety Plans (CHASPs); and
- Vapor Intrusion (VI) Assessments and mitigation strategies for real estate transactions.

Education / Training

- MA, Science Adolescent Education, Adelphi University, Garden City, NY, 2006
- BS, Biology, Saint Joseph's College, Patchogue, NY, 2004
- Certified CPR/AED and First Aid;
- ASTM E2600-08 Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions, 2008;
- 10-hour OSHA 29 CFR 1926, Safety and Health Standards for Construction, 2008;
- 40-Hour OSHA HAZWOPER 1910.120 Health and Safety Training, 2007; and
- ASTM E1527-05 Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2006.

Languages

- English

Honors

- Kappa Delta Pi International Honor Society

Key Projects

Position: Project Task/Manager
Client: BP Solar
Brief description: Project Task/Manager for the completion of an AAI Phase I Environmental Site Assessment (ESA) of a large vacant (200+ acres) part of the Brookhaven National Laboratory (BNL) site in Upton, NY. The BNL property consists of approximately 5,300 acres owned by the United States Federal Government and Department of Energy. Said Phase I ESA was performed for an upcoming solar array installation project. The work also included the review and investigation of the potential risk for the client.

Position: Project/Task Manager
Client: Several confidential clients
Brief description: Project task support for Phase I/Phase II, Remedial Investigation Reports, and Due Diligence Document reviews.

Position: Project Manager
Client: NYC Developer
Brief description: Project Manager for the completion of a Phase I Environmental Site Assessment report of multiple properties which required thorough geophysical activities and limited Phase II investigation of the Site. The Phase II investigation also included test pitting and further investigation to remove a historical Underground Storage Tank (UST). The entire project assessment was performed for land acquisition, future development, and risk assessment for the client.

Position: Project Scientist
Client: Confidential
Brief description: Project Scientist for several commercial and residential vapor intrusion (VI) assessments surrounding a known contaminated site Said assessment included sub-slab (soil/gas), ambient air, and outdoor air sampling events. The results of the VI assessment were used to determine on-going and further remedial design activities.

Position: Project Manager
Client: Confidential
Brief description: Project Manager for the completion of two Phase I Environmental Site Assessment reports and limited Phase II ESA investigation work for two adjacent NYC "e" designated sites. The work was performed for future redevelopment activities. A CHASP and RAWP were submitted to the NYC DEP for approval. A "notice of satisfaction" letter from the NYC DEP was received for construction and development.

Position: Project Manager
Client: Site Seven 22 Properties Client
Brief description: Project Manager for the completion of twenty-two (22) Phase I Environmental Site Assessment reports. The sites throughout Harlem are said to become New York City affordable housing units.

Position: Project Manager
Client: Allied West Developers
Brief description: Project Manager for the completion of a Phase I Environmental Site Assessment report of multiple properties which require limited Phase II investigations. The entire assessment was performed for land acquisition, possible future development, and risk assessment.

Position: Project Manager
Client: Confidential
Brief description: Project Manager for the completion of eleven (11) Phase I Environmental Site Assessment reports in Bedford-Stuyvesant and ten (10) Phase I ESA reports in Ocean Hill and Brownsville, NY. The Sites throughout Brooklyn are said to become New York City affordable housing units.

Position: Project Manager
Client: Grand Street Developers
Brief description: Project Manager for the completion of a Phase I Environmental Site Assessment report and limited Phase II ESA investigation work for NYC "e" designated site. The entire Site assessment was performed for future redevelopment activities. A CHASP and RAWP were submitted to the NYC DEP for further approval. A "notice to proceed" letter from the NYC DOB was received for construction and development.