JAB
8/10/95

Report No.: 8003-352
Rev. No.: 1

FINAL
SITE INSPECTION
S.P. MATERIALS, INC.
KINGS PARK, SUFFOLK COUNTY, NEW YORK
PREPARED UNDER

WORK ASSIGNMENT NO. 038-2JZZ
CONTRACT NO. 68-W9-0051

August 1, 1995
Revised: 8/9/95

SUBMITTED BY:

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LISA GRECO
TASK LEADER

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WORK ASSIGNMENT MANAGER

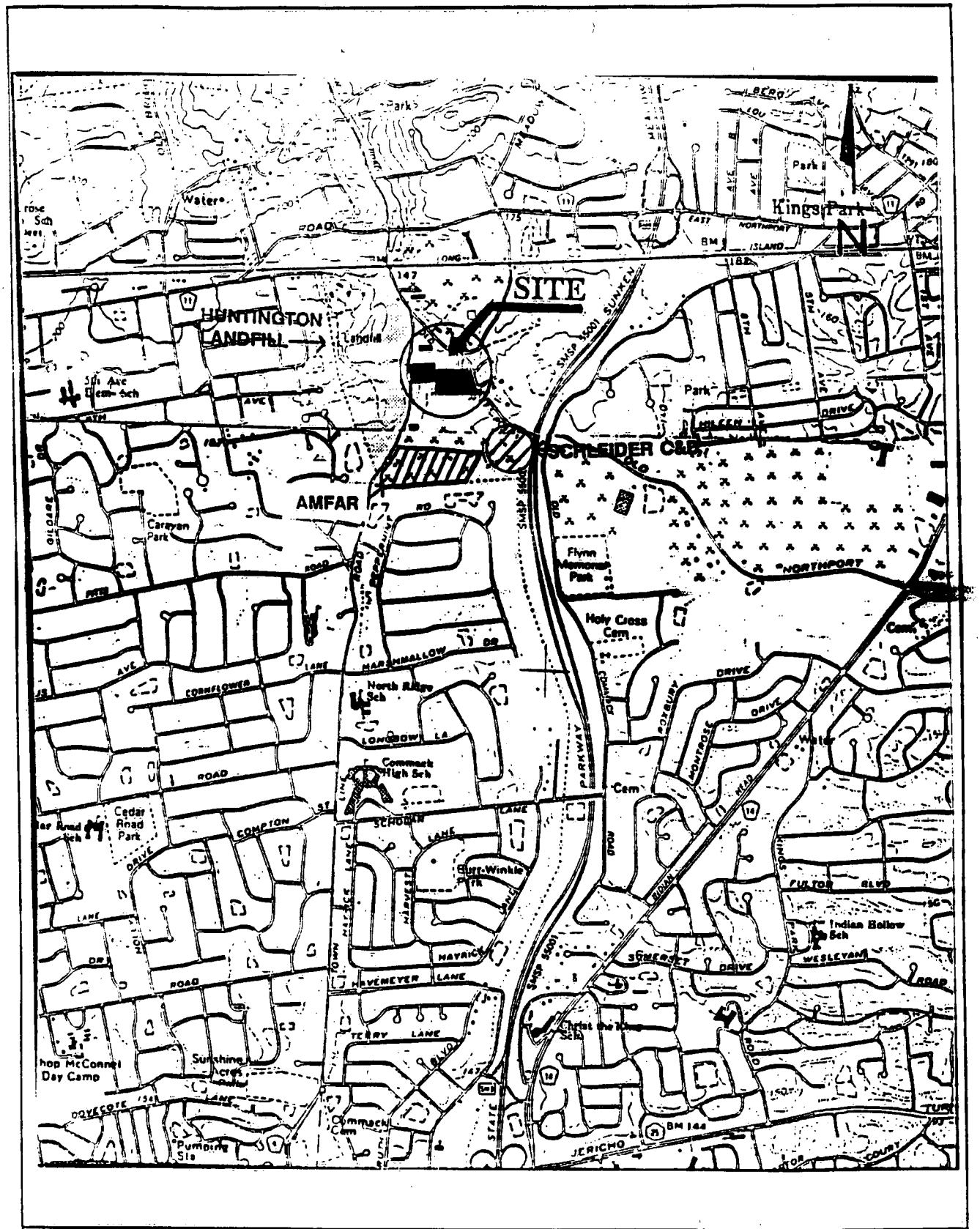
354120

SITE SUMMARY

The SP Materials, Inc. site is an active sand and gravel company located at 170 Town Line Road in the Village of Kings Park, Town of Smithtown, Suffolk County, New York. The site includes two parcels of land totaling 9.6 acres in size used for mining, processing, stockpiling, and distributing sand and gravel. One parcel, approximately six acres in size was purchased in 1973, by Mr. Stephen Pomaro from a sand company owned by Mike Nasti. The second parcel, approximately 3.6 acres, was purchased in 1981 and is used for mining sand and gravel. The site is bordered by Old Northport Road to the north and east, Mike Nasti Sand Company to the south, and the East Northport Landfill to the west. Located on site are a small office, workshop, storage shed, lagoon, and various mining equipment. Figure 1 represents a Site Location Map and Figure 2 represents a Site Map.

On May 16, 1983, the New York State Department of Environmental Conservation (NYSDEC) issued a three year renewable permit to S.P. Materials to mine sand and gravel on the 3.6 acre parcel only. Raw material was removed from the pit, processed, sold and delivered by SP Materials. A one year renewable construction and demolition (C&D) permit was issued by NYSDEC on July 1, 1983. Wastes considered acceptable were limited to fines, oversized rocks, and demolition debris consisting of broken cobble, brick, and wood. During the permit period, approximately fifteen to twenty truck loads of construction debris were dumped at the site and then covered with good quality clay earth.

On September 18, 1984 an inspection by NYSDEC noted the presence of unacceptable material (vehicle parts) at the site. A subsequent inspection on September 21, 1984 noted that the material present at the first inspection had been removed. However, the inspector observed truck parts (brake drums) were about to be dumped into the excavated area. According to the owner, the site was subsequently placed on the Registry of Inactive Hazardous Waste Disposal Sites in 1984, when a NYSDEC inspector noted the presence of a rusted drum on site. The site was classified as a class 2A site. The disposal of the drum consisted of crushing it and placing it in a dumpster.



Scale: 0 1000 2000 4000 FEET

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MAP SOURCE:

Based on U.S.G.S. 7.5 Minute Series Topographic Map.

Quadrangle of "Northport, NY", Dated 1967

SITE LOCATION MAP

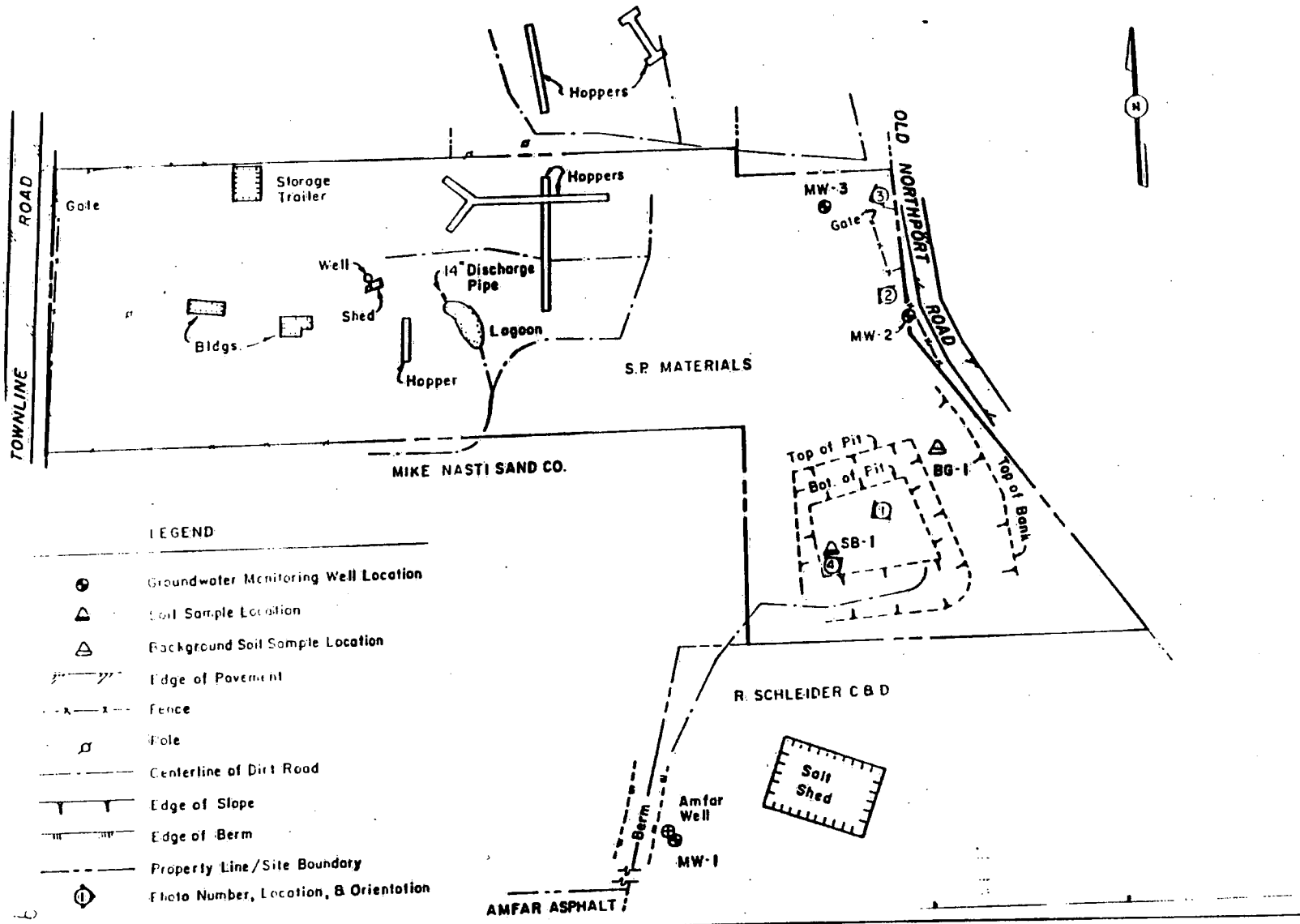
SP MATERIALS, INC.

KINGS PARK, SUFFOLK COUNTY, NY

MALCOLM PIRNIE

DATE: JULY 25, 1995

FIGURE 1



NOT TO SCALE

MAP SOURCE:
SITE INSPECTION REPORT
YEC, INC.
Oct-93

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SITE MAP
SP MATERIAL, INC.
KINGS PARK, SUFFOLK COUNTY, NY

MALCOLM PIRNIE

DATE: JULY 25, 1995

FIGURE 2

There are several other Registry sites in the area including the East Northport Landfill and the R. Schleider C&D site. Amfar Asphalt is located south of the site and is a delisted site. The East Northport Landfill (Huntington Town Landfill) is located west of the site and is a class 2 site. It was in operation for over 50 years and accepted municipal waste, demolition debris, household trash, and some hazardous waste. From 1972-83, the Suffolk County Department of Health Services (SCDHS) sampled and analyzed groundwater from residential wells in the vicinity of the landfill. The results indicated the presence of zinc and tetrachloroethylene (PCE), trichloroethane (TCA) and trichloroethene (TCE). From December 13, 1988 to January 15, 1989 the Town of Huntington conducted a priority pollutant analysis of the leachate from the East Northport Landfill. The results indicated the presence of heavy metals, phenols, tetrachloroethene, 1,2-dichlorobenzene, benzene, toluene, ethylbenzene, and xylenes. It has been reported that the leachate plume from the landfill moves in a northeasterly direction. The Amfar Asphalt site was listed as a Class 2A site on the registry and has been delisted. The Schleider site, located adjacent and to the southeast of the site, is a classified 2A site.

A Phase I Hazardous Waste Site Investigation of SP Materials, Inc. was completed in September, 1989 for the NYSDEC, by YEC, Inc. of Valley Cottage, New York. Sampling was not conducted during this 1989 Phase I Investigation. On May 5, 1992 YEC personnel conducted a site reconnaissance at SP Materials, Inc. as a preliminary task to a Phase II Hazardous Waste Site Investigation for the NYSDEC. No waste was observed on site. The scope of work included a file search, a soil gas survey in the on-site sand pit, the installation of three monitoring wells, and the drilling of one soil boring in the sand pit. A sampling program was also conducted which included monitoring well sampling, surface soil sampling, and subsurface soil sampling from monitoring well borings and the sand pit area. Analysis of the samples in this Phase II investigation was limited to Target Analyte List (TAL) metals and cyanide, volatile organic compounds (VOCs), base neutral acids (BNAs), and pesticides/polychlorinated biphenyls (PCBs).

Three monitoring wells were installed during the Phase II to assess whether waste disposal at the site impacted groundwater quality in the aquifer. MW-1 is located southwest of the site on the R. Schleider C&D site. The

location was selected to obtain background chemical concentrations in the groundwater at an upgradient location. The completed screened interval is 10 to 20 feet. MW-2 is located just west of Old Northport Road in the eastern portion of the site. This location, which is along a dirt roadway on a ridge rising about 50 feet higher than most of the site, was selected to obtain chemical concentrations in the groundwater at a downgradient location. The completed screened interval is 65 to 75 feet. MW-3 is located northwest of MW-2 and west of Old Northport Road in the northeastern portion of the site. The location was selected to obtain chemical concentrations in the groundwater at a downgradient location. The completed screened interval is 40 to 50 feet. No CERCLA-eligible hazardous constituents were detected at concentrations exceeding the upgradient monitoring well during the Phase II investigation.

One subsurface soil sample (SB-1) was collected on June 22, 1992 during the Phase II. SB-1 was collected at a depth of 10 feet below grade. One background surface soil sample (BG-1) was also collected on June 22, 1992. The results of the Phase II investigation indicate the presence of chromium and lead as well as alpha and gamma chlordane, in the subsurface soil sample SB-1 at concentrations three times above background. Chlordane is used as an insecticide and fumigant. Alpha and gamma chlordane will be excluded from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) consideration due to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The above analytical data is Contract Laboratory Program (CLP) equivalent. A data table representing hazardous substances detected in the subsurface soil sample can be seen in Table 1.

A soil gas survey was performed on May 11 and 12, 1992 by Tetra K Testing. Twenty samples were collected at the bottom of the sand pit area at the southeast corner of the site. The gas was analyzed by a gas chromatograph which determined the concentrations of VOCs present. Analysis of the sample indicated the presence of tetrachloroethene, 1,1,1 trichloroethane (TCA), and trichloroethene (TCE) at concentrations ranging from 81 to 671 ug/M^3 (0.01 to 0.1 parts per million (ppm)).

Table 1

CONSTITUENTS DETECTED ABOVE 3X BACKGROUND

General Sample Location	Constituent Detected	Sample Number	Media	Sample Depth (feet)	Concentration	References
Excavation Pit	Chromium	SB-1	Soil	10'	5.6 mg/kg	2, p. 45; 3, p. 46
Excavation Pit	Lead	SB-1	Soil	10'	4.1 mg/kg	2, p. 45; 3, p. 46

Note: The concentrations of the constituents detected in the background surface soil sample (BG-1) were below the contract required detection limit.

Note: The above sampling results are from New York State Department of Environmental Conservation Data.

mg/kg: milligrams per kilogram

On April 12, 1995 a United States Environmental Protection Agency (USEPA) contractor conducted a site reconnaissance. Illegal dumping of mostly household refuse was visible near the fence on the eastern portion of the site. Some heavy equipment work was being conducted towards the center of the site. Also, the pit area observed during the 1992 Phase II is now filled in. Parts of metal were also observed for reuse during the reconnaissance. During the reconnaissance, no stained soils or drums were observed, and there was no visible evidence of hazardous waste deposition.

Residents within four miles of the site obtain their water from groundwater sources. The YEC Phase II report states the possibility of private wells being located in the area, however, the presence of these private wells could not be documented. The major supplier within 4 miles, the Suffolk County Water Authority (SCWA) serves Huntington and Smithtown. There are twenty-one SCWA wellfields within four miles of the site. A second water department, the Greenlawn Water District (GWD) serves the town of Greenlawn. Six of the fifteen wells from GWD are within four miles of the site. Two hospitals within four miles have also been identified as operating potable wells. The Kings Park Psychiatric Center (KPPC) wellfield consists of six wells. The KPPC wells are located in the 2-3 mile ring and serve a population of approximately 3,500 persons. The Northport VA Hospital (NVAH) is supplied by four wells located in the 1-2 mile ring which serve a population of 2,551 persons. The aggregate population served by wells within 4 miles of the site is 121,505 persons.

The surface water pathway will not be evaluated in this report. The nearest perennial downslope surface water body is the wetland leading into the Sunken Meadow Creek. The overland surface water pathway is greater than two miles, in addition, there is no flood potential as the site is outside of the 500 year flood plain. There are no known schools, day care facilities, or residences located within 200 feet of the site. There are no permanent residents living on site, however, two employees occupy the site during normal business hours. A release of contaminants from the site to air is not documented. There are approximately 404 acres of wetlands frontage located within four miles of the site. There are 119,838 people who reside within four miles of the site. Six state threatened/endangered species have been identified within four miles of the site.

Report No.: 8003-352
Rev. No.: 1

SITE ASSESSMENT REPORT: SITE INSPECTION

PART I: SITE INFORMATION

1.Site Name/Alias S.P. Materials, Inc.

Street 170 Town Line Road

City Kings Park, Smithtown State New York Zip 11754

2.County Suffolk County Code 103 Cong. Dist. 02

3.CERCLIS ID NO. NYD986886174

4.Block No. 3 Lot No. 5

5. Latitude 40°52'00"N Longitude 73°17'00"W

USGS Quad. Northport, New York

6. Approximate size of site 9.6 acres

7. Owner Stephen D. Pomaro Telephone No. (516) 266-1000

Street 170 Town Line Road

City Kings Park, Smithtown State NY Zip 11754

8. Operator Stephen D. Pomaro Telephone No. (516) 266-1000

Street 170 Town Line Road

City Kings Park, Smithtown State NY Zip 11754

9. Type of Ownership

X Private ___ Federal ___ State

___ County ___ Municipal ___ Unknown ___ Other

10. Owner/Operator Notification on File

___ RCRA 3001 ___ Date ___ CERCLA 103c Date _____

___ None X Unknown

11. Permit Information

PERMIT	PERMIT NUMBER	DATE ISSUED	EXPIRATION DATE	COMMENTS
Mining	NA	5/16/83	5/16/86	NA
Construction and Demolition Debris Disposal	NA	7/1/83	7/1/84	NA

12. Site Status

X Active _ Inactive _ Unknown

13. Years of Operation: Early 1970s to Present

14. Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

(a) Waste Sources

Waste Unit No.	Waste Source Type	Facility Name for Unit
N/A	N/A	N/A

(b) Other Areas of Concern

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

N/A

Ref. Nos. 1; 2, pp. 6, 27-29, 69-70; 4, pp. 16, 30-41, 101-111; 13

15. Information available from

Contact Joseph Hudek Agency U.S. EPA Telephone No.: (908) 321-6717
Preparer Jin Ho Jang Agency MALCOLM PIRNIE, INC. Date: August 1, 1995

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit 1 - Contaminated Soil

Source Type

_____	Landfill	X	Contaminated Soil
_____	Surface Impoundment	_____	Pile
_____	Drums	_____	Land Treatment
_____	Tanks/Containers	_____	Other (leaking pipelines)

Description:

One subsurface soil sample(SB-1) was collected at a depth of 10 feet below ground surface from the bottom of the bottom of the excavation pit and analyzed for TAL metals and cyanide, VOAs, and pesticides/PCBs.

Hazardous Waste Quantity

The waste quantity associated with this site is an area of greater than zero square feet of contaminated soil.

Hazardous Substances/Physical State

Hazardous substances detected in the subsurface soil are chromium and lead.

Ref. No. 2, pp. 44-47.

PART III. SAMPLING RESULTS

EXISTING ANALYTICAL DATA

On May 11 and 12, 1992, a soil gas survey was performed at the site by Tetra K Testing. Twenty samples were collected at the bottom of the sand pit area at the southeast corner of the site (Ref. No. 2, p. 39). The gas was analyzed by a gas chromatograph which determined the concentrations of volatile organic compounds.

Analytical results from the soil gas survey indicate the presence of PCE, 1,1,1 TCA, and TCE. The concentration of PCE ranged from 81 to 671 $\mu g/M^3$ (0.01 to 0.1 ppm). The concentration of TCA ranged from 0.001 to 0.05 ppm and TCE was detected at 0.02 ppm (Ref. No. 2, p. 39). However, the above compounds were not detected in the soil and groundwater samples (Ref. No. 2, pp. 39, 45-50).

During the Phase II investigation, one subsurface soil sample (SB-1) was collected at a depth of 10 feet below ground surface from the bottom of the sand pit and analyzed for TAL metals and cyanide, VOCs, and pesticides/PCBs (Ref. No. 2, pp. 44-47). Results from the subsurface sample analyses indicate the presence of the inorganics chromium (5.6 ppm) and lead (4.1 ppm) at concentrations three times above the background surface soil sample. The concentrations of the inorganics detected are within typical ranges of native soil concentrations of elements in surrounding natural soils (Ref. No. 2, pp. 44-46).

Three groundwater samples were also collected during the Phase II and analyzed for TAL metals and cyanide, VOCs, and pesticides/PCBs (Ref. Nos. 2, p. 48; 3, p. 49). Sample MW-1 was collected from an upgradient location while MW-2 and MW-3 are considered downgradient wells. Analysis of the groundwater samples did not indicate the presence of any CERCLA-eligible hazardous substances in the downgradient wells at elevated levels when compared to the levels detected in the upgradient well (Ref. No. 2, pp. 48-52).

PART IV. HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. **Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence.**

   A release of contaminants from the site to groundwater is not documented. Analysis of groundwater samples collected during the Phase II did not indicate the presence of any CERCLA-eligible hazardous substances in the downgradient wells at elevated levels when compared to the levels detected in the upgradient well.

   Ref. No. 2, pp. 48-51.

2. **Describe the aquifer of concern; include information such as depth, thickness, geologic composition, areas of karst terrain, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.**

   The SP Materials site is located in Suffolk County, Long Island, New York in the Atlantic Coastal Plain physiographic province. The area of the site is underlain by Precambrian crystalline igneous and metamorphic bedrock which in turn is overlain by Cretaceous unconsolidated sediments of clay, silt, sand, and gravel. These sediments are overlain by glacial till, outwash deposits and lacustrine and marine glacial sediments of the Wisconsin glacial stage of the Pleistocene Epoch.

   The area in the vicinity of the site is underlain by the Upper Glacial Aquifer which is comprised of glacial outwash deposits of the Pleistocene Epoch and Magothy aquifer, Raritan clay member, and Lloyd aquifer of the Cretaceous Period. These unconsolidated sediments overlie Precambrian crystalline bedrock.

   The Upper Glacial Aquifer can be found from 0 to 50 feet below the land surface in the vicinity of the site. It has a maximum thickness of 600 feet and a saturated thickness of 100 feet. It consists of glacial outwash deposited between the Harbor Hill and Ronkonkoma terminal moraines. The upper glacial (shallow) aquifer is unconfined and includes saturated fine to coarse sand and gravel which are hydraulically connected to the finer grained sand and gravel deposits of the upper section of the Magothy aquifer. The outwash deposits are moderately to highly permeable and have good to excellent infiltration characteristics. The hydraulic conductivity of the aquifer has been estimated at 2,000 gallons/day/ft^2 (9.44×10^{-2} centimeters/second (cm/s)).

   The Magothy (intermediate) aquifer underlies the upper glacial aquifer. It has a maximum thickness of 1,100 feet and a saturated thickness of about 600 feet. The fine to medium sand and clayey sands are poorly to moderately permeable and may be highly permeable in some areas. The aquifer is unconfined in the uppermost section and confined elsewhere. The hydraulic conductivity of the aquifer has been estimated at 400 gallons/day/ft^2 (1.89×10^{-2} cm/sec).

   The clay member of the Raritan formation underlies the Magothy Formation. It may be encountered from 70 to 1,500 feet below ground surface and has a maximum thickness of 300 feet. It is poorly to very poorly permeable and acts as a confining layer for the underlying Lloyd aquifer.

   The Lloyd aquifer may be encountered from 200 to 1,800 feet below ground surface and has a maximum thickness of 500 feet. It is poorly to moderately permeable and the water table is confined under artesian pressure.

   Regional groundwater flow at the site is influenced by the presence of the Ronkonkoma moraine which acts as a groundwater divide. South of the moraine, regional groundwater flow is to the south, and north of the moraine flow is to the north. The SP Materials site lies to the north of the groundwater divide.

Groundwater flow direction at the site is towards the northeast and the potentiometric surface of the water table of the upper glacial aquifer underlying the site is approximately 8.5 to 63.4 feet below ground surface in the eastern section of the site.

Ref. No. 2, pp. 31-38.

3. **What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?**

The depth from the lowest point of the waste disposal/storage to the aquifer of concern is approximately 40 feet.

Ref. Nos. 2, pp. 27-29, 63; 4, pp. 16, 30-41, 101-111.

4. **What is the distance to and depth of the nearest well that is currently used for drinking purposes?**

The nearest wells currently used for drinking water purposes are two drinking water wells located on Gun Club Road, approximately 3/4 mile northwest of the site. The two wells are included in the Suffolk County Water Authority water distribution system. Although the depth of the wells is unknown, the two wells are completed in the Magothy Formation.

Ref. Nos. 4, p. 33; 5, p. 12; 15.

5. **If a release to groundwater is observed or suspected, determine the number of people that obtain drinking water from wells that are documented or suspected to be located within the contamination boundary of the release.**

A release of contaminants from the site to groundwater is not observed, suspected or documented.

Ref. No. 2, pp. 48-51.

6. **Identify the population served by wells located within 4 miles of the site that draw from the aquifer of concern.**

DISTANCE	POPULATION	DISTANCE	POPULATION
0 - 1/4 mile	0 (GM)	0 - 1/4 mile	0
> 1/4 - ½ mile	0 (GM)	> 1/4 - ½ mile	0
> ½ - 1 mile	4,640 (GM)	> ½ - 1 mile	0
> 1 - 2 miles	25,384 (GM)	> 1 - 2 miles	276 (L)
> 2 - 3 miles	35,798 (GM)	> 2 - 3 miles	0
> 3 - 4 miles	55,407 (GM)	> 3 - 4 miles	0

Note: (GM) refers to wells tapping the Upper Glacial/Magothy Aquifer.
(L) refers to wells tapping the Lloyd Aquifer

Ref. Nos. 5, pp. 1-30; 15.

State whether groundwater is blended with surface water, groundwater, or both before distribution.

Groundwater is blended with groundwater prior to distribution. The Suffolk County Water Authority (SCWA) supplies municipal potable drinking water for the towns of Huntington and Smithtown utilizing a series of blended wells. Within the town of Huntington, the village of Greenlawn's potable water supply is obtained from Greenlawn Water District (GWD). The GWD operates fifteen wells to supply the village. Of these fifteen wells, only six are within a four mile radius of the site. The Kings Park Psychiatric Center (KPPC) operates six wells located in the 2-3 mile ring from the site. The Northport VA Hospital (NVAH) also has its own water supply system. The NVAH operates four wells, all within four miles of the site. Pumpage information was obtained for all of the wells operated by each water department or hospital. If any one well supplied greater than 40% of the total water to the system, the population assigned to each well was apportioned based on pumpage rates. If none of the wells supplied greater than 40% of the total water to the system, the population assigned to each well was apportioned equally among all the wells. None of the wells within the SCWA, GWD, and KPPC supply greater than 40% of the annual pumpage. Since one well in the NVAH wellfield does pump greater than 40% of the annual pumpage (46%), the population was apportioned according to the pumpage output of each well. In addition, although it is possible that private wells may exist within four miles of the site, their locations cannot be accurately determined.

Ref. Nos. 2, p. 144; 12; 15.

Is a designated well head protection area within 4 miles of the site?

The site is within 4 miles of a designated wellhead protection area.

Ref. No. 6.

Does a waste source overlie a designated or proposed wellhead protection area? If a release to groundwater is observed or suspected, does a designated or proposed wellhead protection area lie within the contaminant boundary of the release?

The waste source does overlie a designated wellhead protection area.

Ref. Nos. 2, pp. 44-48; 6; 9; 11.

7. **Identify uses of groundwater within 4 miles of the site (i.e. private drinking source, municipal source, commercial, irrigation, unusable).**

Groundwater within 4 miles of the site is used as source for municipal drinking water and irrigation purposes.

Ref. Nos. 2, p. 144; 4, p. 33.

SURFACE WATER ROUTE

8. **Describe the likelihood of a release of contaminant(s) to surface water as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence.**

A release to surface water/sediment is not documented. No surface water/sediment samples were collected during the 1992 YEC sampling event. The nearest perennial surface water body is located approximately two miles to the northeast. In addition, there is no flood potential as the site is located outside the 500 year flood zone.

Ref. Nos. 2, pp. 22-25; 15; 16; 17.

9. **Identify the nearest downslope surface water. If possible, include a description of possible surface drainage patterns from the site.**

   The nearest downslope surface water body is the wetland leading into Sunken Meadow Creek. This wetland is located approximately two miles to the northeast. Since the distance to the nearest overland perennial downslope surface water pathway is greater than two miles to the northeast and the site is outside of the 500 year flood plain, the surface water pathway will not be evaluated.

   Ref. Nos. 15; 16; 17.

10. **What is the distance in feet to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.**

    The nearest downslope surface water body is the wetland leading into Sunken Meadow Creek which is located approximately 10,560 feet (2 miles) north of the site. Since the distance to the nearest overland perennial downslope surface water pathway is greater than two miles to the northeast and the site is outside of the 500 year flood plain, the surface water pathway will not be evaluated.

    Ref. Nos. 15; 16; 17.

11. **Determine the type of floodplain that the site is located within.**

    The site is outside of the 500 year flood plain.

    Ref. No. 17.

12. **Identify drinking water intakes in surface waters within 15 miles downstream of the point of surface water entry. For each intake identify: the name of the surface water body in which the intake is located, the distance in miles from the point of surface water entry, population served, and stream flow at the intake location.**

    Since the nearest overland surface water body is greater than two miles to the northeast and the site is located outside of the 500 year flood plain, the surface water pathway will not be evaluated.

    Ref. Nos. 15; 16; 17.

13. **Identify fisheries that exist within 15 miles downstream of the point of surface water entry. For each fishery specify the following information:**

    Since the nearest overland surface water body is greater than two miles to the northeast and the site is located outside of the 500 year flood plain, the surface water pathway will not be evaluated.

    Ref. Nos. 15; 16; 17.

14. **Identify surface water sensitive environments that exist within 15 miles of the point of surface water entry.**

    Since the nearest overland surface water body is greater than two miles to the northeast and the site is located outside of the 500 year flood plain, the surface water pathway will not be evaluated.

    Ref. Nos. 15; 16; 17.

15. If a release to surface water is observed or suspected, identify any intakes, fisheries, and sensitive environments from question Nos. 12-14 that are or may be located within the contamination boundary of the release.

Since the nearest overland surface water body is greater than two miles to the northeast and the site is located outside of the 500 year flood plain, the surface water pathway will not be evaluated.

Ref. Nos. 15; 16; 17.

SOIL EXPOSURE PATHWAY

16. Determine the number of people that occupy residences or attend school or day care on or within 200 feet of observed contamination.

There are no known residences, schools or day care facilities located within 200 feet of the site.

Ref. Nos. 15; 18.

17. Determine the number of people that regularly work on or within 200 feet of observed contamination.

The site is active with two employees.

Ref. No. 13.

18. Identify terrestrial sensitive environments on or within 200 feet of observed contamination.

No terrestrial sensitive environments have been identified on or within 200 feet of the site property.

Ref. No. 14.

AIR ROUTE

19. Describe the likelihood of release of contaminants to air as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release define the supporting analytical evidence.

A release of contaminants from the site to air has not been documented.

Ref. No. 2, p. 146; 4, p. 37.

20. Determine populations that reside within 4 miles of the site.

DISTANCE	POPULATION
0 - 1/4 mile	473
> 1/4 - ½ mile	1,473
> ½ - 1 mile	5,908
1 - 2 miles	28,423
2 - 3 miles	46,151
3 - 4 miles	37,410

Ref. No. 7.

21. Identify sensitive environments, including wetlands and associated wetlands acreage, within 4 miles of the site.

DISTANCE	WETLANDS ACREAGE	SENSITIVE ENVIRONMENT
0 - 1/ 4 mile	0	None Identified
> 1/4 - ½ mile	0	None Identified
> ½ - 1 mile	0	None Identified
> 1 - 2 miles	1	None Identified
> 2 - 3 miles	87	None Identified
> 3 - 4 miles	316	6 State threatened/endangered species

Ref. Nos. 8; 14; 16.

22. If a release to air is observed or suspected, determine the number of people that reside or are suspected to reside within the area of air contamination from the release.

A release of contaminants from the site to air is neither observed nor suspected.

Ref. Nos. 2, p. 146; 4, p. 37.

23. If a release to air is observed or suspected, identify any sensitive environments, listed in question No. 21, that are or may be located within the area of air contamination from the release.

A release of contaminants from the site to air is neither observed nor suspected.

Ref. Nos. 2, p. 146; 4, p. 37.

This Report was conducted
under the following
USEPA Documentation Procedure

Guidance for Performing Site
Inspections Under CERCLA
Interim Final Publication 9345.1-05

ATTACHMENT 1

PHOTOGRAPH LOG
S.P. Materials
Kings Park, New York

April 12, 1995

All photographs taken by J. Jang.

Photo No.	Description	Time
1P1S	Picture of Monitoring Well 2 (MW 2) near eastern border of site.	1355
2P2S	Panoramic view of site, taken from the southwest corner, facing north.	1405
3P3S	Panoramic view of site, taken from the southwest corner, facing northeast.	1405
4P4S	Panoramic view of site, taken from the southwest corner, facing east.	1405
5P5S	Picture of soil test pit area (now filled in).	1412
6P6S	Picture of MW 3 near fencing on eastern border of site.	1417
7P7S	Panoramic view of site, taken from the northeast corner, facing south.	1422
8P8S	Panoramic view of site, taken from the northeast corner, facing southwest.	1422
9P9S	Panoramic view of site, taken from the northeast corner, facing the west.	1422
10P10S	Picture of the Old Northport Landfill located across the site.	1425

PHOTOGRAPH LOG
S.P. Materials
Kings Park, NY

8003-352

1P1S Picture of MW 2 near eastern border of site. 1355

2P2S Panoramic view of site, taken from the southwest corner, facing north. 1405

PHOTOGRAPH LOG
S.P. Materials
Kings Park, NY

3P3S Panoramic view of site, taken from the southwest corner, facing northeast. 1405

4P4S Panoramic view of site, taken from the southwest corner, facing east. 1405

PHOTOGRAPH LOG
S.P. Materials
Kings Park, NY

8003-352

5P5S Picture of soil test pit area (now filled in). 1412

6P6S Picture of MW 3 near fencing on eastern border of site. 1417

PHOTOGRAPH LOG
S.P. Materials
Kings Park, NY

7P7S Panoramic view of site, taken from the northeast corner, facing south. 1422

8P8S Panoramic view of site, taken from the northeast corner, facing southwest. 1422

PHOTOGRAPH LOG
S.P. Materials
Kings Park, NY

8003-352

9P9S Panoramic view of site, taken from the northeast corner, facing the west. 1422

10P10S Picture of the Old Northport Landfill located across the site. 1425

ATTACHMENT 2

REFERENCES

1. Comprehensive Environmental Response Compensation Liability Information System (CERCLIS), List 8: Site/Event Listing, USEPA Superfund Program, p. 276, March 7, 1994.

2. Phase II Investigation (SP Materials, Inc.), Prepared for the New York State Department of Environmental Conservation (NYSDEC), Prepared by YEC, Inc. and Lawler, Matusky, & Skelly Engineers, October, 1993.

3. Reference has been deleted.

4. Phase I Investigation (SP Materials, Inc.), Prepared for the NYSDEC, Prepared by YEC, Inc. and Lawler, Matusky, & Skelly Engineers, September, 1989.

5. Project Note: To SP Materials, Inc. file, from Jin Ho Jang, Malcolm Pirnie, Inc., Subject: Groundwater Apportionment, July 10, 1995.

6. Project Note: To SP Materials, Inc. file, from Jin Ho Jang, Malcolm Pirnie, Inc., Subject: Wellhead Protection Areas, July 10, 1995.

7. Project Note: To SP Materials, Inc. file, from Jin Ho Jang, Malcolm Pirnie, Inc., Subject: Four Mile Radius Populations, July 10, 1995.

8. Project Note: To SP Materials, Inc. file, from Jin Ho Jang, Malcolm Pirnie, Inc., Subject: Wetlands Acreage, July 21, 1995.

9. Telecon Note: Conversation between Stephen Pomaro, (owner) SP Materials, Inc. and Jin Ho Jang, Malcolm Pirnie, Inc., July 10, 1995.

10. Telecon Note: Conversation between Tax Assessor (Smithtown) and Jin Ho Jang, Malcolm Pirnie, Inc., June 29, 1995.

11. Telecon Note: Conversation between Robert Becherer, NYSDEC Region 1, Senior Sanitary Engineer, and Jin Ho Jang, Malcolm Pirnie, Inc., July 10, 1995.

12. Telecon Note: Conversation between Robert P. Santoriello, (Superintendent) Greenlawn Water District, and Lisa Greco, Malcolm Pirnie, Inc., February 3, 1994.

13. Telecon Note: Conversation between Stephen Pomaro, (owner) SP Materials, Inc. and Jin Ho Jang, Malcolm Pirnie, Inc., July 12, 1995.

14. Letter from Information Services New York Natural Heritage Program (NYSDEC) to Jin Ho Jang, Malcolm Pirnie, Inc., Subject: Sensitive Environments, July 14, 1995.

15. Four-mile Vicinity Map for SP Materials, Inc. site, compiled from U.S. Geological Survey Topographical Maps, 7.5 minute series, "Central Islip Quadrangle, New York, 1967", photorevised 1979; "Greenlawn Quadrangle, New York, 1967", photorevised 1979; "Northport Quadrangle, New York, 1967", photorevised 1979; "Saint James Quadrangle, New York" 1967, photorevised 1979.

16. Wetlands Acreage Map for SP Materials, Inc. site, compiled from National Wetland Inventory (NWI) Maps, "Central Islip, New York, April, 1980"; "Greenlawn, New York, April, 1980"; "Northport, New York, April, 1980"; "Saint James, New York, April, 1980".

REFERENCES (Continued)

17. Flood Insurance Rate Map, Town of Smithtown, Suffolk County, New York, Panels 1,2,4,15, Community Panel Numbers 360810 0001-0020. Federal Emergency Management Agency, June 2, 1992.

18. Log Book, SP Materials, Site Inspection, April 12, 1995.

REFERENCE NO. 1

SELECTION:
SEQUENCE: REGION, STATE, SITE NAME

EVENTS: ALL

EPA ID NO.	SITE NAME / STREET / CITY / COUNTY CODE AND NAME / (ASSOCIATED NPL SITE) (ASSOCIATED NPL ID)	STATE ZIP / CONG DIST.	OPRBLE UNIT	EVENT TYPE	EVENT QUAL	ACTUAL START DATE	ACTUAL COMPL DATE	EVENT LEAD
NYD013166483	RYE AUTO COLLISION WORKS		00	IR1		07/27/82	08/13/82	COAST GUARD
	182 NORTH ST							
	RYE	NY 10580						
	119 WESTCHESTER							
NYD986686174	S. P. MATERIALS INC.		00	DS1			11/01/89	STATE(FUND)
	170 TOWN LINE ROAD			PA1			12/01/89	STATE(FUND)
	KINGS PARK	NY 11754						
	103 SUFFOLK							
NYD030222103	SACRE PARK		00	RS1		12/02/81		EPA (FUND)
	1705 THIRD AVE.			RV1		10/10/88	07/19/89	EPA (FUND)
	NIAGARA	NY 14304		RV2		07/19/89	09/28/89	RESP. PARTY
	063 NIAGARA			DS1			04/07/86	EPA (FUND)
				PA1			08/25/86	EPA (FUND)
				SI1		04/07/86	04/11/86	EPA (FUND)
				SP1			11/01/93	
				SI2		09/29/88	10/13/88	EPA (FUND)
				SP1			06/18/92	
				AR1		04/12/94		EPA (FUND)
				AR2		04/12/94		EPA (FUND)
NYD000708196	SAFETY KLEEN CORP.		00	DS1			02/28/89	EPA (FUND)
	80 SEABRO AVE.			PA1		02/28/89	03/31/89	EPA (FUND)
	NORTH AMITYVILLE	NY 11701						
	103 SUFFOLK							
NYD986869170	SAG HARBOR BRIDGE STREET		00	RS1		01/10/90	11/29/90	EPA (FUND)
	BRIDGE STREET			DS1			06/01/88	STATE(FUND)
	SAG HARBOR	NY 11963		PA1		11/01/88	11/01/88	EPA (FUND)
	103 SUFFOLK			SI1		02/28/89	03/31/89	EPA (FUND)
				SP1			12/20/91	
				ES1		12/01/90	12/01/90	EPA (FUND)
NYD986871697	SALAMANCA DRUM SITE		00	RV1		09/20/88	10/07/89	EPA (FUND)
	65 SOUTH AVENUE			AR1		12/31/88		EPA (FUND)
	SALAMANCA	NY 14779						
	009 CATTARAUGUS							

REFERENCE NO. 2

NYD 986986174

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE II INVESTIGATION

SP Materials
Kings Park

Site No. 152093
Suffolk County

DATE: October 1993

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

BY:

YEC, Inc.

in association with

Lawler, Matusky & Skelly Engineers

Ref. 2

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE II INVESTIGATIONS

SP MATERIALS
Kings Park, Suffolk County
Site No. 152093

Prepared For:

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233-7010

Prepared By:

YEC, INC.
Clarkstown Executive Park
612 Corporate Way
Suite 4M
Valley Cottage, New York 10989

in association with

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

October 1993

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5

SECTION 1

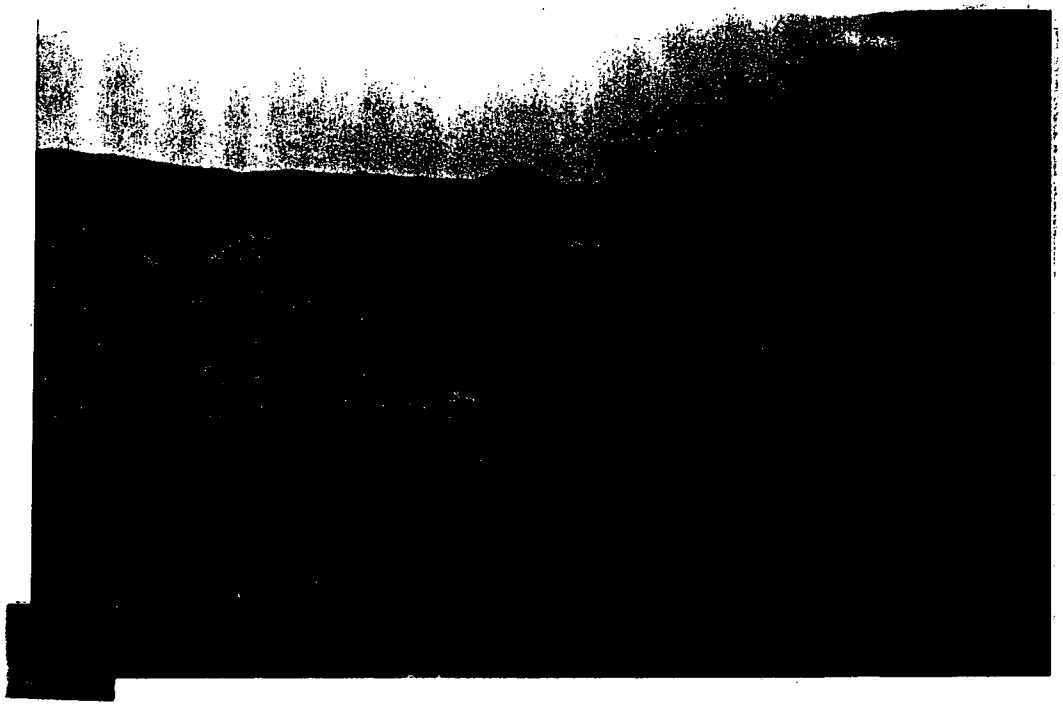
EXECUTIVE SUMMARY

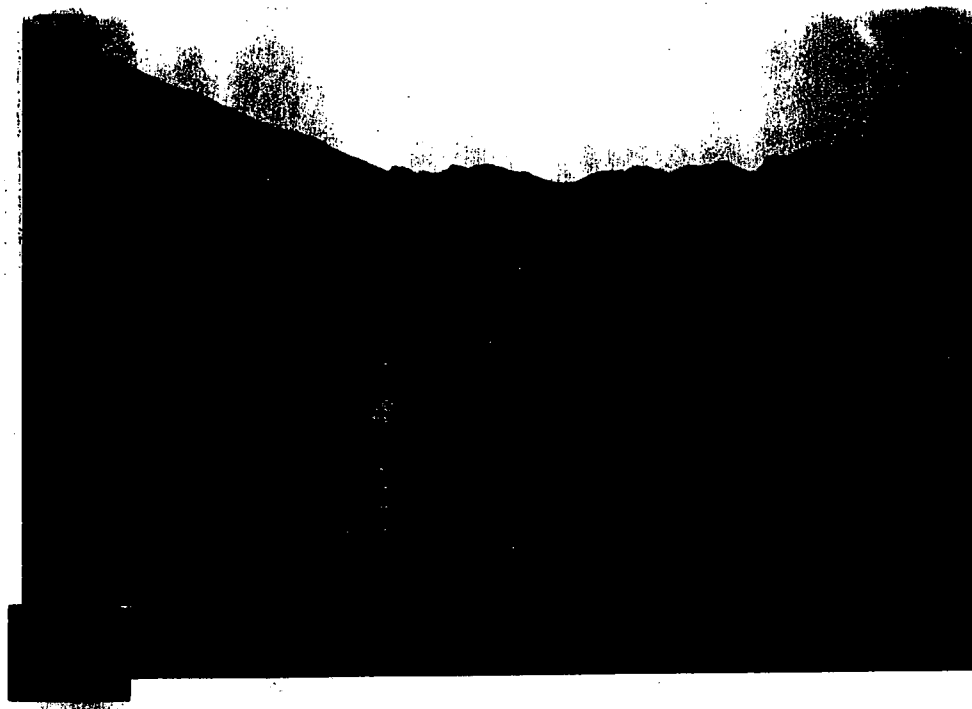
The SP Materials site is an active sand and gravel company located at 170 Townline Road in the Hamlet of Kings Park in the Town of Smithtown, Suffolk County, New York (Figure 1.1). The site includes two parcels of land totaling 9.6 acres in size used for mining, processing, stockpiling, and distribution of sand and gravel. One parcel is approximately 6 acres in size (Figure 1.2). Located on it are a small office, workshop, storage shed, lagoon, and various mining equipment. The second parcel, approximately 3.6 acres in size (Plate A), located south and west of Old Northport Road and east of Townline Road, is used for mining sand and gravel. Photographs of the site are shown in Figure 1.3.

In 1973, Mr. Stephen Pomaro purchased 6 acres from a sand company owned by Mike Nasti. In 1981, Mr. Pomaro purchased an additional 1.4 acre parcel and shortly after, he purchased another 2.2 acre parcel. These last two parcels (totaling 3.6 acres) are used for sand and gravel excavation.

On May 16, 1983 the New York State Department of Environmental Conservation (NYSDEC) issued a three year renewable permit to SP Materials to mine sand and gravel on the second parcel (3.6 acre parcel) only. A one year renewable construction and demolition permit was issued by NYSDEC on July 1, 1983. Acceptable wastes were limited to fines, oversized rocks, and demolition debris consisting of broken cobble, brick, and wood. On September 18, 1984 an inspection by NYSDEC noted the presence of unacceptable material (vehicle parts) at the site. A subsequent inspection on September 21, 1984 noted that the material present at the first inspection had been removed. However, the inspector noted truck parts (brake drums) were about to be dumped into the excavated area.

Fifteen to twenty truck loads of construction and demolition material were disposed on site between 1983 and 1984. According to the owner, the site was placed on the Registry of Inactive Hazardous Waste Disposal Sites when a NYSDEC inspector noted the presence of a rusted drum on site. The site was classified as 2a which is a





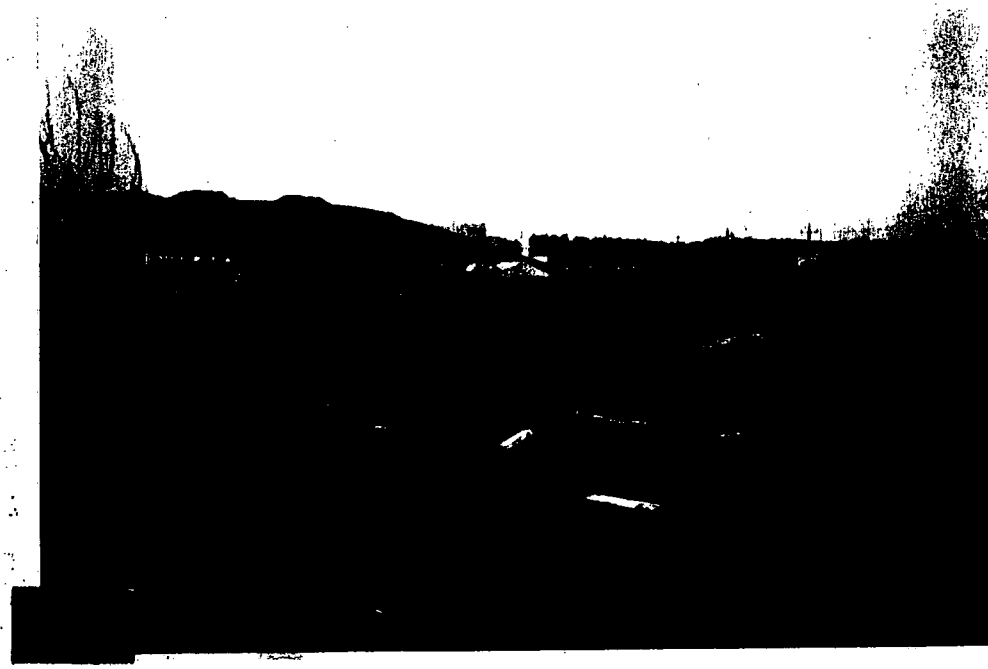
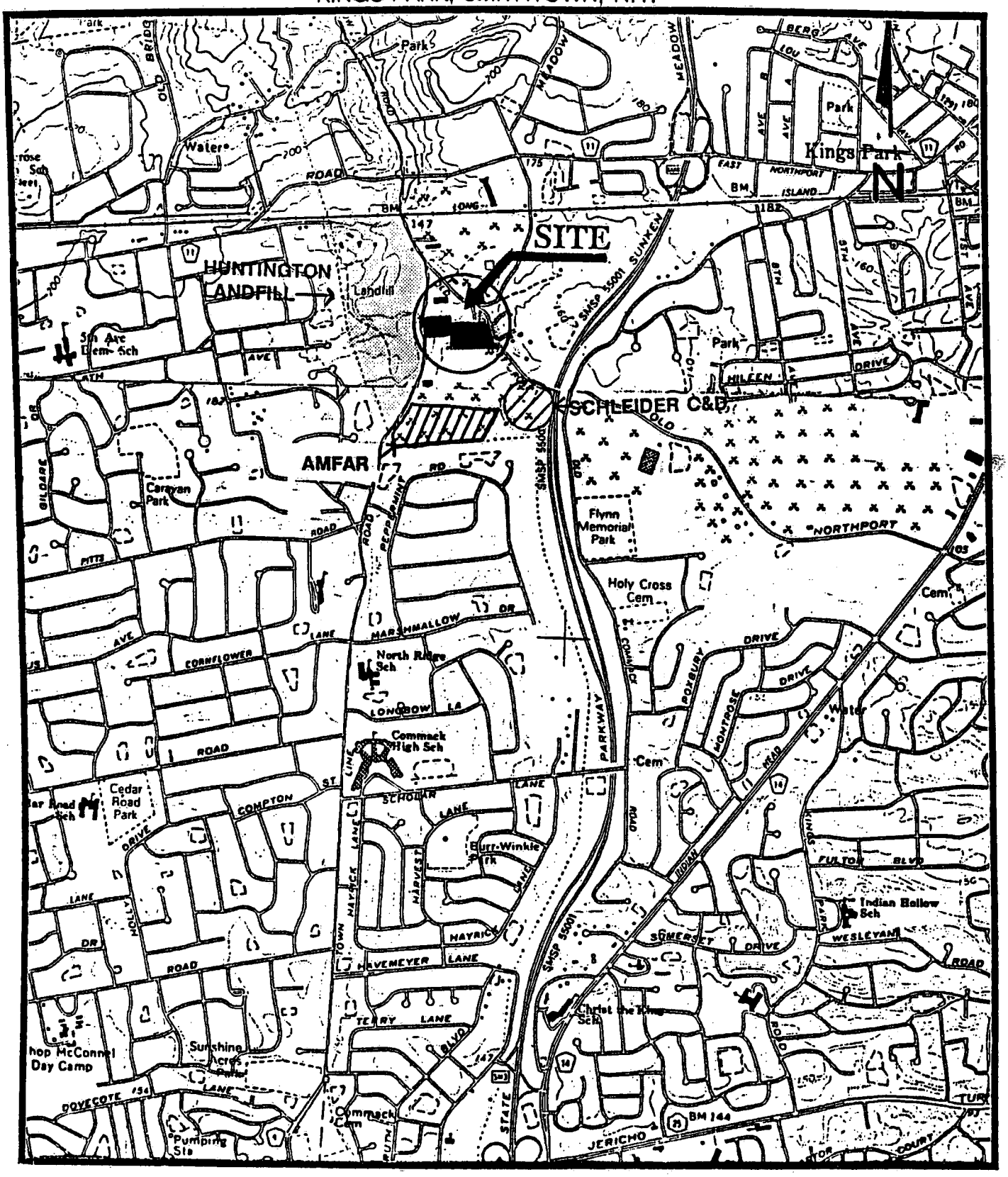


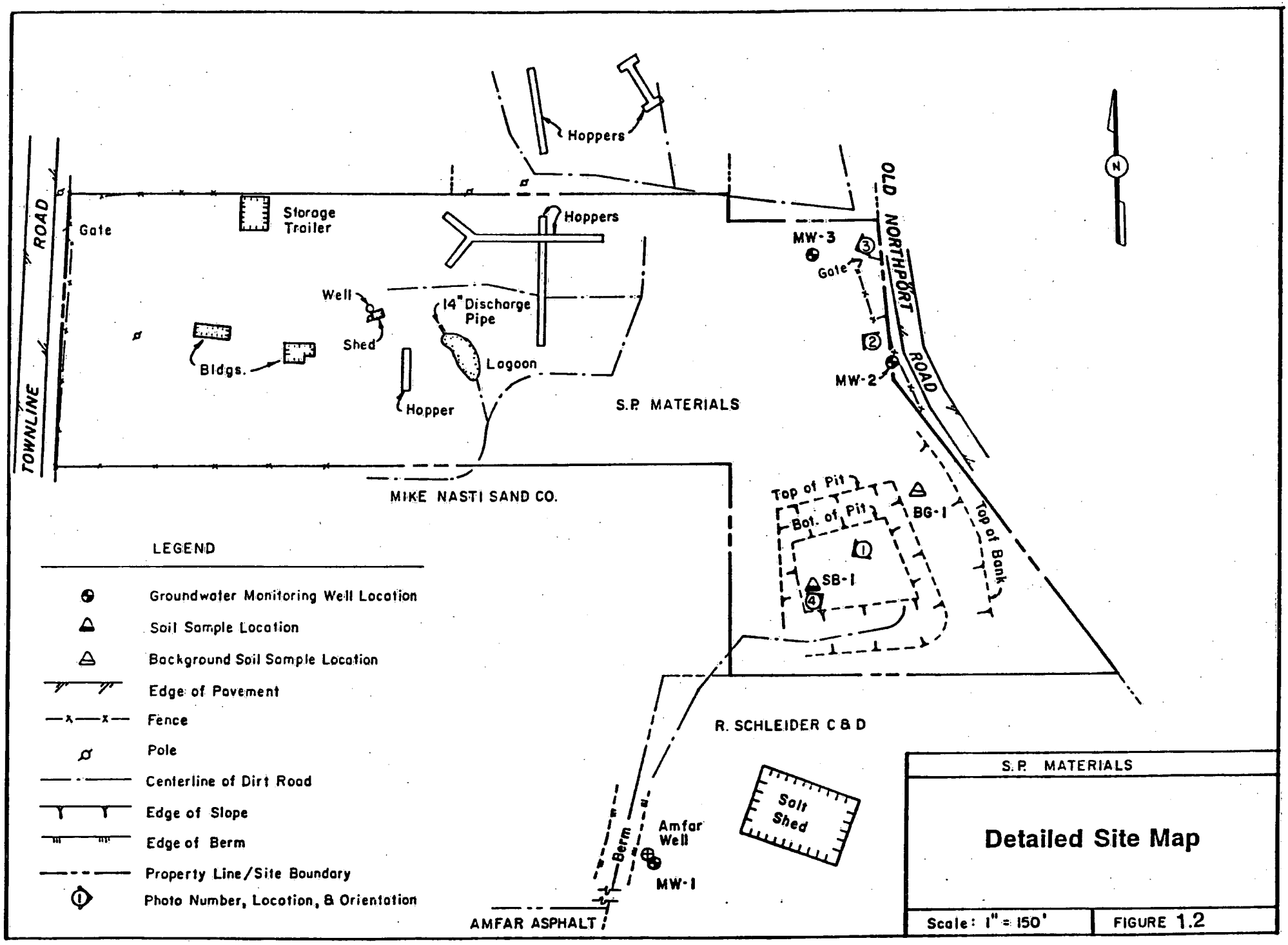
FIGURE 1.1
SITE LOCATION MAP
S.P. MATERIALS SITE PHASE II INVESTIGATION
KINGS PARK, SMITHTOWN, N.Y.



SITE COORDINATES:
LATITUDE: 40° 52' 00" N
LONGITUDE: 73° 17' 00" W

USGS QUADRANGLE MAP
Northport and Greenlawn, 1967

Scale 0 3000 Feet


TOWNLINE ROAD
Gate
Storage Trailer
Hoppers
Hoppers
Well
Shed
14" Discharge Pipe
Bldgs.
Lagoon
Hopper
S.P. MATERIALS
MIKE NASTI SAND CO.
OLD NORTHPORT ROAD
MW-3
Gate
MW-2
Top of Pit
Bot. of Pit
BG-1
SB-1
Top of Bank
R. SCHLEIDER C & D
Salt Shed
Amfar Well
Berm
MW-1
AMFAR ASPHALT
LEGEND
Groundwater Monitoring Well Location
Soil Sample Location
Background Soil Sample Location
Edge of Pavement
Fence
Pole
Centerline of Dirt Road
Edge of Slope
Edge of Berm
Property Line/Site Boundary
Photo Number, Location, & Orientation
S.P. MATERIALS
Detailed Site Map
Scale: 1" = 150'
FIGURE 1.2

temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications. No sampling has been done on the site in the past.

There are several other Registry sites in the area including the East Northport Landfill and the R. Schleider C&D site. One delisted site, Amfar Asphalt is located south of the SP Materials site. The East Northport Landfill (aka The Huntington Town Landfill) is located west of the site (Figure 1.1) and is a Class 2 site. It was in operation for over 50 years and accepted municipal waste, demolition debris, household trash, and some hazardous waste. From 1972 - 1983 the Suffolk County Department of Health Services sampled and analyzed groundwater from residential wells in the vicinity of the landfill. The results indicated elevated levels of some heavy metals (iron, manganese, zinc, and sodium) and the presence of several organic contaminants (tetrachloroethylene, trichloroethane and trichloroethene). From 12/13/88 to 1/15/89 the Town of Huntington conducted a priority pollutant analysis of the leachate from the East Northport Landfill. The results indicated the presence of heavy metals, phenols, tetrachloroethene, 1,2 dichlorobenzene, benzene, toluene, ethylbenzene, and xylenes. It has been reported that the leachate plume from the landfill moves in a northeastern direction. The Amfar site, south of SP Materials, was listed as a Class 2a site on the registry and has recently been delisted. The Schleider site, south west of SP Materials, is classified as a 2a site.

A Phase I Hazardous Waste Site Investigation of SP Materials was completed in September, 1989 by YEC, Inc. of Valley Cottage, New York. It was concluded that a sampling program was necessary to better characterize the site. On May 5, 1992 YEC personnel conducted a site reconnaissance at SP Materials as a preliminary task to a Phase II Hazardous Waste Site Investigation for the New York State Department of Environmental Conservation. No waste was observed on site. The scope of work included a file search for the site, a soil gas survey in the sand pit on site, the installation of three monitoring wells, and one soil boring in the sand pit. A sampling program was also planned which included monitoring well sampling, one background surface soil sample, and subsurface soil sampling from monitoring well borings and the sand pit area.

The site lies on Pleistocene glacial outwash sediments of the upper glacial aquifer.

These sediments have hydraulic conductivities in the range of 9.44 X 10^{-2} cm/s. The groundwater flow direction at the site is northeast. Depth to groundwater in monitoring wells at the site was approximately 8.5 to 63.4 feet below ground surface (146 feet AMSL to 150 feet AMSL).

The results of the Phase II investigation indicate the presence of two chlorinated hydrocarbon pesticides, alpha and gamma chlordane, in the subsurface soil sample SB-1. Alpha and gamma chlordane were reported just outside the detection limit and were not detected in the groundwater samples. No TAL metals were detected in the subsurface soil sample SB-1 outside the typical range of elements for soils. For the surface soil sample BG-1, no TAL metals were detected outside the typical range of elements for soils. No organic compounds were reported above the detection limit.

Both downgradient wells MW-2 and MW-3 had concentrations of iron, manganese and sodium that exceeded the NYSDEC GA standards/guidance values. Iron was detected in the upgradient well at a higher concentration than the downgradient wells. The high concentration of sodium reported for both downgradient wells may be due to runoff from Old Northport Road which is located just east of the site. MW-2, which is closer to the road, had a higher concentration of sodium than did MW-3, which is located more than 80 feet west of the road. Manganese was detected in leachate samples collected from the East Northport Landfill which is located just west of the site. The concentration of manganese detected in the upgradient well also exceeded the standards. The Suffolk County Department of Health sampled private wells from 1972 - 1983. The results indicated elevated levels of sodium and manganese. Acetone exceeded the NYSDEC GA standard for this organic compound. It was detected in the upgradient well and may not be attributable to the site.

This investigation did not discover documented disposal of hazardous waste on the site as per 6 NYCRR part 371. It is therefore recommended that the SP Materials site be removed from the Inactive Hazardous Waste Site Registry.

SECTION 2

PURPOSE

YEC, Inc, under contract to Lawler Matusky & Skelly Engineers (LMS), which in turn is under contract to the New York State Department of Environmental Conservation, conducted a Phase II investigation of the SP Material site located in Suffolk County, New York. The investigation was targeted to address specific concerns regarding past construction and demolition disposal practices and to ascertain the presence or absence of hazardous waste.

Objectives of this Phase II investigation are:

- Provide a geological and hydrogeological site assessment, including a determination of depth to groundwater in the aquifer of concern.
- Identify and evaluate the presence, concentration, and nature of contamination.
- Determine the presence/absence of hazardous waste.
- Prepare a report documenting findings and outlining any recommendations for possible additional investigation.

SECTION 3

DESCRIPTION OF PHASE II INVESTIGATION

3.1 LITERATURE REVIEW

During the literature review, general information on regional geography, geology, and hydrology was obtained from the YEC library. Information and data were also gathered from Federal, state, county, and local offices.

The following agencies and individuals provided information and data regarding past operations and sampling activities:

Mr. James Radey
U.S. Environmental Protection Agency, Region II
26 Federal Plaza
New York, New York 10278
(212) 264-2301
Files

Mr. Dan Eaton
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010
(518) 457-0639
Files

Mr. Bob Stewart
New York State Department of Environmental Conservation, Region I
SUNY Campus - Building 40
Stony Brook, New York 11794
(516) 751-4078
Files

Mr. Don Miles
New York State Department of Health
Room # 205, 2 University Place
Albany, New York 12203
(518) 458-6310
Files

Suffolk County Soil & Water Conservation District
164 Old Country Road
Peconic Plaza
Riverhead, New York 11901
(516) 727-2315
Aerial Photographs

Mr. Otto Reneberg
Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, New York 11738
(516) 854-2537
Files

3.2 SITE RECONNAISSANCE

Prior to drilling and sampling at the SP Materials site, YEC conducted a site inspection on May 5, 1992 to:

- Identify the area of concern and work areas.
- Identify the presence of potential drilling and sampling hazards.
- Designate locations for monitoring wells, test borings, and background surface soil sampling.

Monitoring well and sampling locations are shown on Figure 3.1 and Plate A (at the back of this report).

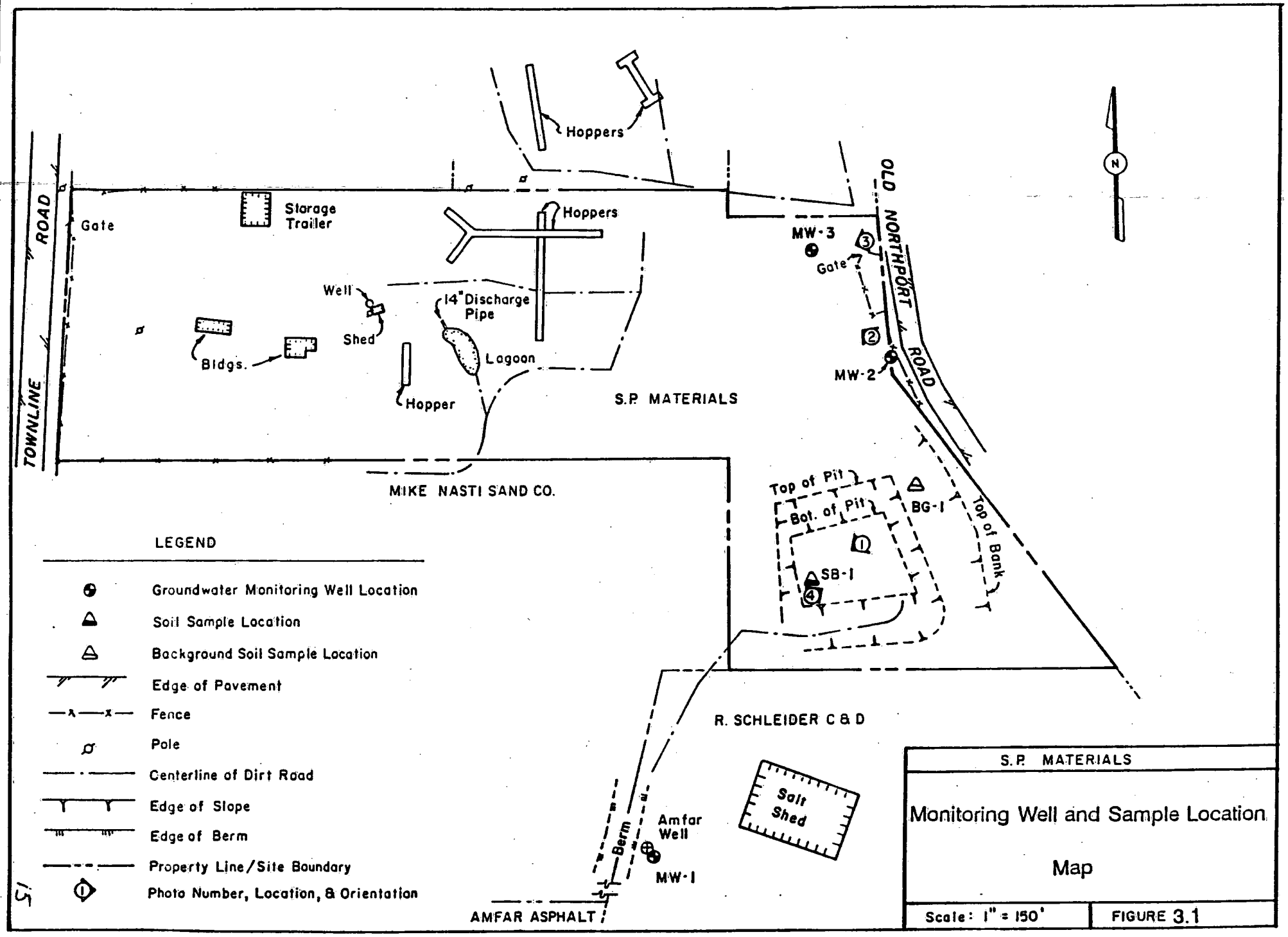
Air monitoring upwind and downwind of the site using a photoionization detector (PID) (HNU PI 101) was not performed during the site reconnaissance because of windy and dusty conditions and excessive site activity. Air monitoring using a RM-60/LCD-60 Micro-roentgen Radiation Monitor was performed at the site. No readings above background were reported. A YEC site-specific health and safety plan (HASP) was prepared based on site reconnaissance observations and data obtained from NYSDEC (Ref. 1).

3.3 GEOPHYSICS

All proposed monitoring well locations (MW-1, 2, and 3) and the soil boring location (SB-1) were cleared by YEC using a magnetometer. Only small amounts of surface scrap metal were detected in the sand pit where the soil boring (SB-1) was located and the soil gas survey was to be performed.

3.4 SOIL GAS

A soil gas survey was performed at the site on May 11 and 12, 1992 by Tetra K Testing, a division of Tighe & Bond, Inc. (Ref. 2). The soil gas survey was conducted in the bottom of the sand pit area at the southeast corner of the site (Figure 3.2). The soil gas


TOWNLINE ROAD
Gate
Storage Trailer
Hoppers
Hoppers
Well
Shed
14" Discharge Pipe
Lagoon
Bldgs.
Hopper
S.P. MATERIALS
MIKE NASTI SAND CO.
OLD NORTHPORT ROAD
MW-3
Gate
MW-2
Top of Pit
Bot. of Pit
BG-1
SB-1
Top of Bank
R. SCHLEIDER C & D
Salt Shed
Amfar Well
MW-1
Berm
AMFAR ASPHALT
N
LEGEND
Groundwater Monitoring Well Location
Soil Sample Location
Background Soil Sample Location
Edge of Pavement
Fence
Pole
Centerline of Dirt Road
Edge of Slope
Edge of Berm
Property Line/Site Boundary
Photo Number, Location, & Orientation
S.P. MATERIALS
Monitoring Well and Sample Location Map
Scale: 1" = 150'
FIGURE 3.1

survey consisted of the following procedure. A steel rod is driven into the ground using a sliding hammer. Once a hole is established, a thin plastic tube with a steel point is inserted in the hollow steel rod and placed downhole. When the desired depth is reached, the rod is removed and the tube remains in the hole and the hole is sealed. A sand layer is placed at the bottom of the hole (to cover end of the tube), then bentonite is used to fill remainder of the hole. A clay plug is then placed to surface to prevent outside gases from entering the hole. Soil gas samples collected in the field were injected into the Gas Chromatograph (GC) using a gas-tight syringe. A HNU Model 421 Gas Chromatograph was used. Twenty soil gas points were monitored for volatile organic compounds.

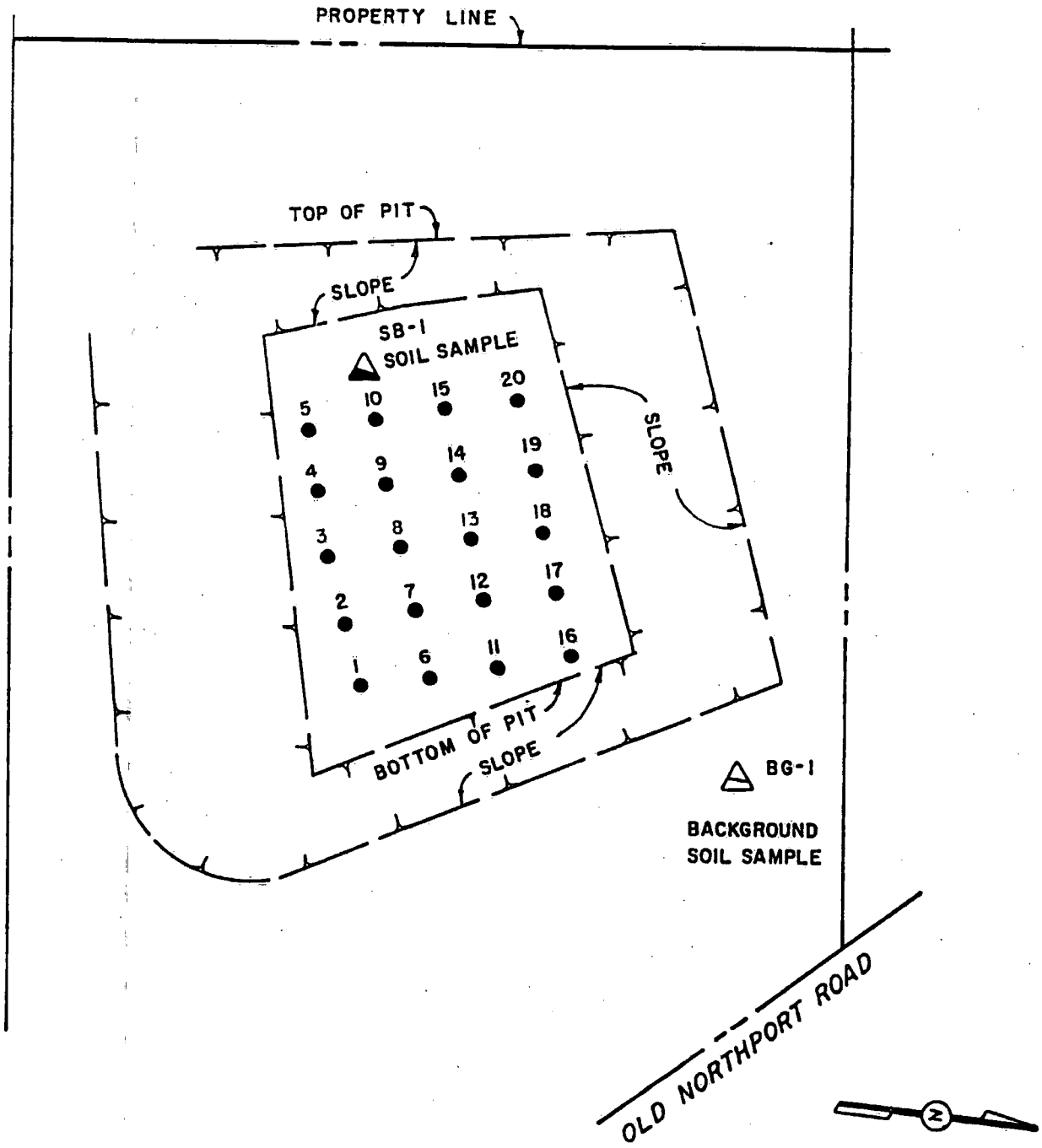
3.5 GROUNDWATER INVESTIGATION

The objectives of the groundwater investigation were to examine and characterize the local subsurface geological and hydrogeological conditions and to identify the presence and nature of groundwater contamination at the site. This was accomplished by installing several test borings in overburden materials and obtaining soil samples for visual and laboratory examination if necessary. Three monitoring wells were installed, one upgradient, and two downgradient of the site (Figure 3.1). Soil and groundwater were analyzed to determine the degree of contamination at the site if any.

3.5.1 General Boring/Monitoring Well Details

Between June 15 and June 22, 1992, Delta Well and Pump of Ronkonkoma, New York installed three monitoring wells and drilled one test boring at the site (Figure 3.1). Drilling was performed under the supervision of a YEC geologist. All boring and monitoring well installation procedures followed NYSDEC's *Guidelines for Exploratory Boring and Monitoring Well Installations (Exhibit 3).* Health and safety protection during the drilling and well installation was confined to Level D.

Drilling and sampling equipment was steam cleaned in a designated area prior to initiation of any drilling activities and in the vicinity of each boring following its completion. PVC screen and casing used in monitoring well construction was also steam cleaned before being introduced into any borehole.



LEGEND

● SOIL GAS SAMPLING POINT
1 LOCATION AND DESIGNATION

SCALE: 1" = 150'

Soil Gas Survey Location Map	S. P. MATERIALS
	FIGURE 3.2

The procedure for advancing both investigatory test borings and those to be converted to monitoring well locations included the use of a truck-mounted mobile drilling rig. Split spoon samples were collected from the ground surface and at five-foot intervals to the point at which the boring was either terminated or bedrock was encountered using standard ASTM D-1586 penetration methods. All recovered soil samples were logged at the borehole by a YEC geologist. All drilling water was from a local potable source located on-site. General construction guidelines for overburden monitoring wells followed Exhibit 3 specifications; 2-in. I.D. PVC screen and riser were used in the borehole.

After the well casing was installed, a sand pack was installed from 1 ft beneath the screened interval in the annulus around the screen to a depth of 2 feet above the top of the screen. A 1 foot bentonite pellet seal and a 1 foot bentonite powder slurry seal was either poured or pumped onto the top of the sand pack in each well. Bentonite was generally at least 2 ft thick when conditions allowed. Bentonite pellets were allowed to hydrate in the borehole before the addition of the cement/bentonite seal, which was mixed and pumped into a depth of 2 ft below grade. Any remaining annulus was backfilled with type 1 portland cement with a sand aggregate or a cement/sand mix. A locking protective steel casing was set over the PVC casing into the cement grout with a minimum stickup of approximately 2 ft. Deviations from the standard borehole fill thickness are caused primarily by flowing sands, which prevent a sand slug below the screen, and by shallow water table depth, which brings the screen interval to a depth close to the ground surface for normal thickness of backfill material to be used. If this occurs, decisions are made in the field by YEC geologists and NYSDEC oversight personnel concerning the best procedure for completing the well construction without sacrificing sampling quality or overall well integrity.

Specific monitoring well construction details are discussed in the following sections. Boring logs and well diagrams are included in Appendix A.

3.5.1.1 ***Monitoring Well MW-1.*** The test boring for this monitoring well was located southwest of the site at the location of a monitoring well (deemed unusable) located on the R. Schleider C&D site. The location was selected to obtain background chemical concentrations in the groundwater at an upgradient location (see Figure 3.1).

The first 12 feet of the boring at MW-1 consisted of a fill material composed of brown to black, medium to coarse sand and gravel. The remainder of the boring down to a depth of 22 feet consisted of brown to tan, fine to coarse sand and gravel.

The monitoring well was constructed of a 2-inch ID Schedule 40 flush-jointed polyvinyl chloride (PVC) riser with a 10-foot long, 2-inch ID Schedule 40 PVC 0.010 inch slotted well screen. The completed screened interval was 20 ft to 10 ft. The surrounding sand pack was extended upward to a depth of 8 ft. A 1-ft bentonite pellet seal and a 1-ft bentonite slurry were then installed and allowed to hydrate, followed by a bentonite/portland cement grout pumped in to a depth of 2 ft. The remaining annulus was backfilled with a cement/aggregate mixture. A protective locking steel casing was installed with approximately a 3 foot stickup (Appendix A).

3.5.1.2 Monitoring Well MW-2. The test boring for this monitoring well was located just west of Old Northport Road in the eastern portion of the site. This location is along a dirt roadway on a ridge rising about 50 feet higher than most of the site. The location was selected to obtain chemical concentrations in the groundwater at a downgradient location (see Figure 3.1).

In boring MW-2, a brown, fine to coarse grained sand and gravel with varying amounts of gravel and some trace silt was encountered. At a depth of 20 to 22 feet, the sand took on a black color. From 30 to 37 feet, the sand was medium to coarse grained with some cross-bedding. From 40 to 67 feet, a light brown to tan medium sand was encountered, compact at times. Fine grained sand was again encountered at 70 feet. At 72 feet, the sand returned to a light brown to tan medium sand.

The monitoring well was constructed of a 2-inch ID Schedule 40 flush-jointed polyvinyl chloride (PVC) riser with a 10 foot long, 2-inch ID Schedule 40 PVC 0.010 inch slotted well screen. The completed screened interval was 75 ft to 65 ft and the surrounding sand pack was extended upward to a depth of 63 ft. A 1-ft bentonite pellet seal and a 1-ft bentonite slurry were then installed and allowed to hydrate, followed by a bentonite/portland cement grout pumped in to a depth of 2 ft. The remaining annulus was backfilled with a cement/aggregate mixture. A protective locking steel casing was installed with approximately a 3 ft stickup (Appendix A).

3.5.1.3 Monitoring Well MW-3. The test boring for this monitoring well was located northwest of MW-2 and west of Old Northport Road in the northeastern portion of the site. Boring MW-3 is located at the bottom of a slope bordering Old Northport Road. The location was selected to obtain chemical concentrations in the groundwater at a downgradient location (see Figure 3.1).

In boring MW-3, a brown, medium to coarse grained sand and gravel with pieces of wood, plastic, and aluminum fence wire were encountered to a depth of 12 feet. From 12 feet to approximately 40 feet, the subsurface materials consisted of brown to tan, medium to coarse grained sand with varying amounts of gravel and some bedding. A layer of coarse sand and some gravel was encountered at 40 to 42 feet. A layer of brown to tan to red medium to coarse sand with only trace gravel was encountered from 42 to 52 feet.

The monitoring well was constructed of a 2-inch ID Schedule 40 flush-jointed polyvinyl chloride (PVC) riser with a 10 foot long, 2-inch ID Schedule 40 PVC 0.010 inch slotted well screen. The completed screened interval was 50 ft to 40 ft and the surrounding sand pack was extended upward to a depth of 38 ft. A 1-ft bentonite pellet seal and a 1-ft bentonite slurry was then installed and allowed to hydrate, followed by a bentonite/portland cement grout pumped in to a depth of 2 ft. The remaining annulus was backfilled with a cement/aggregate mixture. A protective locking steel casing was installed with approximately a 3 foot stickup (Appendix A).

Well Development. The 3 newly installed monitoring wells were developed on June 18 through June 22, 1992 by YEC using bailing and pumping or a combination of these methods. The main objective of development is to rapidly move groundwater in and out of the sand pack, creating a disturbance that will clean the borehole skin or bedrock fractures of fine-grained material that becomes trapped during the drilling process. Each well was developed until the turbidity of expelled groundwater was lowered to no more than 50 nephelometric turbidity units (NTU) and pH, temperature, and specific conductance measurements stabilized. The maximum time allowed for development, 4 hrs, was not exceeded at any of the wells. Well development data appear in Appendix B.

3.5.2 Permeability Testing

Following groundwater sampling, the previously installed wells and newly installed monitoring wells (MW-1,2, and 3) were slug tested. The purpose of a slug test is to determine hydraulic conductivity at individual monitoring points within the screened interval so as to characterize the aquifer properties and determine the uniformity of subsurface materials. Slug testing is performed at each well under static conditions by rapidly displacing a known volume of water within the well casing. The recovery to static conditions is recorded by submerging a RocTest Water Level Indicator model CPR 6. At each monitoring well at the SP Materials site, recovery of the well to static conditions was too fast to be measured using an electronic water level meter. Hydraulic conductivity values characteristic of the subsurface materials comprising the aquifer were estimated from other literature.

HYDRAULIC CONDUCTIVITY ESTIMATES

SP MATERIALS SITE NO. 152093

HYDRAULIC CONDUCTIVITY				
Monitoring Well ID.	**Range (cm/s)[1]**	**Average (cm/s)[2]**	**Screened Interval**	**Development Pump Rate**
MW-1	$1.0 - 10^{-4}$	6.6×10^{-2}	sand/gravel	1.5 gpm
MW-2	$1.0 - 10^{-4}$	6.6×10^{-2}	sand/gravel	1 gpm
MW-3	$1.0 - 10^{-4}$	6.6×10^{-2}	sand/gravel	.5 gpm

[1] Environmental Protection Agency. 1987. *Handbook-Groundwater.*

[2] United States Geological Survey. 1972. *Water Transmitting Properties of Aquifers on Long Island, NY.*

3.6 OTHER PHASE II WORK TASKS

No other Phase II work tasks were conducted.

3.7 SAMPLING

Groundwater, surface and subsurface soil samples were collected from the three monitoring wells and soil on the SP Materials site. All sampling methods were discussed with and approved by NYSDEC personnel before sampling proceeded.

Analysis of samples in this Phase II investigation is limited to target analyte list (TAL) metals and cyanide, volatile organic compounds (VOCs), base neutral acids (BNAs), and pesticides/PCBs. The groundwater samples were also analyzed for Total Dissolved Solids (TDS), Total Suspended Solids (TSS) and Chemical Oxygen Demand (COD). The type of chemicals/contamination likely to be present at the site was determined from the site history, and previous sampling data.

3.7.1 Groundwater Sampling

Sampling of the groundwater from the three Phase II installed monitoring wells was conducted by a YEC crew on June 30, 1992 (Ref. 3). The 3 monitoring wells, MW-1,2, and 3 (Figure 3.1), were purged and sampled according to NYSDEC protocols and the samples were submitted to Aquatec Inc. of Colchester Vermont, for analysis. All groundwater samples were analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, pesticides/PCBs, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), and Chemical Oxygen Demand (COD) (Refs. 4, 5).

Prior to sampling, the initial top of static water levels and monitoring well bottom depths were measured with an electronic water level meter to 0.01 ft. The volume of water to be purged was calculated based on a 2 inch PVC diameter and the height of the water column. The wells were purged with an inertia pump using dedicated polyethylene tubing and foot valves.

The general procedure is to purge from the bottom of the well initially to remove any accumulated fines. The pumping rate is then adjusted to maintain a steady recovery

and pumping volume. If a steady state can be achieved, and any silt has been removed from the bottom of the well, the intake of the tubing is gradually raised to the top of the water column to ensure that the entire water column has been purged. If the well purges dry before the calculated volume has been removed, the well is allowed to recover and purged again to ensure that the groundwater in the immediate area of the well has been removed. In general, a minimum of three to five well volumes is purged from each well unless the well purges dry before this is accomplished. Turbidity, specific conductance, pH, and temperature are measured at intervals during the purging with calibrated instruments. The objective of the purging process is to ensure representative groundwater samples with turbidity values of 50 NTU or less so as to meet NYSDEC water clarity requirements for sample analysis.

After being purged, the wells were allowed to recover to at least 90% of the initial water column volume before sampling commenced. Samples were collected with dedicated laboratory-cleaned PVC bailers from the top of the well water column. Temperature, pH, specific conductance, and turbidity were measured during sampling (see table below). Every effort was made to achieve a level of turbidity below 50 NTU.

If it was not possible to achieve a level below 50 NTU, then the following alternative sampling procedure was followed for metals. If the NTU level was between 50 and 100, the sample was taken as a normal sample (just one sample). If the NTU level was above 100 the sample collected for metal analysis was split into two samples. One portion was filtered through a 0.45 micron filter and the second portion remained unfiltered. The samples were filtered as soon as possible to minimize the impacts of pH and Eh changes. Both samples were preserved with nitric acid to a pH of less than two. If it were determined that the potential for PCB contamination existed at the site and the NTU level exceeded 100, one portion of the sample was filtered through a glass mesh 0.45 micron filter and the second portion remained unfiltered. Both samples would have been kept at 4 degrees celsius (34.2 degrees fahrenheit) once the samples had been collected.

All samples were placed in precleaned bottles/vials provided by Aquatec. All sample bottles were labeled with the site name, job number, sample ID., date/time, and parameters for analysis. Preservatives were added in the field where applicable. Sample containers were then packed in iced coolers to maintain a temperature of 4

degrees celsius, and sent priority overnight by Federal Express daily under chain-of-custody protocol to Aquatec (Ref. 3).

GROUNDWATER CHEMISTRY

SP MATERIALS SITE NO. 152093

Monitoring Well ID.	Volume Purged (gal)	Temperature (°C)	pH (Units)	Specific Conductance µmhos/cm @ 25°C	Turbidity (NTU)
MW-1	15	12.3	7.58	1050	14
MW-2	12	15.6	7.51	1636	30
MW-3	13	13.3	7.12	1232	38

Note: pH, Temperature, Specific Conductivity, and Turbidity measurements taken at time of sampling.

3.7.1.1 ***MW-1.*** Monitoring well MW-1, a newly installed overburden well upgradient of the site was purged with an inertial pump equipped with dedicated polyethylene tubing and a foot valve. The well was purged at 1.5 gpm throughout the water column. A total of 15 gallons was purged from the well. Turbidity was initially >100 NTU in the purged water and decreased slowly to 14 NTU during the purge process. Filtering of metals samples was not necessary because the turbidity at time of sampling was below 100 NTU.

3.7.1.2 ***MW-2.*** Monitoring well MW-2, a newly installed overburden well downgradient of the site was purged with an inertial pump equipped with dedicated polyethylene tubing and a foot valve. The well was purged at 1.0 gpm throughout the water column. A total of 12 gallons was purged from the well. Turbidity was initially >100 NTU in the purged water and decreased slowly to 30 NTU during the purge process. Filtering of metals samples was not necessary because the turbidity at time of sampling was below 100 NTU.

3.7.1.3 ***MW-3.*** Monitoring well MW-3, a newly installed overburden well downgradient of the site was purged with an inertial pump equipped with dedicated polyethylene tubing and a foot valve. The well was purged at 0.5 gpm throughout the water column. A total of 13 gallons was purged from the well. Turbidity was initially >100 NTU in the purged water and decreased slowly to 38 NTU during the purge process. Filtering of metals samples was not necessary because the turbidity at time of sampling was below 100 NTU.

3.7.2 Soil Sampling.

3.7.2.1 ***Subsurface Soil Sampling.*** One subsurface soil sample (SB-1) was collected on June 22, 1992 during the drilling of soil boring SB-1 (Figure 3.1). SB-1 was collected at a depth of 10 ft below grade. All samples were collected with steam-cleaned 2-inch diameter split spoons. Labeling, preservation, chain-of-custody, and shipping procedures were identical to those described for the groundwater samples. The samples were delivered to Aquatec and analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, and pesticides/PCBs (Ref. 3).

In addition, during the drilling of the boreholes for monitoring wells, MW-1,2, and 3, one split-spoon sample from each screened interval was submitted for geotechnical analysis to Empire Soils of Middleport, NY. (Ref. 6). The samples were analyzed for Grain Size Distribution, ASTM D 422 and Atterberg Limits, if possible. The samples were non-plastic, and therefore Atterberg Limits (ASTM D 4318) were not performed.

3.7.2.2 ***Surface Soil Sampling.*** One background surface soil sample (BG-1) was collected on June 22, 1992. Sample locations were selected from workplan recommendations and approved by a NYSDEC representative before sampling commenced (Figure 3.1). BG-1 was collected from an area 20 feet east of the excavation pit and 40 feet west of the berm. The sample was collected with a hand trowel from a depth of 1 foot below the ground surface. Labeling, preservation, chain-of-custody, and shipping procedures were identical to those described for the groundwater samples. The sample was delivered to Aquatec and analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, and pesticides/PCBs (Ref. 3).

3.8 SURVEYING

Following the completion of the Phase II sampling program, a survey of geographical site features, locations and elevations of sampling points was completed by YEC, Inc. on July 16, 1992. All sampling points and site features were surveyed for horizontal and vertical location. This data was then used to prepare detailed site maps and Plate A, a site survey map.

All horizontal distances and angles were measured using a Topcon GTS-3 Electronic Distance Meter. Ground surface elevations were determined utilizing a Topcon AT-F3 Differential Level Instrument.

Property lines were obtained from a Town of Smithtown Tax Assessment Map. Elevations were approximate USGS datum. All surveying was done by YEC's New York State Licensed Land Surveyor (L.S.).

SECTION 4

SITE ASSESSMENT

4.1 SITE HISTORY

The SP Materials site is an active sand and gravel company located at 170 Townline Road in the Hamlet of Kings Park in the Town of Smithtown, Suffolk County, New York (Figure 4.1) (Ref. 7). The site includes two parcels of land totaling 9.6 acres in size used for mining, processing, stockpiling, and distribution of sand and gravel. One parcel is approximately 6 acres in size. Located on it are a small office, workshop, storage shed, lagoon, and various mining equipment. The second parcel, approximately 3.6 acres in size (Plate A), located south and west of Old Northport Road and east of Townline Road, is used for mining sand and gravel (Ref. 8).

In 1973, Mr. Stephen Pomaro purchased 6 acres from a sand company owned by Mike Nasti. In 1981, Mr. Pomaro purchased an additional 1.4 acre parcel and shortly after, he purchased another 2.2 acre parcel. These last two parcels (totaling 3.6 acres) are used for sand and gravel excavation.

On May 16, 1983 the New York State Department of Environmental Conservation (NYSDEC) issued a three year renewable permit to SP Materials to mine sand and gravel on this parcel only (3.6 acre parcel) (Ref. 9). A one year renewable construction and demolition permit was issued by NYSDEC on July 1, 1983. Acceptable wastes were limited to fines, oversized rocks, and demolition debris consisting of broken cobble, brick, and wood (Ref. 10). On September 18, 1984 an inspection by NYSDEC noted the presence of unacceptable material (vehicle parts) at the site. A subsequent inspection on September 21, 1984 noted that the material present at the first inspection had been removed. However, the inspector noted truck parts (brake drums) were about to be dumped into the excavated area (Ref. 11).

Fifteen to twenty truck loads of construction and demolition material were disposed on site between 1983 and 1984 (Ref. 12). According to the owner, the site was placed on the Registry of Inactive Hazardous Waste Disposal Sites when a NYSDEC inspector

FIGURE 4.1
SITE LOCATION MAP
S.P. MATERIALS SITE PHASE II INVESTIGATION
KINGS PARK, SMITHTOWN, N.Y.

SITE COORDINATES:
LATITUDE: 40° 52' 00" N
LONGITUDE: 73° 17' 00" W

USGS QUADRANGLE MAP
Northport and Greenlawn, 1967

Scale 0 3000 Feet

noted the presence of a rusted drum on site (Ref. 13). The site was listed as a Class 2a site which is a temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications. No sampling has been done on the site in the past.

There are several other Registry sites in the area including the East Northport Landfill and R. Schleider C&D site. One delisted site, Amfar Asphalt is located south of the SP Materials site. The East Northport Landfill (aka The Huntington Town Landfill) is located west of the site (Figure 4.1) and is a Class 2 site on the Registry. It was in operation for over 50 years and accepted municipal waste, demolition debris, household trash, and some hazardous waste (Ref. 14). From 1972 - 1983 the Suffolk County Department of Health Services sampled and analyzed groundwater from residential wells in the vicinity of the landfill. The results indicated elevated levels of some heavy metals (iron, manganese, zinc, and sodium) and the presence of several organic contaminants (tetrachloroethylene, trichloroethane and trichloroethene) (Ref. 15). From 12/13/88 to 1/15/89 the Town of Huntington conducted a priority pollutant analysis of the leachate from the East Northport Landfill. The results indicated the presence of heavy metals, phenols, tetrachloroethene, 1,2 dichlorobenzene, benzene, toluene, ethylbenzene, and xylenes (Ref. 14). It has been reported that the leachate plume from the landfill moves in a northeastern direction (Ref.16). The Amfar site, south of SP Materials, was listed as a Class 2a site on the registry and has recently been delisted (Figure 4.1). The Schleider site, south west of SP Materials, is classified as a 2a site (Ref.17) (Figure 4.1).

A Phase I Hazardous Waste Site Investigation of SP Materials was completed in September, 1989 by YEC, Inc. of Valley Cottage, New York. It was concluded that a sampling program was necessary to better characterize the site (Ref. 8). On May 5, 1992 YEC personnel conducted a site reconnaissance at SP Materials as a preliminary task to a Phase II Hazardous Waste Site Investigation for the New York State Department of Environmental Conservation. No waste was observed on site (Ref. 12).

4.2 SITE TOPOGRAPHY

The site is located east of Townline Road, west of Old Northport Road, north of Jericho Turnpike and south of the Long Island Railroad in the Town of Smithtown, Suffolk County, New York. The site is approximately three miles south of the Long Island Sound

and Sunken Meadow Creek is approximately 2.4 miles to the northeast (Ref.18) .

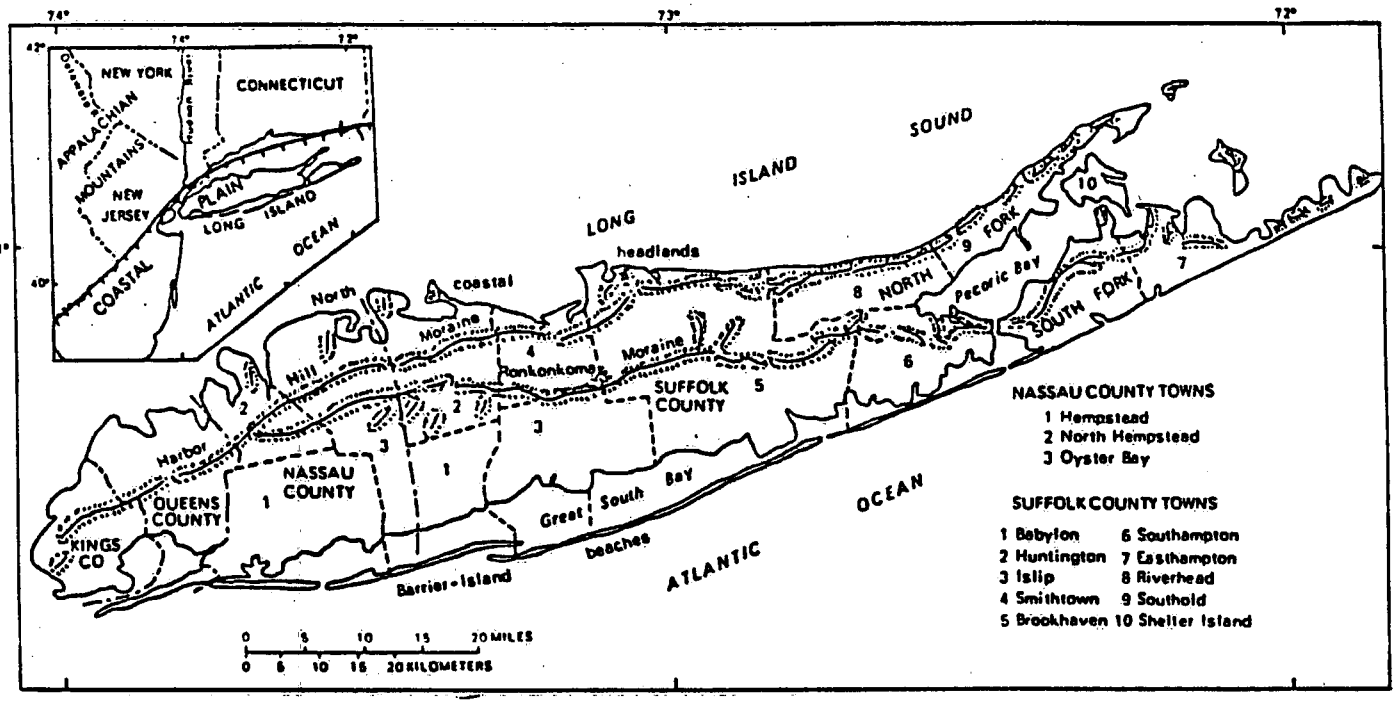
The site is fairly level with a 20 foot change in elevation from the north west corner of the site to the north west corner of the top of the excavation pit (930 feet) with the elevation decreasing towards the south west (Plate A). The pit is located in the south east section of the site and the bottom is approximately 27 feet below grade. A berm rises about 32 feet above the rim of the pit immediately east of the excavation. The surrounding area is approximately level with most of the site. The southeast section of the site is at a lower elevation than the areas immediately to the east (Old Northport Road), to the north, and to the northwest (Townline Road) and could receive surface runoff from these areas. The site is unpaved sand and gravel and because precipitation percolates rapidly into these highly permeable materials, overland flow would be negligible.

4.3 GEOLOGY

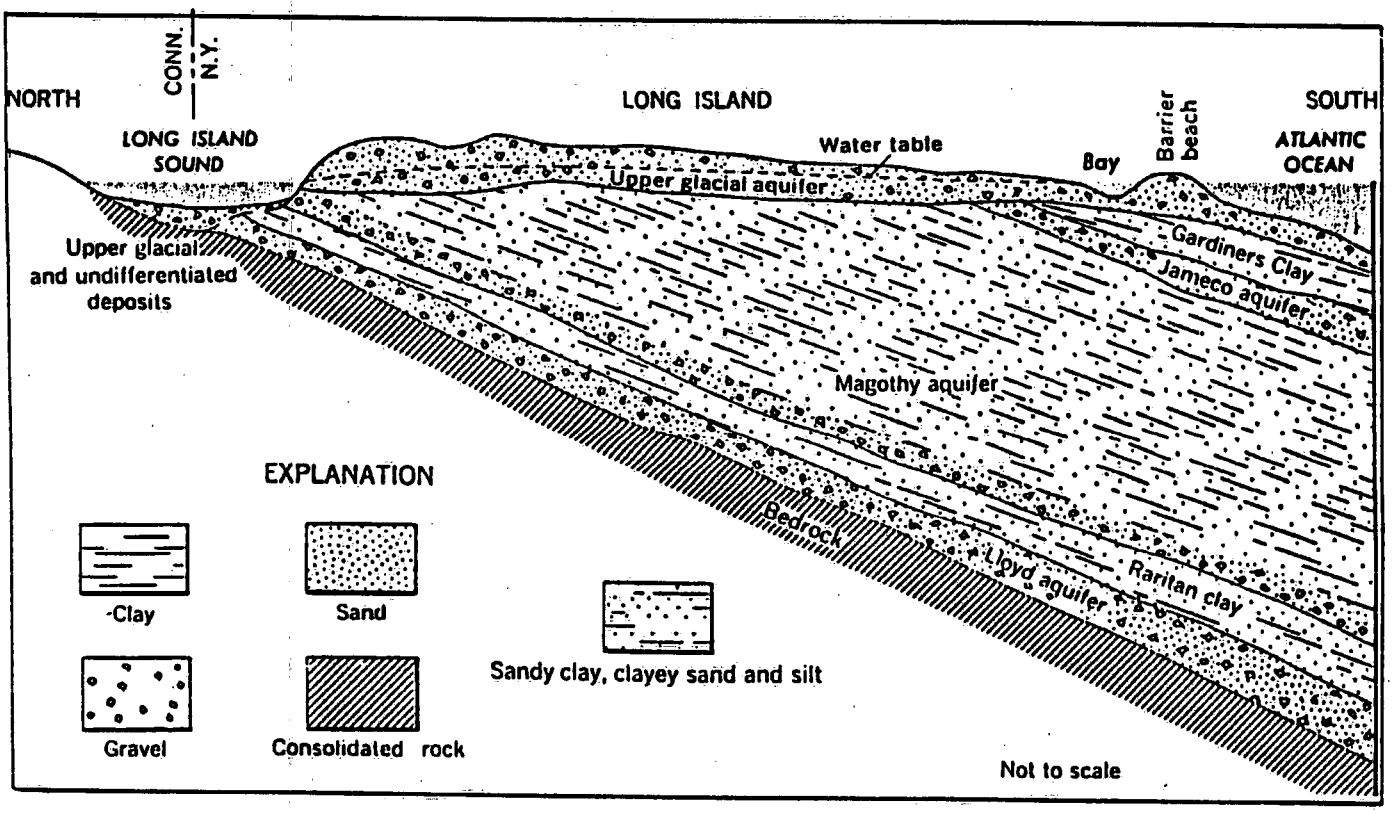
The S P Materials site is located in Suffolk County, Long Island, New York in the Atlantic Coastal Plain physiographic province. Long Island is bounded on the north by Long Island Sound, on the east and south by the Atlantic Ocean, and on the west by New York Bay and the East River. The area of the site is underlain by Precambrian crystalline igneous and metamorphic bedrock which in turn is overlain by Cretaceous unconsolidated sediments of clay, silt, sand, and gravel. These sediments are overlain by glacial till, outwash deposits and lacustrine and marine glacial sediments of the Wisconsin glacial stage of the Pleistocene Epoch. Recent deposits overlay the Pleistocene but are not very thick in most areas (Figure 4.2).

4.3.1 Bedrock

According to published information about the area, the bedrock in the vicinity of the site consists of Precambrian crystalline igneous and metamorphic granite, diorite, gneiss, and muscovite-biotite schist (Ref. 19). A weathered zone, immediately above the surface of the bedrock, is 5 to 100 feet thick and composed of red, gray, yellow, white, green, or mottled colored clay or sandy clay with rock and mineral fragments. The bedrock surface is a gently inclined peneplain that strikes east-northeast and slopes southeast to a depth of 400 feet (at Lloyd Neck) to 2000 feet below sea level (in south-



(A) Location of the Harbor Hill and Ronkonkoma terminal moraines.



(B) Generalized geologic section showing the relative positions of the Long Island aquifers.

FIGURE 4.2
LONG ISLAND
REGIONAL GEOLOGY

central Suffolk County) at about 65 feet per mile (Refs. 20, 21). There are no bedrock outcrops at or in the vicinity of the site. None of the monitoring wells were installed in bedrock and consequently no bedrock cores were available for visual inspection and characterization.

4.3.2 Unconsolidated Deposits

A sequence of Cretaceous unconsolidated fluvial and deltaic deposits lie unconformably on the Precambrian crystalline igneous and metamorphic bedrock throughout Long Island (Figure 4.2). These sediments can be characterized by three depositional periods each separated by periods of non-deposition and/or erosion. The Raritan Formation, which may have been deposited in an environment dominated by streams, unconformably overlies the bedrock surface. It is divided into two members, the Lloyd Sand Member and an overlying conformable clay member. The Lloyd Sand Member has an approximate maximum thickness of 500 feet and the overlying clay member has an approximate maximum thickness of 300 feet. It is relatively flat and dips gradually to the southeast. The Lloyd Sand Member of the Raritan Formation consists of yellow, gray, and white fine to coarse quartzose sand and gravel commonly found in a red clayey matrix. Lenses and layers of clay and silty clay are found throughout the Lloyd member as are thin layers of lignite and iron concretions. In places the sand member grades into the overlying clay member.

The Raritan Clay Member is characterized by gray, red, white and variegated clay and silty clay. It contains lenses and layers of sand with some gravel. Layers of lignite and pyrite are commonly found. An unconformity lies between the fine grained clay member of the Raritan Formation and the overlying coarser grained Magothy Formation. The Magothy Formation was also deposited in an environment dominated by streams. It has an approximate maximum thickness of 1,100 feet and consists of gray, white, red, brown, and yellow fine to medium sand, clayey sand, coarse sand, sandy clay, clay, and gravel. It commonly contains layers of lignite and pyrite and iron concretions. There are no known onshore Tertiary deposits in this area.

Pleistocene deposits unconformably overlie the glacially scoured and eroded surface of the Cretaceous sediments. The upper Pleistocene deposits have an approximate maximum thickness of 600 feet. The deposits consist of till composed of grayish green

clay, gray, brown and yellow sand, gravel and boulders that form two terminal moraines (Harbor Hill and Ronkonkoma) (Figure 4.2); outwash deposits that consist of gray, brown and yellow quartzose sand, fine to very coarse, and gravel, pebble to boulder sized; glaciolacustrine deposits and marine clay that consist of grayish green silt, clay and some and gravel layers. Recent deposits consist of beach sands, river and bay silts and mud (Refs. 20, 22).

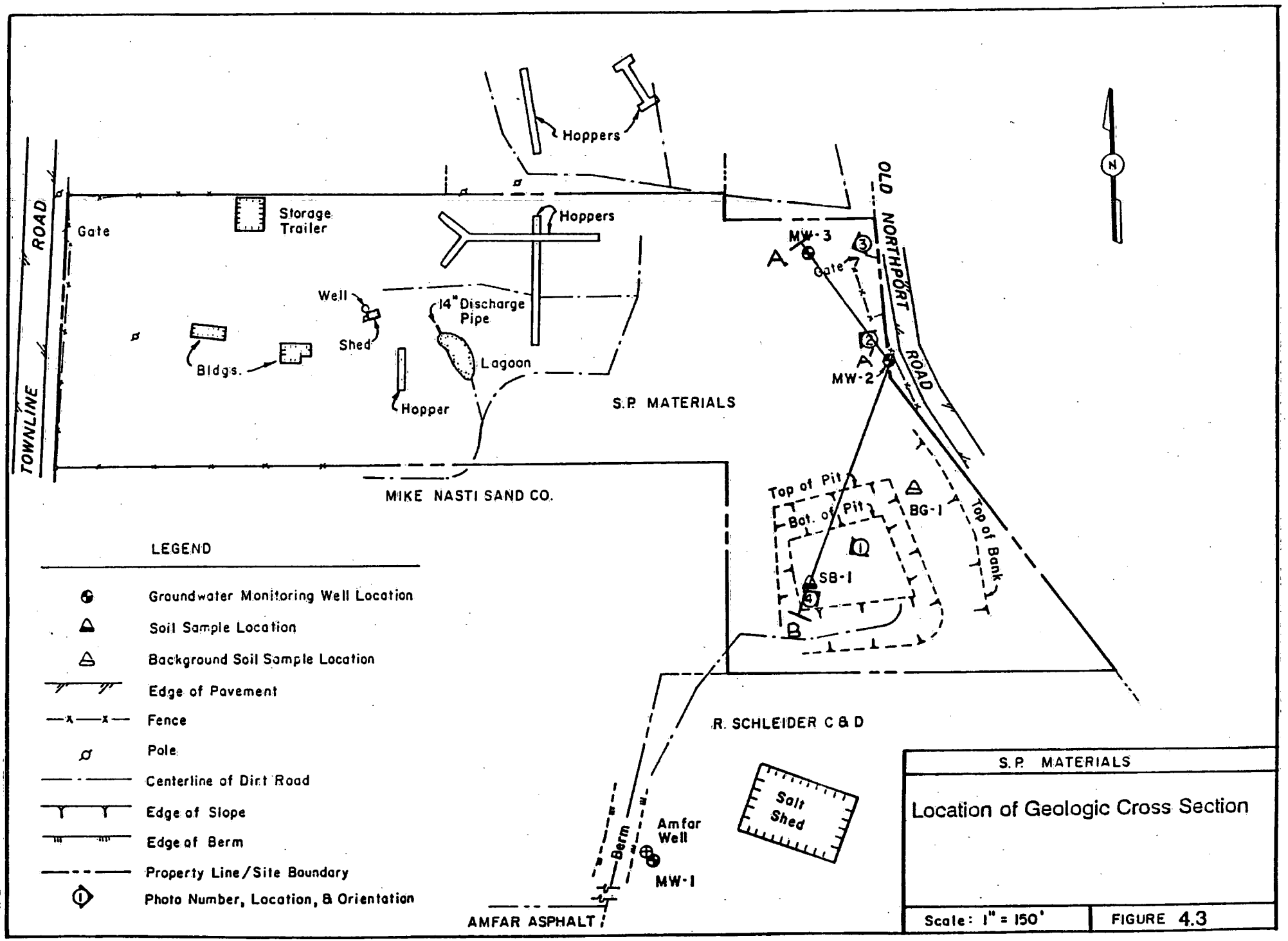
The site lies on glacial outwash deposits that formed between the Harbor Hill terminal moraine to the north and the Ronkonkoma terminal moraine to the south (Figure 4.2). Samples from well borings MW-1, MW-2 and MW-3 were sent to Empire Soils Investigations of Middleport, New York for a Geotechnical analysis. All samples were found to consist of fine to medium well sorted ($C_u < 4$) sand with traces of gravel and silt (Ref. 6). This is consistent with the unconsolidated outwash sediments associated with the upper Pleistocene. The location of a geologic cross-section across the site is shown in Figure 4.3. A geologic cross-section across the site is shown in Figure 4.4.

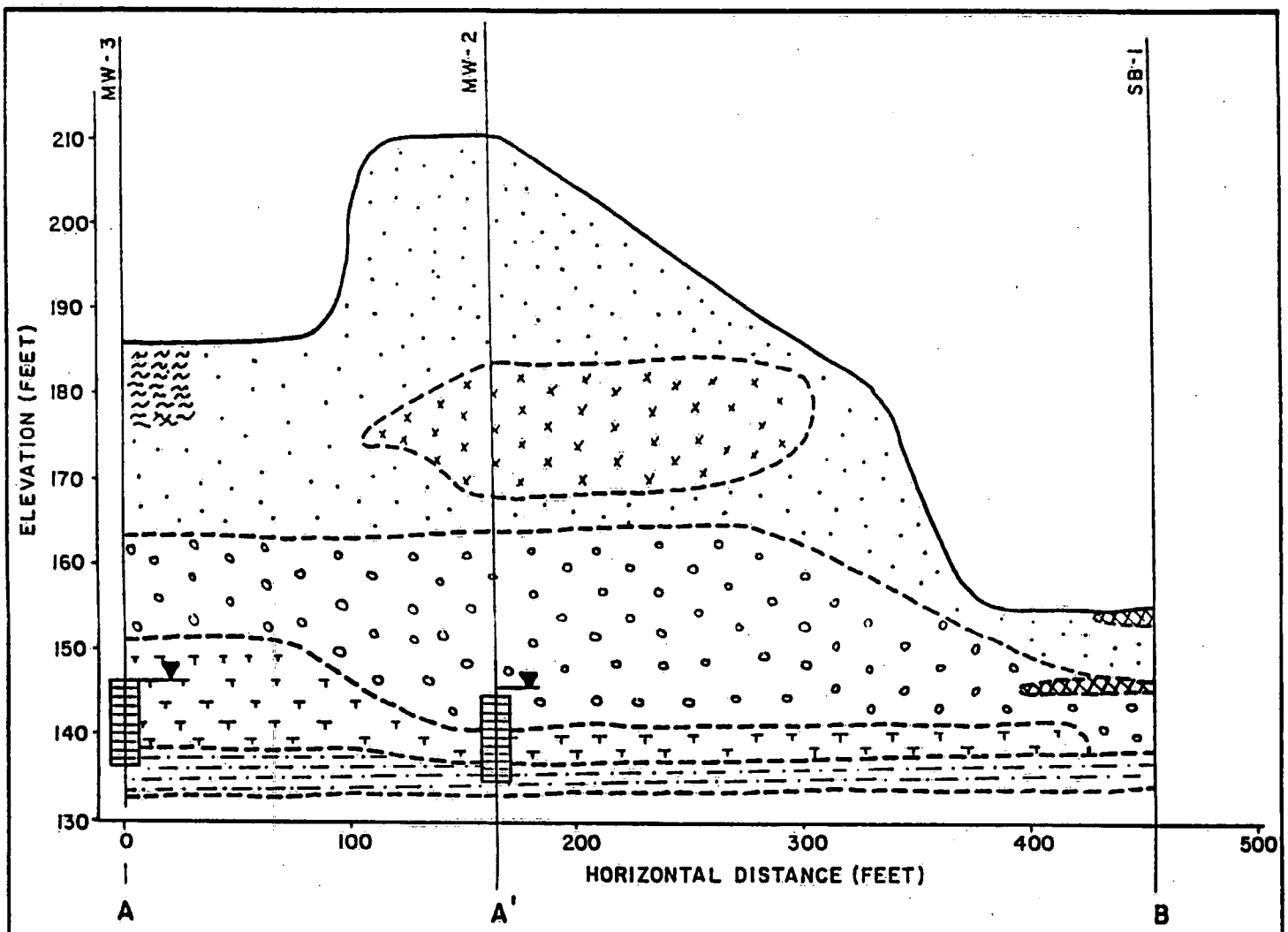
The soil in the area of the site is classified as Gravel Pits (Gp). Gravel Pits are open excavations made for the purpose of mining sand and gravel. The pits may range from 8 to 100 feet deep with nearly vertical sides and level bottoms (Ref. 23).

4.4 HYDROGEOLOGY

The Recent, Pleistocene, and Cretaceous unconsolidated deposits that overlie the Precambrian crystalline bedrock comprise the hydrogeologic framework of Long Island and serve as the sole source of fresh water for Nassau and Suffolk Counties (Ref. 24). The area in the vicinity of the site is underlain by the upper glacial aquifer which is comprised of glacial outwash deposits of the Pleistocene Epoch and the Magothy aquifer, Raritan clay member, and Lloyd aquifer of the Cretaceous Period. These unconsolidated sediments overlie Precambrian crystalline bedrock. Natural aquifer recharge is solely derived from precipitation. Engineered recharge basins in the area of the site are used to conserve storm water runoff and augment the supply of water to the underlying aquifers.

The upper glacial aquifer can be found from 0 to 50 feet below the land surface in the vicinity of the site. It has a maximum thickness of 600 feet and a saturated thickness


Hoppers
Hoppers
Storage Trailer
Gate
TOWNLINE ROAD
Well
Shed
14" Discharge Pipe
Lagoon
Bldgs.
Hopper
S.P. MATERIALS
MIKE NASTI SAND CO.
OLD NORTHPORT ROAD
MW-3
MW-2
Gate
A
A
Top of Pit
Bot. of Pit
BG-1
SB-1
B
Top of Bank
R. SCHLEIDER C & D
Salt Shed
Amfar Well
MW-1
Berm
AMFAR ASPHALT
N
LEGEND
Groundwater Monitoring Well Location
Soil Sample Location
Background Soil Sample Location
Edge of Pavement
Fence
Pole
Centerline of Dirt Road
Edge of Slope
Edge of Berm
Property Line/Site Boundary
Photo Number, Location, & Orientation
S.P. MATERIALS
Location of Geologic Cross Section
Scale: 1" = 150'
FIGURE 4.3



LEGEND

- Wood, plastic, fence wire debris
- Brown-tan-reddish medium-course sand, varying amounts of gravel
- Light tan fine-course sand and gravel
- Light brown-tan medium sand with some crossbedding
- Fine-course stratified sand
- Fine-medium sand and gravel, trace silt, with black film
- Brown fine-course sand, gravel, trace silt

MW — Monitoring Well

SB — Soil Boring

---- Inferred geologic contact

Water level

Screened interval

SCALE:
Horizonal 1" = 75'
Vertical 1" = 20'

Geologic Cross Section Across Site

S.P. MATERIALS

FIGURE 4.4

of 100 feet. It consists of glacial outwash deposited between the Harbor Hill and Ronkonkoma terminal moraines. The upper glacial (or shallow) aquifer is unconfined and includes saturated fine to coarse sand and gravel which are locally hydraulically connected to the finer grained sand and gravel deposits of the upper section of the Magothy aquifer. The outwash deposits are moderately to highly permeable and have good to excellent infiltration characteristics. In the vicinity of the site groundwater from the upper glacial aquifer discharges into effluent streams which flow into Long Island Sound. The hydraulic conductivity of the aquifer has been estimated at 2,000 gallons/day/ft^2 (9.44 x 10^{-2} cm/sec).

The Magothy (or intermediate) aquifer underlies the upper glacial aquifer. It has a maximum thickness of 1,100 feet and a saturated thickness of about 600 feet. The fine to medium sand and clayey sands are poorly to moderately permeable and may be highly permeable in some areas. The aquifer is unconfined in the uppermost section and confined elsewhere. The hydraulic conductivity of the aquifer has been estimated at 400 gallons/day/ft^2 (1.89 x 10^{-2} cm/sec). Groundwater from the upper section of the aquifer discharges into effluent streams which flow into the Long Island Sound in the vicinity of the site. Groundwater also discharges into the Sound by upward leakage from the intermediate aquifer. The Magothy constitutes the principal aquifer for public drinking water supply.

The clay member of the Raritan formation underlies the Magothy Formation. It may be encountered from 70 to 1,500 feet below ground surface and has a maximum thickness of 300 feet. It is poorly to very poorly permeable and acts as a confining layer for the underlying Lloyd aquifer.

The Lloyd aquifer may be encountered from 200 to 1,800 feet below ground surface and has a maximum thickness of 500 feet. It is poorly to moderately permeable and the water table is confined under artesian pressure.

The bedrock underlying the unconsolidated sediments may be encountered from 0 to 2,700 feet below ground surface. It is poorly permeable to impermeable and is the lower boundary of the groundwater reservoir. Some amounts of freshwater are obtainable from secondary porosity features such as joints and fractures.

Regional groundwater flow at the site is influenced by the presence of the Ronkonkoma moraine which acts as a groundwater divide. South of the moraine, regional groundwater flow is to the south, and north of the moraine flow is to the north (Figure 4.2). The SP Materials site lies to the north of the groundwater divide (Refs. 20, 21, 22, 25).

Groundwater flow direction at the site is towards the northeast and the potentiometric surface of the water table of the upper glacial aquifer underlying the site is approximately 8.5 to 63.4 feet below ground surface in the eastern section of the site (Figure 4.5). Because recovery was almost instantaneous, slug test data could not be collected. The hydraulic conductivities were therefore estimated.

The estimated hydraulic conductivities are within the range for unconsolidated silt, sandy silts, clayey sands and till (Ref. 26). This is consistent with the information presented in the boring logs.

4.5 OTHER DATA

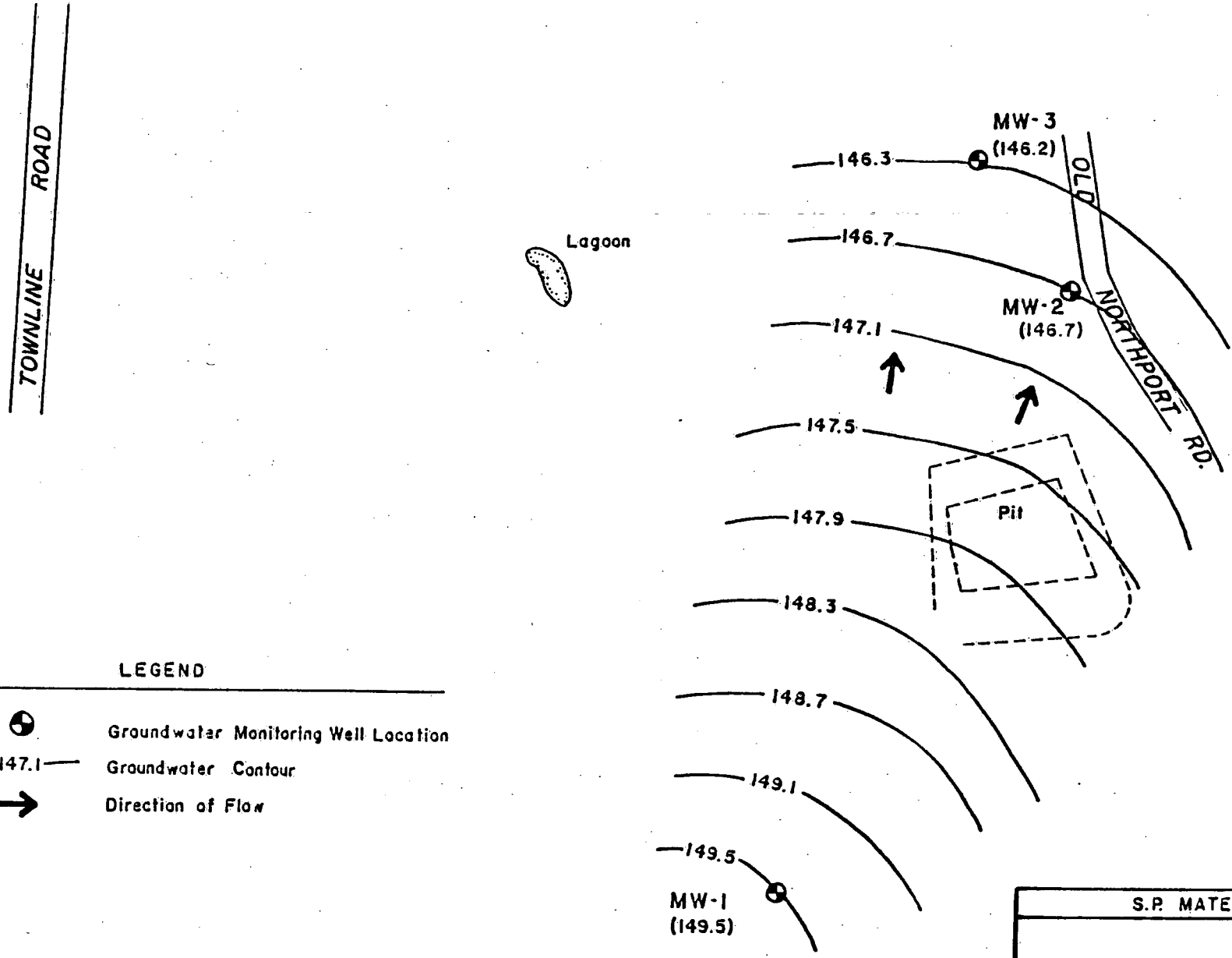
No previous sampling was performed at the site.

4.6 PHASE II RESULTS

4.6.1 Site Inspection

YEC inspected the SP Materials site on May 5, 1992 (Ref. 12). No air monitoring was performed at this site due to the breezy conditions and the dusty nature of the excavated material.

Two YEC inspectors visited the site to: collect site history data, check the proposed locations of the groundwater monitoring wells, screen well locations with magnetometer and Micro-Roentgen radiation monitor, locate, screen and stake soil sampling areas, make note of any drill rig access problems, check on underground (with magnetometer) and above ground obstacles, locate a source of water for drilling operation, designate a decontamination area, stake out soil gas sampling grid points, make note of health and safety concerns, and collect data for the preparation of a site map.



LEGEND

- Groundwater Monitoring Well Location
- 147.1 Groundwater Contour
- Direction of Flow

NOTE: Elevations are static water elevations.

S.P. MATERIALS

Groundwater Contour Map

Scale: 1" = 150'

FIGURE 4.5

4.6.2 Geophysics Data

A magnetometer survey was performed by YEC on site at all proposed well and soil boring locations. Small amounts of surface scrap metal were detected in the sand pit where the soil boring was located and the soil gas survey was to be performed.

4.6.3 Soil Gas Data

A soil gas survey was performed at the site on May 11 and 12, 1992, by Tetra K Testing. Twenty samples were collected at the bottom of the sand pit area at the southeast corner of the site (Figure 4.6 and Ref. 2). A known volume of soil air (i.e. soil gas) was collected from soil pores within a few feet of the soil surface. The gas was analyzed by a gas chromatograph which determined the concentrations of volatile organic compounds present. Based on Henry's Law the concentration of a volatile organic compound in soil air (soil gas) should be directly proportional to the volatile organic compound concentration in groundwater at equilibrium:

$$V_p = K_H C$$

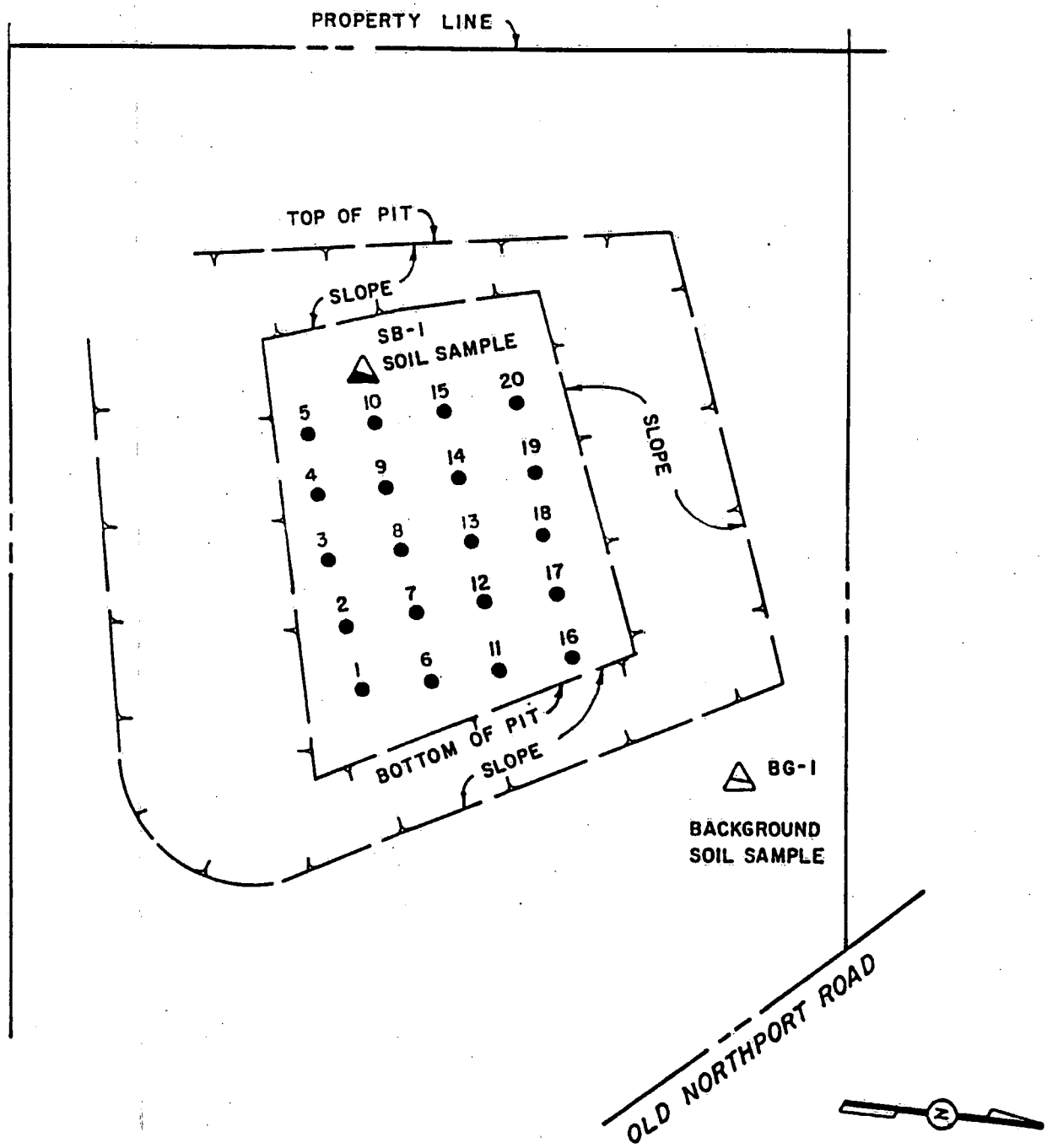
*V_p = Vapor pressure of the chemical

K_H = Henry's Law constant

C = Concentration of the chemical in water

* The vapor pressure of a chemical should be proportional to its concentration (Ref. 27).

Tetrachloroethene (tetrachloroethylene), 1,1,1 trichloroethane (TCA), and trichloroethene (TCE) were detected in the soil gas samples collected from the site. The concentration of tetrachloroethene ranged from 81 to 671 ug/M^3 (0.01 to 0.1 ppm) (Figure 4.7). The highest concentration was detected at sample point SG-9. The concentration of TCA ranged from 0.001 (SG-6) to 0.05 ppm (SG-8) (Figure 4.8). TCE was detected at SG-7 at 0.02 ppm (Figure 4.9). The highest concentrations of these chemicals were detected in the area defined by sample points 6, 7, 8, and 9. This area may be a potential source of contaminant migration to groundwater. However, these compounds were undetected in the soil and groundwater sampling results. Tetrachloroethene, 1,1,1 trichloroethane, and trichloroethene are among the most commonly detected volatile

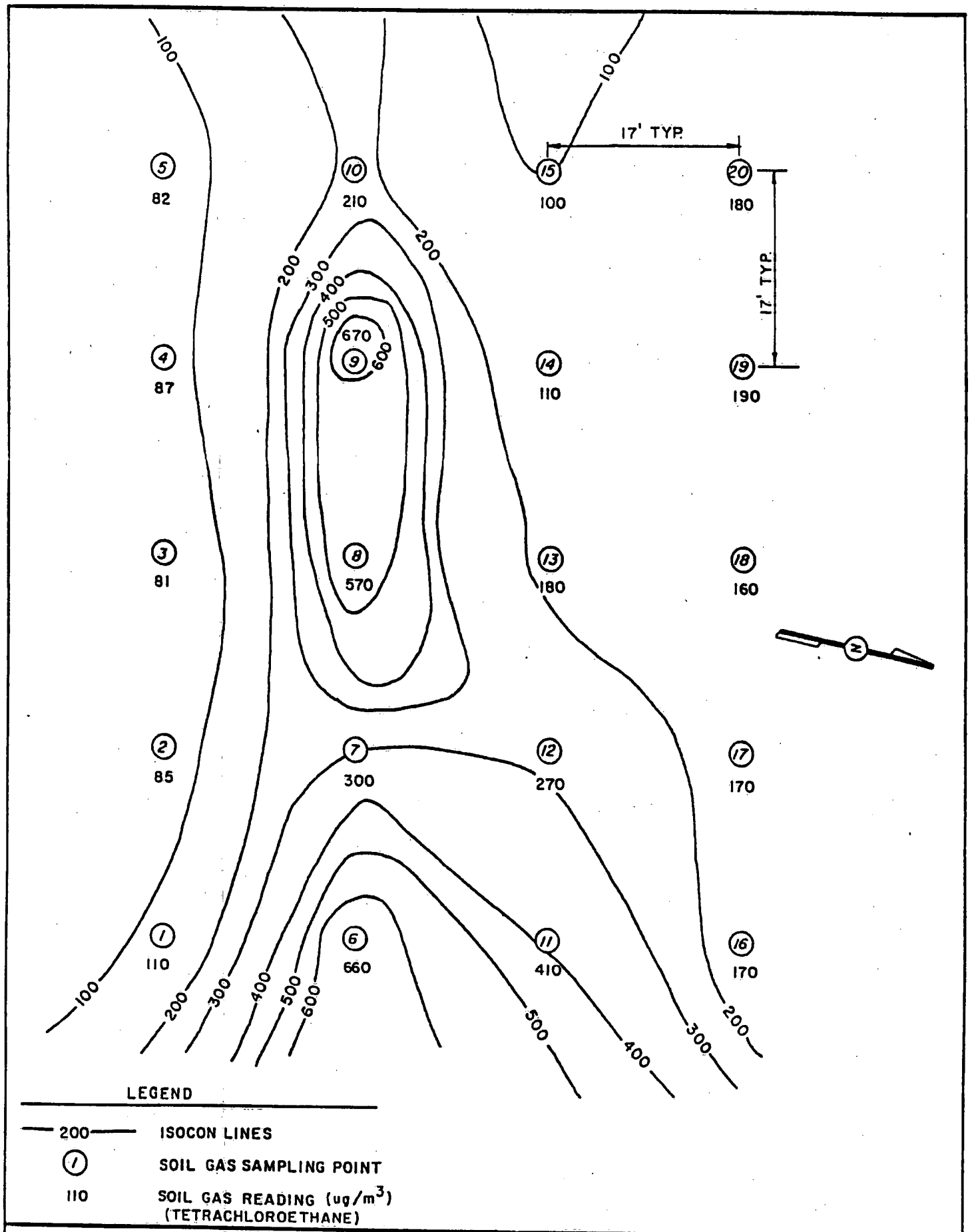


LEGEND

● SOIL GAS SAMPLING POINT
1 LOCATION AND DESIGNATION

SCALE: 1" = 150'

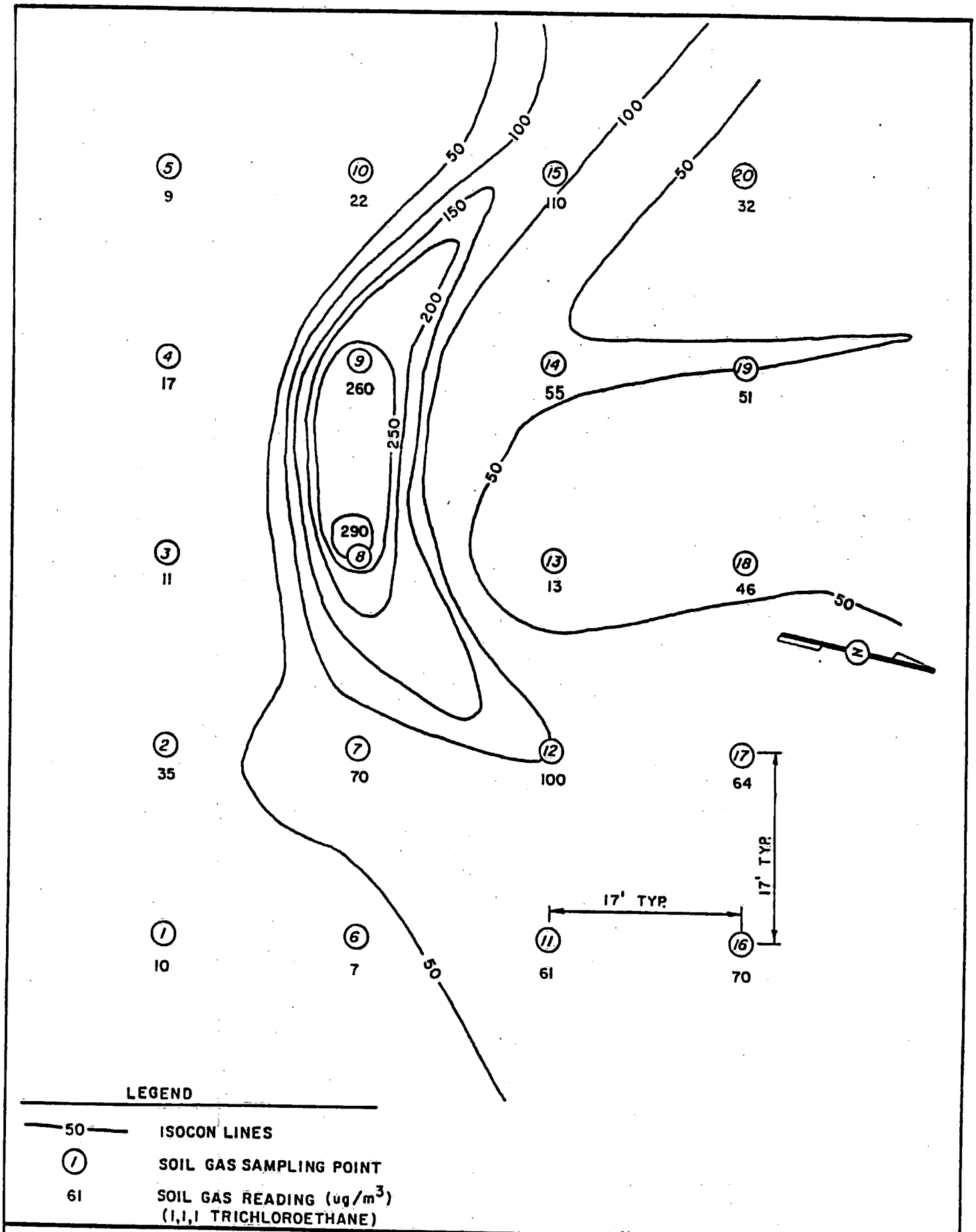
Soil Gas Survey Location Map	S. P. MATERIALS
	FIGURE 4.6



Tetrachloroethane Concentration Contours

S.P. MATERIALS

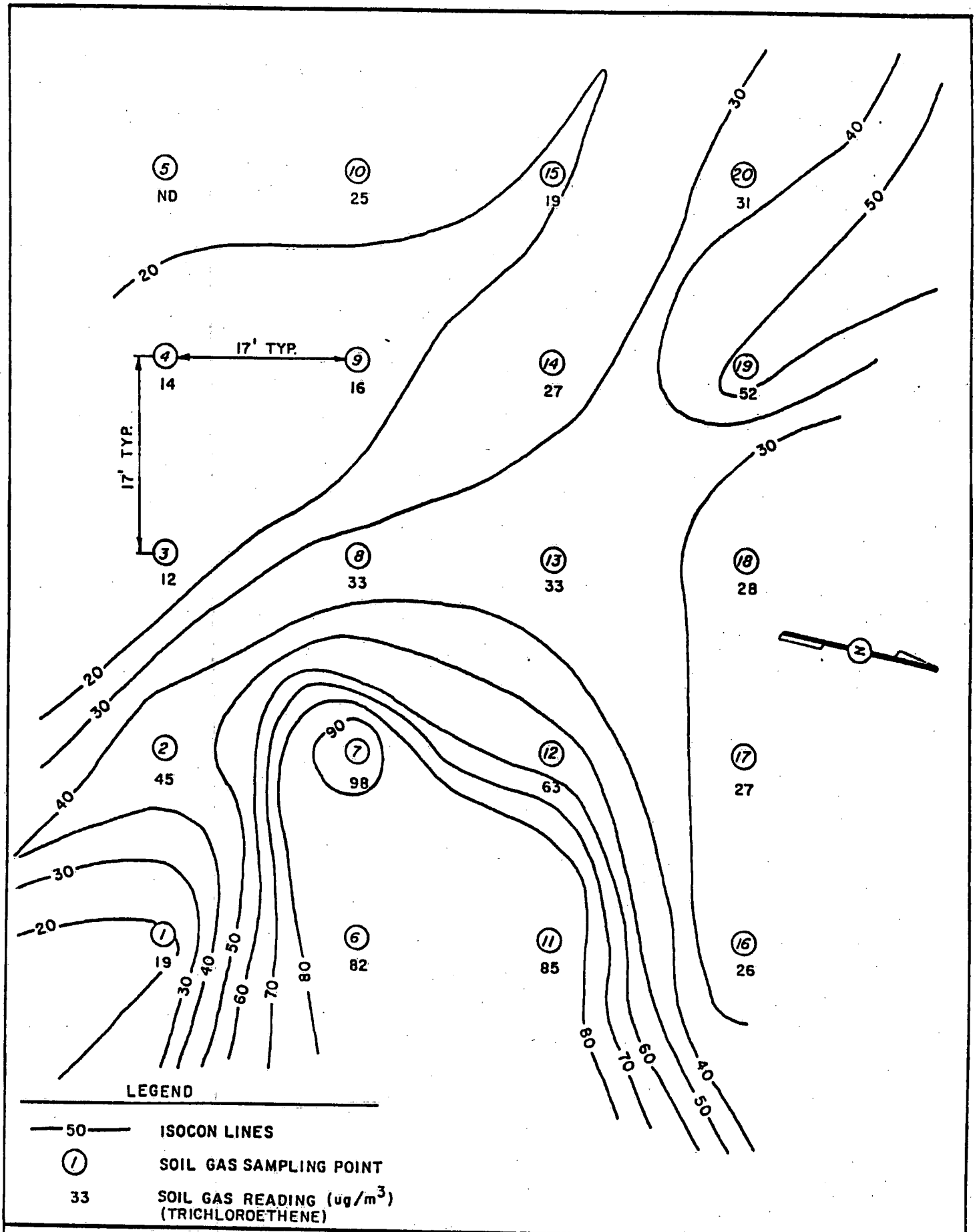
FIGURE 4.7



1,1,1 Trichloroethane Concentration Contours

S.P. MATERIALS

FIGURE 4.8



Trichloroethene Concentration Contours

S.P. MATERIALS

FIGURE 4.9

organic compounds in the upper glacial aquifer. These compounds are usually found in most industrial and commercial solvents. They have low molecular weight and are considerably mobile (Ref. 28).

In a study conducted by the U.S.G.S. a definite correlation was noted between the concentration of TCA and TCE present in area wells and population density and land use. These compounds were detected more frequently as the population density increased, especially in Nassau and west-central Suffolk Counties. Concentrations were highest and most frequent in medium to high density residential, commercial, industrial, institutional, and transportational areas (Ref. 28). A Suffolk County Department of Health Services sampling of nine area wells also indicated the presence of these compounds in concentrations that were high and/or in contravention of standards/guidelines (Ref. 15). The NYS GA standard for each of these compounds is 5 ppb.

4.6.4 Soil Data

4.6.4.1 ***Subsurface Soil Data.*** One soil boring sample (SB-1) was collected at a depth of 10 feet bgs from the bottom of the excavation pit and analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, and pesticides/PCBs (Tables 4.1, 4.2, Figure 4.10 and Refs. 4, 5). Typical ranges of native soil concentrations of various elements in natural soils (background concentrations) are used to evaluate metals concentrations in site soils (Ref. 27).

15 TAL metals were detected in the subsurface soil sample. All the concentrations fell within typical ranges, as reported in the literature.

Methylene chloride, acetone, benzo (g,h,i) perylene, phenanthrene, fluoranthene, pyrene, benzo (a) anthracene, chrysene, benzo (b) fluoranthene, benzo (k) fluoranthene, 4,4'-DDT, alpha-chlordane, and gamma-chlordane were detected in the subsurface soil sample. Methylene chloride, acetone, and benzo (g,h,i) perylene were detected in the laboratory blank samples. Their presence in the field sample is attributable to laboratory contamination. With the exception of alpha and gamma-chlordane (3.0 and 2.2 ug/Kg) all organic compounds were reported below detection limits. The two chlorinated hydrocarbon pesticides were detected just above the detection limit of 1.7 ug/Kg.

TABLE 4.1 SOIL DATA SUMMARY			
SP MATERIALS SITE NYSDEC I.D. No. 152093			
PARAMETER (METALS) (mg/Kg)	NATIVE SOIL CONCENTRATIONS TYPICAL RANGE (r)	BG-1 (Surface)	SB-1 (Subsurface)
Aluminum	10,000 - 300,000	622 *	781 *
Antimony	0.6 -10	ND	ND
Arsenic	1.0 - 40	0.19 B	0.94 B
Barium	100 - 3,500	2.6 B	5.5 B
Beryllium	0.1 - 40	ND	ND
Cadmium	0.01 - 7.0	ND	ND
Calcium	100 - 400,000	24.7 B	130 B
Chromium	5.0 - 3,000	1.5 B	5.6
Cobalt	1.0 - 40	ND	ND
Copper	2.0 - 100	1.4 B	2.6 B
Iron	7,000 - 550,000	1390 E *	2070 E *
Lead	2.0 - 200	0.29 B *	4.1 *
Magnesium	600 - 6,000	222 B	188 B
Manganese	100 - 4,000	36.2 E	53 E
Mercury	0.01 - 0.08	ND	ND
Nickel	5.0 - 1,000	ND	1.2 B
Potassium	400 - 30,000	655 B	370 B
Selenium	0.1 - 2.0	0.34 B	0.19 B
Silver	0.1 - 5.0	ND	ND
Sodium	750 - 7,500	ND	ND
Thallium	0.1 - 0.8 (q)	ND	ND
Vanadium	20 - 500	1.7 B	2.5 B
Zinc	10 - 300	3.5 B	3.8
Cyanide	-	ND	ND

(r) - Dragun, J., The Soil Chemistry of Hazardous Materials.
(q) - Bowman, Environmental Chemistry of the Elements.
B - Value is less than the contract required detection limit but greater than the instrument detection limit.
E - Values estimated due to interference.
N - Spiked sample recovery is not within control limits.

* - Duplicate analysis not within control limits.
W - Post-digestion spike out of control limits; sample absorbance is less than 50% of spike absorbance.
ND - Not detected at analytical detection limit; see Supporting Documentation for detection limit.
NR - Not run.
SA - Value determined by the method of standard addition.

TABLE 4.2 SOIL DATA SUMMARY		
SP MATERIALS SITE NYSDEC I.D. No. 152093		
PARAMETER (ORGANICS) (ug/Kg)	BG-1 (Surface)	SB-1 (Subsurface)
Methylene Chloride	2 B J	4 B J
Acetone	5 B J	11 B
Benzo (g,h,i) Perylene	49 B J	95 B J
Phenanthrene	U	26 J
Fluoranthene	U	40 J
Pyrene	U	29 J
Benzo (a) Anthracene	U	21 J
Chrysene	U	28 J
Benzo (b) Fluoranthene	U	26 J
Benzo (k) Fluoranthene	U	19 J
4,4'-DDT	U	3.5 J P
alpha-Chlordane	U	3.0
gamma-Chlordane	U	2.2

B - This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

U - Indicates a compound was analyzed for but not detected. Refer to Supporting Documentation for detection limit.

D - This flag is used to indicate that the value for the target analyte was calculated from a dilution.

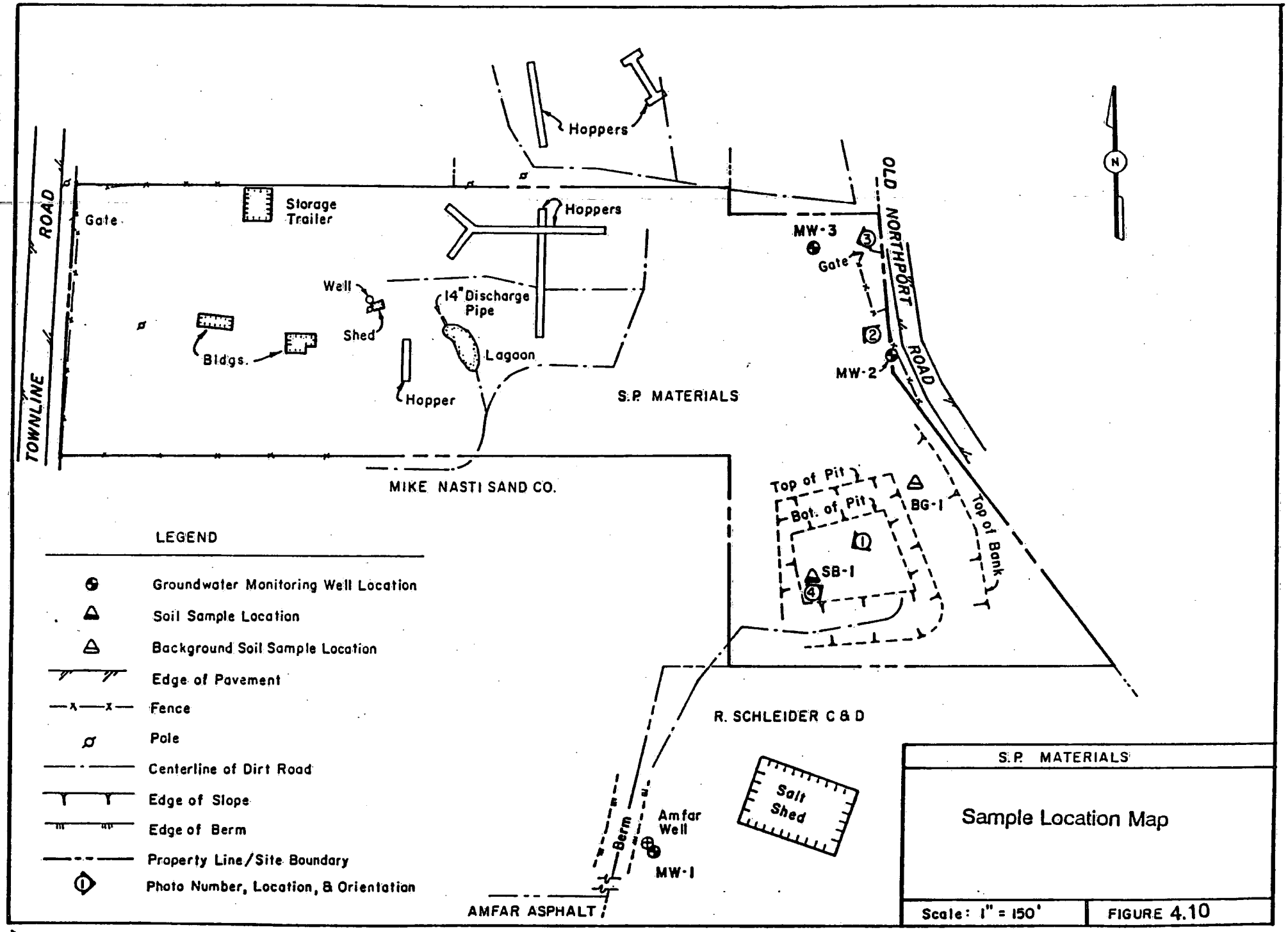
X - Identifies compounds with spectra that do not meet identification criteria in Exhibit (E) E-61.

J - An estimated value. Indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit and greater than zero. Also used to estimate a concentration for tentatively identified compounds.

E - This flag is used to indicate that the quantitation of the analyte is outside the curve and that dilution was required to properly quantitate.

Y - Flag used when a matrix spike compound is also confirmed present in the unspiked sample.

P - Flag is used for a pesticide/Aroclor target analyte when there is > 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported.


Hoppers
Hoppers
Storage Trailer
Gate
TOWNLINE ROAD
Well
Shed
14" Discharge Pipe
Lagoon
Bldgs.
Hopper
S.P. MATERIALS
MIKE NASTI SAND CO.
OLD NORTHPORT ROAD
MW-3
Gate
MW-2
Top of Pit
Bot. of Pit
BG-1
SB-1
Top of Bank
R. SCHLEIDER C & D
Salt Shed
Berm
Amfar Well
MW-1
AMFAR ASPHALT
N
LEGEND
Groundwater Monitoring Well Location
Soil Sample Location
Background Soil Sample Location
Edge of Pavement
Fence
Pole
Centerline of Dirt Road
Edge of Slope
Edge of Berm
Property Line/Site Boundary
Photo Number, Location, & Orientation
S.P. MATERIALS
Sample Location Map
Scale: 1" = 150'
FIGURE 4.10

4.6.4.2 *Surface Soil Data.* One background surface soil sample (BG-1) was collected from an area 20 feet east of the excavation pit and 40 west of the berm and analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, and pesticides/PCBs (Tables 4.1, 4.2, Figure 4.10 and Refs. 4, 5).

Fourteen TAL metals were detected in the surface soil sample. All the concentrations fell within typical ranges, as reported in the literature (Ref. 27).

Methylene chloride, acetone, and benzo (g,h,i) perylene were detected in the surface soil sample and in the laboratory blank samples. Their presence in the field sample is due to laboratory contamination.

4.6.5 Groundwater Data

Three groundwater monitoring well samples were collected on June 30, 1992 and analyzed for TAL metals and cyanide, volatile organic compounds, base neutral acids, and pesticides/PCBs. Sample MW-1 was collected from an upgradient location while MW-2 and MW-3 are considered downgradient wells. MW-4 is a blind duplicate of MW-1. Reproduction of the blind duplicate is good. NYSDEC Class GA standards are used to evaluate groundwater quality (Tables 4.3, 4.4, Figure 4.10 and Refs. 4, 5).

Analytical results are not available for groundwater field blanks for BNA and Pesticide/PCBs. Bottles were received broken by Aquatec on July 1, 1992. It was decided not to redo the procedure as field personnel had already left the site and were in transit. Field blanks for TAL metals, cyanide, and VOA's were in tact.

Eighteen TAL metals were detected in the groundwater samples. Only iron, magnesium, manganese, and sodium were reported above the NYSDEC GA standards and/or guidance values. Both iron and magnesium were detected in the upgradient well MW-1 (6,870 ug/L, 58,400 ug/L) at a higher concentration than the downgradient wells MW-2 and MW-3. Manganese was detected in MW-2 (14,500 ug/L) and MW-3 (11,500 ug/L) over ten and eight times the concentration detected in the upgradient well (1,410 ug/L). Sodium was detected in the downgradient wells MW-2 (285,000 ug/L), MW-3 (73,600 ug/L) and the upgradient well MW-1 (63,600 ug/L). The concentration detected in MW-2 exceeded the concentration detected in the upgradient well MW-1 by more than a factor of four.

TABLE 4.3 GROUNDWATER DATA SUMMARY					
SP MATERIALS NYSDEC I.D. No. 152093					
PARAMETER METALS (ug/L)	NYS STANDARDS/ GUIDANCE VALUES FOR GROUNDWATER (a)	MW-1"	MW-2"	MW-3"	MW-4 (Blind)
Aluminum	NS	84.4 B	405	488	78.8 B
Antimony	3.0 GV	ND	ND	16.7 B	ND
Arsenic	25	4.3 B W	2.0 B W	2.8 B W	4.6 B W
Barium	1,000	91.2 B	74.7 B	69.8 B	97.0 B
Beryllium	3.0 GV	ND	ND	ND	ND
Cadmium	10	ND	ND	ND	ND
Calcium	NS	109,000	114,000	154,000	113,000
Chromium	50	ND	4.9 B	3.3 B	ND
Cobalt	NS	10.4 B	ND	ND	9.6 B
Copper	200	3.6 B	4.1 B	3.6 B	3.3 B
Iron	300 *	6,870	1,030	698	7,580
Lead	25	ND	1.1 B W	2.4 B W	1.3 B W
Magnesium	35,000 GV	58,400	20,400	32,100	61,200
Manganese	300 *	1,410	14,500	11,500	1,480
Mercury	2.0	ND	ND	ND	ND
Nickel	700 (f)	7.0 B	ND	ND	ND
Potassium	NS	13,900	12,200	15,600	12,300
Selenium	10	1.3 B W N	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	63,600	285,000	73,600	66,600
Thallium	4.0 GV	ND	ND	2.1 B	2.0 B
Vanadium	NS	ND	ND	ND	ND
Zinc	300	4.6 B	8.9 B	9.4 B	4.3 B
Cyanide	100	ND	ND	ND	ND

(a) - NYS Ambient Water Quality Standards, TOGS 1.1.1., November 1991.
GV - Guidance value.
E - Value estimated due to interference.
W - Post digestion spike out of control limits; sample absorbance is less than 50% of spike absorbance.
SA - Value determined by the method of standard addition.
(f) - USEPA health-based criteria for Systemic Toxicants, May 1989.
* - Iron and manganese not to exceed 500 ug/L.
ND - Not detected at analytical detection limit; see Appendix G for detection limit.
NS - No standard.
B - The reported value is less than the contract detection limit (CDL) but greater than the instrument detection limit (IDL).
u - Upgradient well.
d - Downgradient well.
F - Filtered sample.

TABLE 4.4 GROUNDWATER DATA SUMMARY					
SP MATERIALS NYSDEC I.D. No. 152093					
PARAMETER ORGANICS (ug/L)	NYS STANDARDS/ GUIDANCE VALUES FOR GROUNDWATER (a)	MW-1[u]	MW-2[d]	MW-3[d]	MW-4 (Blind)
Acetone	50	75	ND	ND	ND
Diethylphthalate	50 GV	ND	0.6 J	ND	ND
Di-n-butylphthalate	50	ND	0.8 J	ND	ND
Bis(2eth.)phthalate	50	ND	1 B J	2 B J	1 B J

(a) - NYS Ambient Water Quality Standards, TOGS 1.1.1., November 1991.

ND - Indicates a compound was analyzed for but not detected. Refer to Supporting Documentation for detection limit.

D - This flag is used to indicate that the value for the target analyte was calculated from a dilution.

X - Identifies compounds with spectra that do not meet identification criteria in Exhibit E-61.

J - An estimated value. Indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit and greater than zero. Also used to estimate a concentration for tentatively identified compounds.

B - This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - This flag is used to indicate that the quantitation of the analyte is outside the curve and that dilution was required to properly quantitate.

Y - Flag used when a matrix spike compound is also confirmed present in the unspiked sample.

u - Upgradient well.

d - Downgradient well.

Acetone was the only organic compound detected in the groundwater that exceeded NYSDEC GA standards and/or guidance values. It was detected in the upgradient well (75 ug/L) and may not be attributable to the site.

4.7 CONCLUSIONS

4.7.1 Soil

4.7.1.1 *Subsurface Soil.*

No TAL metals were detected outside the typical range of elements for soils in the subsurface soil sample SB-1. Two chlorinated hydrocarbon pesticides, alpha and gamma chlordane were reported just outside the detection limit. Chlordane is used as an insecticide and fumigant. It is toxic by ingestion, inhalation, and skin absorption. It is not easily broken down and therefore persists in soil. It is mobile and contamination of groundwater and/or surface water is possible. However, it was not detected in the groundwater samples. It is harmful to aquatic life in low concentrations (0.5 ppm) (Refs. 29, 30, 31).

4.7.1.2 *Surface Soil.*

No TAL metals were detected outside the typical range of elements for soils in the surface soil sample BG-1. No organic compounds were reported above the detection limit.

4.7.2 Groundwater

Of the four TAL metals that contravened the NYSDEC GA standards and/or guidance values, only manganese and sodium were detected at greater concentrations in the downgradient wells. The high concentration of sodium reported for both downgradient wells may be due to runoff from Old Northport Road which is located just east of the wells. MW-2, which is closer to the road, had a higher concentration of sodium than did MW-3, which is located more than 80 feet west of the road. Manganese was detected in leachate samples collected from the East Northport Landfill which is located just west of the site. It has been reported that the leachate plume from the landfill moves in a

northeasterly direction (Ref. 16). The concentration detected in the upgradient well also exceeded the standards. Acetone exceeded the NYSDEC GA standard for this organic compound. It was detected in the upgradient well and may not be attributable to the site.

4.8 RECOMMENDATIONS

This investigation did not discover documented disposal of hazardous waste on the site as per 6 NYCRR part 371. It is therefore recommended that the SP Materials site be removed from the Inactive Hazardous Waste Registry.

REFERENCES CITED

1. YEC, Inc., 1992. Health and safety plan.
2. Tetra K Testing. 1992. Soil gas survey.
3. YEC, Inc., 1992. Sampling logs.
4. Aquatec, Inc., 1992. Analytical data package.
5. Data Validation Services, 1992. Data validation report.
6. Empire Soils, 1992. Grain size analysis.
7. Mining Permit Application and Reclamation Report, NYSDEC Department of Mines, 1/13/83 (Appendix D).
8. YEC, Inc., Phase I Hazardous Waste Site Investigation, SP Materials, September, 1989 (Appendix D).
9. Mining Permit Attachment, NYSDEC Department of Mines, 5/16/83 (Appendix D).
10. Permit for a Construction and Demolition Site, NYSDEC, 7/1/83 (Appendix D).
11. Letter to SP Materials, from NYSDEC Region I, 9/28/84, re: inspection reports (Appendix D).
12. YEC, Inc., 1992. Site inspection report.
13. Interoffice Memorandum, NYSDEC Region I, 11/21/89, re: SP Phase I report (Appendix D).
14. Dvirka and Bartilucci, RIFS Study Work Plan, East Northport Landfill, August 1988 (Appendix D).
15. Interoffice Memorandum, Town of Huntington, N.Y., 8/13/84, re: summary of SCDHS private well sampling (Appendix D).
16. YEC, Inc., Phase II Hazardous Waste Site Investigation, Amfar Asphalt Corp., October 1990 (Appendix D).
17. NYSDEC, Quarterly Status Report of Inactive Hazardous Waste Disposal Sites, April 1992 (Appendix D).

REFERENCES
(Continued)

18. USGS 7.5 minute Series (Topographic) Quadrangle, Greenlawn and Northport, New York, 1969.

19. Suter, R., et al., 1949. Mapping of Geologic Formations and Aquifers of Long Island, New York, USGS Bulletin GW-18, Albany, N.Y.

20. Smolensky, D.A., et al., 1989. Hydrologic Framework of Long Island, New York, USGS Hydrologic Investigations Atlas, Albany, N.Y.

21. Lubke, E.R., 1964. Hydrogeology of the Huntington - Smithtown Area, Suffolk County, New York, USGS Water-Supply Paper 1669-D., Washington D.C.

22. Mack, T., Maus, P.E. Direction of Contaminant Plumes in Ground Water of Long Island, New York, By Electromagnetic Terrain- Conductivity Surveys, USGS Water-Resources Investigations Report 86-4045.

23. Warner, J.W. et al., 1975. Soil Survey of Suffolk County, New York, United States Department of Agriculture, Soil Conservation Service, April 1975.

24. USEPA, 1983, 1984. Designation of 17 Sole Source Aquifers, USEPA 45 FR. 52621 (Appendix D).

25. Doriski, T.P., 1987. Potentiometric-Surface of the Water-Table, Magothy & Lloyd Aquifers on Long Island, New York, USGS Water-Resources Investigations Report 86-4189.

26. Fetter, C.W., 1988. *Applied Hydrogeology*, second ed., Merrill Publishing Co., Columbus Ohio.

27. Dragun, J., 1988. *The Soil Chemistry of Hazardous Materials*, Hazardous Materials Control Research Institute, Silver Spring, Maryland.

28. Eckhardt, A.V., et al. 1989. Relation Between Land Use and Ground-Water Quality In The Upper Glacial Aquifer In Nassau and Suffolk Counties, Long Island, New York, USGS Water-Resources Investigations Report 86-4142.

29. Lewis, R.S., Sr. and N.I.Sax, 1987. *Hawley's Condensed Chemical Dictionary*, eleventh ed. Van Nostrand Reinhold, New York, N.Y.

30. CHRS Data Sheets, Chlordane (Appendix D).

31. Bassow, H., 1983. *Land Pollution Chemistry: An Experimenters Source Book*, Hayden Book Company, Inc., Rochelle Park, N.J.

APPENDIX A

BORING LOGS AND WELL DIAGRAMS

Drilling Log

Project SP Materials Owner Stephen Pomaro

Location Kings Park, LI. W.O. Number Site# 152093

Well Number SB-1 Total Depth 10 feet Diameter 2"

Surface Elevation 155.77' Water Level: Initial 7-8' BGS 24-hrs. NA

Screen: Dia. NA Length NA Slot Size NA

Casing: Dia. NA Length NA Type NA

Drilling Company Delta Well / Pump Drilling Method Tri-Pod 2" Split Spoon

Driller Luke / Mike P. Log By Cunningham / Mecca Date Drilled 6-22-92

Sketch Map

Notes
BGS - Below Ground Surface

Depth (Feet)	Graphic Log	Well Construction	Sample Number	Description/Soil Classification (Color, Texture, Structures)
1			1	0-2' (1-2-2-4) RCV = 1' Light tan med-crse. sand, trace gravel Recent Fill material HNV = 0 (65 = 0
2				
3			2	2-4' (10-15-15-20) RCV = .8' Brown fine-crse. Sand and gravel HNV=0
4				
5			3	4-6' (15-18-22-30) RCV = 1.5' Dry Light Brown fine to crse. Sand and gravel. No visual contamination. HNV = 0
6				
7			4	6-8' (4-12-16-22+) RCV = 1' Moist-Saturated fine-coarse sand and gravel ▽ 7-8' HNV = 0
8				
9			5	8-10' (20-22-45-62) RCV = 2.0'
10				8-9.0' Light Brown sand-gravel (med.-coarse) (Saturated)
				8.5 Dark brown sand-gravel (med-coarse (Saturated)
				9-10' Light tan fine-coarse sand and gravel (Saturated)
				* Chemical Analytical Sample Metals/CN/SVOA/Pest/PCB/VOA

Drilling Log

Project SP Materials Owner Stephen Pomaco

Location Smithtown, L.I. W.O. Number Site # 152093

Well Number MW-1 Total Depth 20 ft. Diameter 2 inch

Surface Elevation 158.00 Water Level: Initial 9.5' BGS 24-hrs. 8.5'

Screen: Dia. 2 inch Length 10 ft Slot Size .010

Casing: Dia. 2 inch Length 10 ft Type PVC

Drilling Company Delta Well / Pump Drilling Method HSA 4.25" I.D.

Driller Lou K / Mike P. Log By Cunningham / Meeca Date Drilled 6-19-92

Sketch Map

Notes
BGS - Below Ground Surface

Depth (Feet)	Graphic Log	Well Construction	Sample Number	Description/Soil Classification (Color, Texture, Structures)
1, 2			1	0-2' (3-10-14-16) RCV = 6" Dry br. sand and gravel + brick fragments HNV = 0 Fill material
4, 5			2	5-7 (3-6-8-16) RCV = 1.5' Black-brown med. sand (Fill) some gravel Moist HNV = 0
7, 8			3	10-12 (6-7-7-8) RCV = 1.3' 10'-10.65' Brown, med. sand (fill) CGE = 0 10.65-11.3 Med.-crs. sand, lt. br.-tan - Saturated HNV = 0 ▽ 10.6' BGS - 10.9' BGS
11, 12			4	15-17' (3-4-6-8) RCV = 1' Saturated brown-tan fine-crse. sand, some gravel HNV = 0 CGE = 0
15, 16			5	20-22' (2-5-6-8) RCV = 1.5' Saturated fine-crse. sand and gravel HNV = 0 ▽ 9.5' BGS.
			*	HNV = 0, CGE = 0 also means no readings > Background

Drilling Log

Project SP Materials Owner Stephen Pomaro

Location Commack, L.I. W.O. Number Site #: 152093

Well Number MW-2 Total Depth 75 Feet Diameter 2 inch

Surface Elevation 210.07 Water Level: Initial 64 ft. 24-hrs. 63.43 ft BGS

Screen: Dia. 2 inch Length 10 ft. Slot Size .010

Casing: Dia. 2 inch Length 65 ft. Type PVC

Drilling Company Delta Well/Pump Drilling Method HSA 4.25 inch I.D. 6-16-92

Driller Luu/Mike P. Log By Cunningham/Mecca Date Drilled 6-17-92

Sketch Map

Notes
Water Levels Below Ground Surface (BGS)

Depth (Feet)	Graphic Log	Well Construction	Sample Number	Description/Soil Classification (Color, Texture, Structures)
3			1	RCV = 18.5" 0-2' (6-20-26-25) Fine-Med. Sand and gravel (Dry) HNU=0 CGE=0
6			2	5-7' (1-3-5-6) RCV = 1.2' 5-5.6' Fine-Med. Sand and gravel (coarse)
9				5.6-6.2' Med. to CRS. Sand (Dry X reddish color) HNU=0 CGE=0
12			3	10-12' (5-6-7-7) RCV=18" 10'-10'5" (Dark fine to med. sand, Some gravel Dry
15				10'5"-11'6" Light Brown fine-med. Sand (Slightly moist) trace silt HNU=0
18			4	15-17' (5-6-7-7) RCV=.9' Light Brown-tan Moist CRS sand, Some gravel HNU=0 CGE=0
21			5	20-22' (2-6-8-9) RCV=1' 0-2" Dry Fine-med. sand, 2"-4" Fine-med sand
24				With black film, 4"-12" Dry Fine-med sand, gravel, trace silt HNU=0 CGE=0
27			6	25-27' (3-4-8-9) RCV=18", 0-2" Moist fine-med sand w/Black film, 2"-18"
30				Moist, Lt. brown-tan med-crse sand
33			7	30-32' (2-4-8-12) RCV=1.2' DRY Lt. Br-tan med-crse sand and gravel CGE=0 HNU=0
36			8	35-37' (4-8-12-15) RCV=1.5', 0-14", Light tan fine-crse sand-Dry) Crossbedding
39				14"-16" Light gray med. sand, 16"-18" Same as 0-14" HNU=0 CGE=0
42			9	40-42' (3-4-8-6) RCV=14" (1.16'), 0-12" Lt. tan-br. med. Sand-Dry, 12"-14"
45				Dry, dark, gray-br. med. Sand HNU=0 CGE=0
48			10	45-47' (5-4-6-6) RCV=12"-14" Slightly moist Lt. tan-br. med. sand HNU=0
51			11	50-52' (4-14-22-26) RCV=1.4' Light tan-brown Med. Sand (Dry) HNU=0
54			12	55-57' (6-2-26-28) RCV=1' Light br-tan med. sand, (compact, slightly Moist HNU=0
57			13	60-62' (4-14-19-22) RCV=1.5' Dry Lt. Br-tan med. Sand HNU=0 CGE=0
60			14	65-67' (4-18-16-20) RCV=1.2' Moist-Saturated Lt. Br-tan med. sand HNU=0 CGE=0
63				∇_{w} = 66'
66			15	70-72' (3-10-15-30) RCV=2' 70-71' med-crse sand 71'-72' fine sand Some stratification in Sand
69				HNU=0 CGE=0
72				Water level = 64' BGS
75			16	72'-74' (1-2-2-5) RCV=2' Lt. brown-tan med. Sand-Saturated
78				
			*	HNU=0, CGE=0 also means no readings > Background

Drilling Log

Project SP Materials Owner Stephen Pomaro

Location Commack, L.I. W.O. Number Si.6# 152093

Well Number MW-3 Total Depth ≈ 50 FEET Diameter 2 inch

Surface Elevation 186.17 Water Level: Initial 40 ft BGS 24-hrs. 40' BGS

Screen: Dia. 2" inch Length 10 feet Slot Size .010

Casing: Dia. 2" inch Length 40 feet Type PVC

Drilling Company Delta Well / Pump Drilling Method HSA 4.25" I.D.

Driller Lou K. / MIKE P Log By Cunningham / MECCA Date Drilled 6-18-92

Sketch Map

Notes
BGS - Below Ground Surface

Depth (Feet)	Graphic Log	Well Construction	Sample Number	Description/Soil Classification (Color, Texture, Structures)
2			1	0-2' RCV=1.3' Br. med-crse sand and gravel (moist)
4				Hitting concrete at 3 ft., wire (fence, aluminum) HNU=0
6			2	5-7' (4-7-6-6) RCV = .8' dk. brown med. sand and gravel (moist) HNU=0 CGI=0
8			3	10-12' (5-10-20-15) RCV=1.0' Brown sand and gravel (pieces of wood &
10				plastic HNU=3
12			4	15-17' (5-15-17-6) RCV=.7' Brown med.-crse sand and gravel (DM)
14			5	20-22' (5-8-12-12) RCV=1.0' Tan med. sand (Bedded) HNU=0 CGI=0
16			6	25-27' (4-5-6-18) RCV=1.2' Virgin sand (Tan med. sand) (Bedded) HNU=0
18			7	30-32' (4-8-18-20) RCV=1.3' Same as 25-27'
20			8	35-37' (3-5-7-15) RCV=1.2' Moist Med.-crse sand, some gravel
22				Some bedding
24			9	40-42' (3-6-10-11) Crs. sand, some gravel Wet-saturated below 41'
26			10	45-47' (7-16-8-14) Saturated tan-brown-reddish med-crse. sand
28				and trace gravel
30				Water level ≈ 40' BGS
32			11	50-52' Med. crse. sand - trace gravel
34				
36				
38				
40				
42				
44				
46				
48				
50				
52				
			*	HNU=0, CGI=0 also means no readings > Background

APPENDIX B

WELL DEVELOPMENT/PURGING LOGS

YEC, Inc. Well Development/Purging Log

Site name & number: SP Materials Well #: MW-1

well casing and screen inner diameter (i.d.) in inches = 2"

G = # of gallons/foot of water in well = 0.17

To determine G:

well i.d.	1"	2"	3"	4"	5"	6"	8"
gals/ft	0.04	0.17	0.38	0.66	1.04	1.50	2.60

L1 = total casing and screen length (feet) = 20'

L2 = static water level ~~below top of casing~~ BGS (feet) = 8.5'

WV = one well volume (gallons) = 1.955

WV = G(L1 – L2) = .17 (20'-8.5') = 1.955 gallons

BGS - Below Ground Surface

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
WV's	6	12	18	24	30	36	42	45		
pH	7.19	7.20	7.30	7.32	7.35	7.32	7.30	7.32		
Spec. cond.	1350	1332	1305	1290	1272	1220	1230	1206		
Temperature	12.3	12.2	12.2	12.2	12.2	12.2	12.2	12.2		
turbidity (ntu's)	>100	46	22	40	19	34	60	28		

METHODS/COMMENTS:

23 well volumes pumped from well at different depths in the screened interval.

personnel present: MARK MECCA / BOB Cunningham date: 6-22-92

YEC, Inc. Well Development/Purging Log

Site name & number: SP MATerials Well #: MW-2

well casing and screen inner diameter (i.d.) in inches = 2"

G = # of gallons/foot of water in well = .17

To determine G:

well i.d.	1"	2"	3"	4"	5"	6"	8"
gals/ft	0.04	0.17	0.38	0.66	1.04	1.50	2.60

L1 = total casing and screen length (feet) = 75.0

L2 = static water level below ~~top of casing~~ BGS (feet) = 63.43

WV = one well volume (gallons) = 1.96 gallons

WV = G(L1 – L2) = .17(11.57) = 1.96 gallons

BGS – Below Ground Surface

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	3gal	12gal	21	27	34	40	43	46		
WV's										
pH	7.54	7.28	7.4	7.27	7.30	7.35	7.38	7.36		
Spec. cond.	975	2200	2300	2860	2840	2680	2700	2900		
Temperature	17.3	18.1	17.4	17.7	16.8	16.3	16.1	16.0		
turbidity (ntu's)	>200	-	-	-	11	-	36	10		

METHODS/COMMENTS:

* 23.5 Well volumes pumped from well

personnel present: MARK Mecca/BOB Cunningham date: 6/18/92

YEC, Inc. Well Development/Purging Log

Site name & number: SP MATERIALS Well #: 6-22-92 / MW-3

well casing and screen inner diameter (i.d.) in inches = 2"

G = # of gallons/foot of water in well = 0.17

To determine G:

well i.d.	1"	2"	3"	4"	5"	6"	8"
gals/ft	0.04	0.17	0.38	0.66	1.04	1.50	2.60

L1 = total casing and screen length (feet) = 50.00'

L2 = static water level below top of ~~casing~~ ground surface (feet) = 40.00'

WV = one well volume (gallons) = 1.7 gal

WV = G(L1 – L2) = .17(10') = 1.7 gallons

BGS (Below Ground Surface)

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	6	12	15	21	27	33	39			
WV's										
pH	7.5	7.1	7.1	7.5	7.2		7.3			
Spec. cond.	cp 1032	cp 950 ll 1340	cp 1040	1100	1080	64	cp 1040 ll 1210			
Temperature	12.3	12.5	12.1	12.6	12.3		12.4			
turbidity (ntu's)	–	–	10	26	11	29	18			
Depth in Screened Interval.	42'	42'	42'	45'	49'	49'	49'			

METHODS/COMMENTS:

*23 Well Volumes pumped from well

personnel present: Mark Mecza, Bob C. date: 6-22-92

APPENDIX C

DATA USABILITY SUMMARY

Data Validation Services

Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429

TO: YEC, Inc.

FROM: Judy Harry, Data Validation Services J. Harry

DATE: 10-12-92

RE: Validation report for SP Materials Site

Aquatec, Inc. Case Nos. 32083 and 32209
SDG Nos. 162421 and 163011

Review has been completed for the data package generated by aquatec, inc. pertaining to samples collected at the SP Materials Site. Four groundwater and two soil samples were analysed for TCL CLP parameters. Field and trip blanks were processed; matrix spikes/duplicates were analysed for the two matricies. Methodologies utilized were those of the 12/91 NYSDEC ASP.

In summary, sample reported values were substantiated by the raw data, with exceptions as noted below. Any noncompliancies with protocol are discussed in the sections below and indicated on the compliancy chart. No specific internal chain-of-custody documentation was available for this project. The sample handling and preparation sections of the data package are very complete with all associated processing documentation. Technician/analyst/reviewer signatures or initials are present for all levels of handling.

The field blank associated with the aqueous samples was processed only for volatiles and metals due to shortage of submitted sample.

Recommended edits and qualification of sample reported results are as follows:

1. The BNA analysis of the aqueous samples shows detection of numerous polyalkoxy-propanols as Tentatively Identified Compounds (TICs). Although these compounds were not detected in the associated method blank, they should be considered extraction by-products, and rejected as sample components. There are TICs identified in the soil samples which are also present in their associated method blank. They are correctly anotated with a "B" to indicate such.

VOLATILE ANALYSES

Method blank, and instrumental tune criteria were met for sample processing. All aqueous and soil surrogate recoveries were within required ranges. The aqueous matrix spikes of MW-1 and the aqueous matrix spike blank produced acceptable recoveries and duplicate correlation. The soil matrix spikes of SB-1 and the soil matrix spike blank produced acceptable recoveries and duplicate correlation.

Initial and continuing calibration standards were within all required criteria, and internal standard areas and retention times were consistent. All quantitative values were reported with accuracy, target analyte spectra were good, and tentatively identified compound identifications were very well determined.

SEMIVOLATILE ANALYSES

Holding times and instrumental tune criteria were met for sample processing. The aqueous and soil surrogate recoveries for the samples were acceptable. Soil sample SB-1 recovered 2,4,6-tribromophenol at the lowest allowable recovery of 10%. The matrix spike duplicates of this sample exhibited the same depressed recovery for this compound. Sample reported results are not affected.

The soil sample matrix spikes of SB-1 and the matrix spike blank produced acceptable recoveries and duplicate correlation. The aqueous matrix spikes of sample MW-1 produced elevated recoveries for 4-nitrophenol (at 112% and 120%; above the 80% limit), and pentachlorophenol (at 188% and 186%; above the limit of 103%). The outlying pentachlorophenol recoveries in the matrix spike is likely related to the outlying response for that compound in the associated continuing calibration standard (discussed below). The aqueous matrix spike blank, which was not analysed during the same sequence, produced recoveries which were all within limits.

Please see the above discussion regarding TICs which are resultant of the extraction process. Initial and continuing calibration standards were within all required criteria for the soil analyses. However, the continuing calibration standard associated with samples MW-1, MW-2, MW-3, MW-4, and the matrix spikes of MW-1 showed outlying response for pentachlorophenol with a percent difference value of 47.9%, above the allowable limit of 40%. Although sample matrix spike recoveries were elevated, sample reported results are not affected by this noncompliancy. Internal standard areas and retention times were consistent. All quantitative values were reported with accuracy and target analyte spectra were good.

PESTICIDE/PCB ANALYSES

Holding times and method blank criteria were met for sample processing. Sample surrogate recoveries were all within recommended limits. One method blank had recoveries for surrogate standard DCB at 161% and 160%. Surrogate TCX recovered within recommended range for this blank.

Sample matrix spikes on aqueous sample MW-1 and soil sample SB-1 produced recoveries and precision values within the recommended ranges. Both matrix spike blanks were within required range. All required preparation and analytical system evaluations were reviewed and found acceptable and compliant with protocol requirements.

All sample reported results are substantitated by the raw data.

METALS/CN ANALYSES

All quality control criteria required by protocol were reviewed and found to be acceptable. All reported sample results and summary form values are supported by the raw data.

The aqueous matrix spike of MW-1 produced one outlier from the recommended range of 75 to 125%, with selenium at 60.7% The soil matrix spike of SB-1 produced no outliers. Duplicate correlation and serial dilution values of MW-1 were all within recommended limits. The serial dilution of the soil sample SB-1 produced values just exceeding ten

percent difference for iron and manganese (10.4 and 10.7%, respectively). Soil duplicate correlation (SB-1) indicated values exceeding the recommended limits for aluminum, iron, and lead by graphite furnace. Relative percent differences for these elements are 29.5%, 31.3%, and 33.7%, respectively; above the limit of 20%.

CONVENTIONALS

Total solids determinations for the soils were reviewed. Total dissolved solids, total suspended solids, and chemical oxygen demand data was reviewed. All conventional analyses were found acceptable for methodology, holding time, associated QC, and transcription.

APPENDIX D

PERTINENT FILES OR RECORDS

85-19-2 (2/77)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BUREAU OF MINERAL RESOURCES

MINING PERMIT APPLICATION AND RECLAMATION REPORT

SECTION A

1. N.Y.S MINE FILE NO.
2. NAME OF APPLICANT OR PERMITTEE: S P Materials Inc
3. TELEPHONE NO. (Include Area Code): (516) 266-1000
4. MAILING ADDRESS: 170 Towaline Rd Kings Park N.Y. 11754
5. COMMON NAME OF MINE: Same
6. LOCATION OF MINE
   County: Suffolk
   Town: Kings Park
   U.S.G.S. DESIGNATION
   (a) Northport
   (b) 7.5 Minutes
   (c) 5.7 Inches Top
   (d) 5.0 Inches Right
7. TYPE OF SUBMITTAL
   - [x] Original Application
   - [ ] Renewal Application
   - [ ] Renewal WITH Amendment Application
   - [ ] Amendment Application
   - [ ] Transfer Application
   - [ ] Reclamation Report

SECTION B

8. PERMIT TERM:
   Previous Term: [ ] Annual [ ] Triennial
   Coming Term: [ ] Annual [x] Triennial
9. STATUS OF OTHER N.Y.S. MINE FILE NUMBERS. LIST FILE NUMBERS UNDER APPROPRIATE HEADING.

Active	Inactive	Refused	Suspended	Revoked	Reclamation Bond Forfeited
1028-32					

10. Has any owner, partner, corporate officer or corporate director of your organization ever held any of these positions in another organization which has had a New York State mining permit SUSPENDED OR REVOKED or has had a New York State mined land reclamation bond FORFEITED? [x] No [ ] Yes
    If "Yes", identify the person(s)
11. COMMON OR COMMERCIAL NAME OF THE MINERAL TO BE MINED: Bankrun
12. TYPE OF GEOLOGIC DEPOSIT: Sand
13. TYPE OF MINE
    - [ ] Surface Consolidated
    - [x] Surface Unconsolidated
    - [ ] Underground
14. ESTIMATED LIFE OF MINE: 3 Years
15. ESTIMATED NO. OF ACRES TO BE AFFECTED BY MINING DURING THIS:
    A. Coming Year 1 Acres
    B. Remainder of Year N/A Acres
16. HAS THE PROPOSED RECLAMATION PLAN BEEN DEVELOPED IN COOPERATION WITH ANY OF THE FOLLOWING:
    - [ ] Department of Environmental Conservation
    - [ ] County Soil and Water Conservation District
    - [ ] Consultant (Identify)
    - [ ] Soil Conservation Service
    - [ ] Cooperative Extension Office
    - [ ] Other (Identify)

SECTION C

17. NAME AND MAILING ADDRESS OF THE MINERAL OWNER: Same
18. NAME AND MAILING ADDRESS OF THE SURFACE LANDOWNER: Same
19. As the surface landowner of the property which is to be mined, I have been advised by the applicant of the contents of the reclamation plan.
    SIGNATURE OF LANDOWNER: [illegible] of S P Materials Inc
    DATE: 1-13-83

SECTION D

20. What is the present zoning classification of the property to be mined? Light Industry
21. Does the proposed land-use objective conform to officially adopted COUNTY and/or TOWN planning? [ ] Yes [ ] No If "No", explain in block 25.
22. Does local government have any reclamation standards which apply to this mine? [ ] No [ ] Yes If "Yes", explain below in block 25.
23. Is the applicant required to have a local mining permit? [ ] No [ ] Yes If "Yes", enter the Permit Identification No.
24. Is the applicant required to have a local mining reclamation bond? [ ] No [ ] Yes If "Yes", what is the (a) amount of the bond $
    (b) name and address of the surety
25. COMMENTS RELATIVE TO QUESTIONS IN SECTION D
26. NAME AND MAILING ADDRESS OF LOCAL GOVERNMENT: Town of Smithtown
    TELEPHONE NO. ( )
27. As the Chief Administrative Officer of the municipality having immediate jurisdiction over the proposed mine site, I have been advised by the applicant of the contents of the reclamation plan.
    NAME, TITLE AND SIGNATURE OF CHIEF ADMINISTRATIVE OFFICER: In process of filing for town permit
    DATE

SECTION E

28. NO. OF ACRES
    (A) Affected _____ AND (B) Reclaimed _____ DURING THIS REPORT PERIOD
29. ESTIMATED NO. OF ACRES TO BE AFFECTED DURING THE COMING YEAR: Acres
30. DESCRIBE RECLAMATION PERFORMED DURING THE REPORT PERIOD:
31. DESCRIBE ANY PROPOSED CHANGE IN THE RECLAMATION SCHEDULE:
32. DO YOU REQUEST A REDUCTION IN THE AMOUNT OF THE RECLAMATION BOND? [ ] No [ ] Yes
    If "Yes", explain:

SECTION F

The Mined Land-Use Plan submitted with this application constitutes the applicant's proposal for mining and reclaiming the affected land described herein. Approval of the plan by the Department of Environmental Conservation is for the term of the permit. The applicant is responsible for submitting all plans, maps, forms, fees, bonds and reports as required by the Department. The permit is valid only for mining on land described in the plan and mining on unpermitted land is unlawful. Failure to adhere to the approved plan is cause for non-renewal, suspension or revocation of the permit. As a condition of the issuance of the permit, the applicant agrees to perform all work in accordance with the approved plan and amendment thereto.

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

33. NAME, TITLE AND SIGNATURE OF APPLICANT OR AUTHORIZED REPRESENTATIVE: [illegible]
    DATE: 1/19/83

SECTION G

UTM COORDINATES:
UTMN
UTME

- [ ] Acceptable
- [ ] Acceptable with conditions
- [ ] Unacceptable

REMARKS:

SITE INSPECTION BY (Name and Date): [illegible] 1/25/83

PLAN REVIEW BY (Name and Date)

BY: DEPARTMENT REPRESENTATIVE (Title and Date)

PERMIT NO.	Date of Issue	Expiration Date	Bond Amount
			$

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR USE OF A CONSTRUCTION AND DEMOLITION DEBRIS DISPOSAL SITE

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

FOR STATE USE ONLY	
PROJECT NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

1. OWNER'S NAME	2. ADDRESS (Street, City, State, Zip Code)	3. Telephone No.
4. OPERATOR'S NAME	5. ADDRESS (Street, City, State, Zip Code)	6. Telephone No.
7. ON-SITE SUPERVISOR	8. ADDRESS (Street, City, State, Zip Code)	9. Telephone No.

10. PROJECT/FACILITY NAME

11. PROJECT STATUS ☐ Public ☐ Private ☐ Proposed ☐ Existing	12. COUNTY IN WHICH FACILITY IS LOCATED	13. ENVIRONMENTAL CONSERVATION REGION
14. OPERATING HOURS/DAY	15. ESTIMATED SITE LIFE Months	16. ESTIMATED DAILY VOLUME Cubic Yards

17. DESCRIBE SPECIFIC LOCATION OF SITE

RECEIVED
FEB 9 1983
N. Y. S. D. E. C.
REGULATORY AFFAIRS, REGION 1

18. LIST EACH WASTE COMPONENT TO BE DISPOSED

19. BRIEFLY DESCRIBE PROPOSED COMPACTION, COVER, SEEDING AND FINAL CLOSURE OF SITE

[illegible]

20. CERTIFICATION:

I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

2-7-83 — Date

[illegible] — Signature and Title

47-19-6 (6/77)
Formerly SW-24

REGIONAL OFFICE COPY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BUREAU OF MINERALS

ORGANIZATIONAL REPORT

10-85-0134

INSTRUCTIONS:

1. Two (2) copies of Form 85-15-1 shall be filed with the New York State Department of Environmental Conservation by every person acting as a principal or agent for another or independently engaged in mining or in the drilling for, production of, or underground storage of oil, gas or brine in the State of New York.
2. An updated copy of Form 85-15-1 shall be filed as specified above within ten (10) days of any change to the facts stated in the most recent report filed with the Department.
3. The form shall be completed by typewriter, or printed in black ink, and be signed by a responsible individual who has full and correct knowledge of the facts stated.

1. TYPE OF FILING (Check One)
☑ Original Filing ☐ Revised Report

2. TYPE OF ACTIVITY (Check One)
☑ Mining ☐ Oil, Gas or Brine

3. FULL NAME OF THE COMPANY, ORGANIZATION, INDIVIDUAL OR MUNICIPALITY
S. P. Malcolm, Inc

4. TELEPHONE NO.
(516) 266 1000

5. MAILING ADDRESS (P.O. Box or Street Address, City, State, Zip Code)
170 Townline Rd
Kings Park, NY 11754

RECEIVED
1983
N.Y.S.D.E.C.
REGULATORY AFFAIRS, REGION 1

6. NEW YORK STATE MAILING ADDRESS
Same

7. TYPE OF ORGANIZATION (State whether Individual, Partnership, Company, Corporation, Governmental Agency, or Municipality)
Corp.

8. NAME, TITLE AND ADDRESS TO WHOM ALL CORRESPONDENCE SHOULD BE SENT
Same

9. PRINCIPAL OFFICERS OR PARTNERS (Names, Titles and Addresses) (If an Individual, go directly to Item 10)
Stephen D. Pimaro Pres 75 Longfellow Dr. Kings Park, NY 11754

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10. NAME AND TITLE OF APPLICANT OR AUTHORIZED REPRESENTATIVE (Print or Type)
Stephen D. Pimaro Pres.

SIGNATURE
X Stephen D. Pimaro Pres.

DATE
1-13-83

FOR DEPARTMENT USE ONLY

85-15-1 (1/77)

71

Short Environmental Assessment Form

Name of Applicant: J.P. Malone Inc.

Mine: _____

N.Y.S. Mine File No. _____

	Yes	No
A. General		
1) Is there any known public controversy or adverse public opinion associated with this proposed mining operation?		✓
2) Will any processing or size separation of minerals occur at the mine site in conjunction with the mining operation?	✓	
3) Will the operation involve the use of any substance known to be toxic or hazardous?		✓
4) Will blasting occur on a regular basis as a part of your mining operation?		✓
5) Will the mining operation occur in an area which is thickly settled?		✓
6) Are there any local or federal zoning, mining excavation or other laws or ordinances that apply to your proposed mining operation?	✓	
7) Have other agencies of government given or denied approval to the proposed operation?		✓
B. Impact on Land Use		
1) Will any rare, strategic or unique minerals be mined during this operation?		✓
2) Will the proposed mining and processing operations impact upon any site designated by a local government as a critical environmental area?		✓
3) Will the proposed operation be located within or next to an officially designated flood hazard zone or certified agricultural district?		✓
4) Will the proposed mining operation significantly affect the quantity or quality of existing open spaces?		✓

C. Impact on Water

1) Will the proposed operation result in erosion or sedimentation off the mine site? ___ ✓

2) Will the proposed mining and/or processing operation alter, disturb or create any streams, rivers, ponds, lakes, wetlands or other bodies of water on or adjacent to the mine site? ___ ✓

3) Will the proposed mining operation be located within five feet of an existing groundwater table? ___ ✓

4) Will the operation use more than 2 million gallons of ground or surface water? ___ ✓

D. Visual Impact

1) Will the proposed mining operation be visible from, adjacent to or within any publicly owned or operated park or recreation area? ___ ✓

2) Will the proposed mining and processing operations be visible from land travel corridors, scenic vistas, or population concentrations? ___ ✓

3) Will the proposed operation be visible from, next to or within any location listed or proposed for listing on the National Register for Historic Places? ___ ✓

4) Will any structures more than 100 feet tall be constructed for use by this mining operation? ___ ✓

E. Impact on Air Quality

1) Will any airborne dusts, fumes or objectionable odors leave the mine site as a result of the mining operation? ___ ✓

2) Will the project produce operating noise exceeding the usual local noise levels? ___ ✓

3) Will the proposed mining project involve frequent operation outside the hours of a typical working day (i.e. from 7 a.m. - 6 p.m.) or on holidays? ___ ✓

F. Impact on Plants and Animals

1) Will the proposed mining operation alter or disturb the existence or habitat of any plant or animal species officially designated as being threatened or endangered?

- If all questions have been answered "NO," it is likely that this project is not environmentally significant, and that no further SEQR review will be necessary.

- If any question has been answered "YES," further explanation will be required utilizing the Long Environmental Assessment Form.

In signing this Short Environmental Assessment Form, I hereby declare that all above stated questions have been answered honestly and correctly to the best of my knowledge, and am aware that I am subject to penalty under the laws of the State of New York if any discrepancies are found herein.

Preparer's Signature: Stephen R. Pomeroy Title: Pres.

Applicant: Date: 1-13-83

-P 3 0/34

S.P. Materials, Inc. is located at 170 Townline Road in Kings Park. This site is the base of our sand and gravel business. Here minerals from various sources are trucked in, processed, stockpiled and distributed. Adjacent to the site is a recently purchased 3.5 acre site that is proposed for mining.

The mine site is located south and west of Old Northport Road and east of Townline Road. The property is presently zoned light industrial and it is our future plan to grade the site to the elevation of Townline Road and to build on the site. There is a methane problem in the area and our plans of construction will be delayed until that situation is corrected.

The present plan is to mine starting at the northern end of the site and to progress in a southerly direction effecting approximately one acre at a time. The depth will be between 30 and 40 feet below Townline Road. As mining progresses, the northern portion will be backfilled with spoil (fine mineral and oversize mineral) generated from the processing site and from Rock Point Mining. It is also possible to add broken concrete, brick, stone and cobble with the spoil.

Our hope is to utilize the property and the resource while the problem of methane still exists. The mining operation will also help generate some monetary value back from the land and provide a deposit site for spoil.

The mining activity will not generate any additional use of equipment due to the fact that sand and gravel if not obtained from the mine site, would have to be trucked in from alternative sources and moved and loaded on the site by use of payloader and existing conveyors.

During times of extremely dry weather, water can be used to prevent any dust from leaving the site. At present there is a berm along Old Northport Road to screen the view of the operation.

The reclamation of the site is simply to backfill the pit with spoil and clean fill and then to grade it to the same elevation of Townline Road (±2 feet). Then, as mentioned before, our future land-use objective is to be able to build on the site.

ADDITION TO MINED LAND USE PLAN

It should be pointed out that when we reach a point about 2 to 4 feet below final grade, good sand and gravel will be used to meet final grade.

Until that time that building takes place, the site will be used for a stockpile storage area for the sand and gravel operation.

REFERENCE 8

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE I INVESTIGATIONS

S.P. Materials, Inc.
Kings Park, Suffolk County
NYSDEC I.D. No. 152093

Prepared for

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233-0001

STATE OF NEW YORK
YUAN SHAN E. CHEN
No. 062683
LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK
EDWARD A. MAIKISH
No. 055116
LICENSED PROFESSIONAL ENGINEER

Prepared by

YEC, INC.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, New York 10989

In Association with

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

September 1989

4. SITE ASSESSMENT

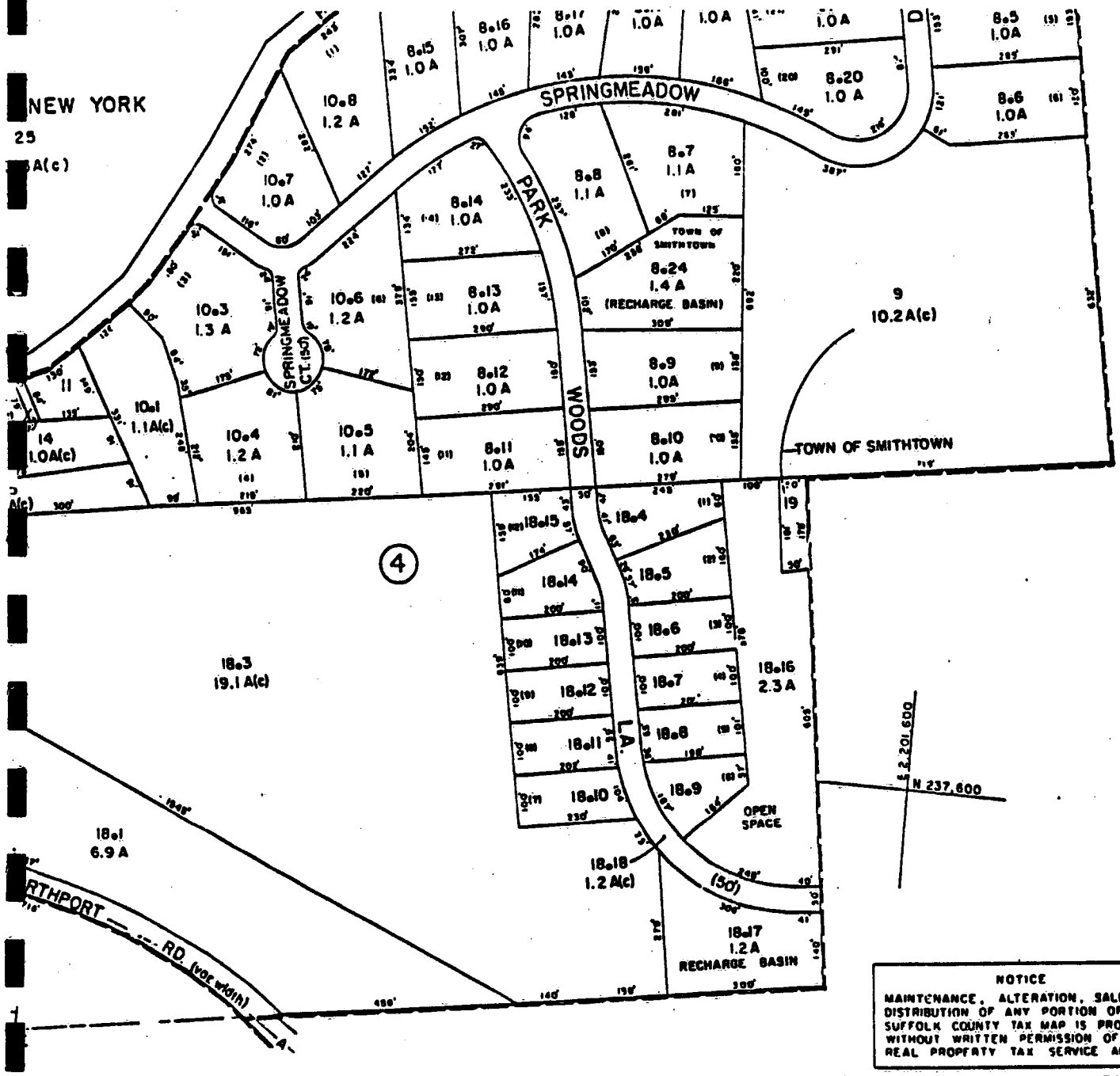
4.1 SITE HISTORY

S. P. Materials, Inc. (NYSDEC I.D. # 152093) is located at 170 Town Line Road in Kings Park, New York. The site consists of two parcels. One parcel, approximately 3.6 acres located south and west of Old Northport Road and east of Town Line Road is used for sand and gravel operation. A three year renewable mining permit was issued by the Town of Smithtown on May 16, 1983. Raw mine material was removed from the pit, processed, sold and delivered with S. P. Materials' own trucks. The pit is currently about 3 acres by approximately 50 feet deep.

A one year, renewable, construction and demolition debris landfill permit was issued on July 1, 1983 by New York State Department of Environmental Conservation (NYSDEC) and expired on July 1, 1984. During the first period, approximately 15 to 20 dump truck loads of construction debris (brick, cobble, block, concrete and wood) were dumped on the side of the pit and these debris were covered with a good quality clay earth for erosion and appearance purposes.

The other parcel, approximately 6 acres purchased in 1973 has various structures including a small office/workshop, a storage shed, a lagoon and various mining equipments.

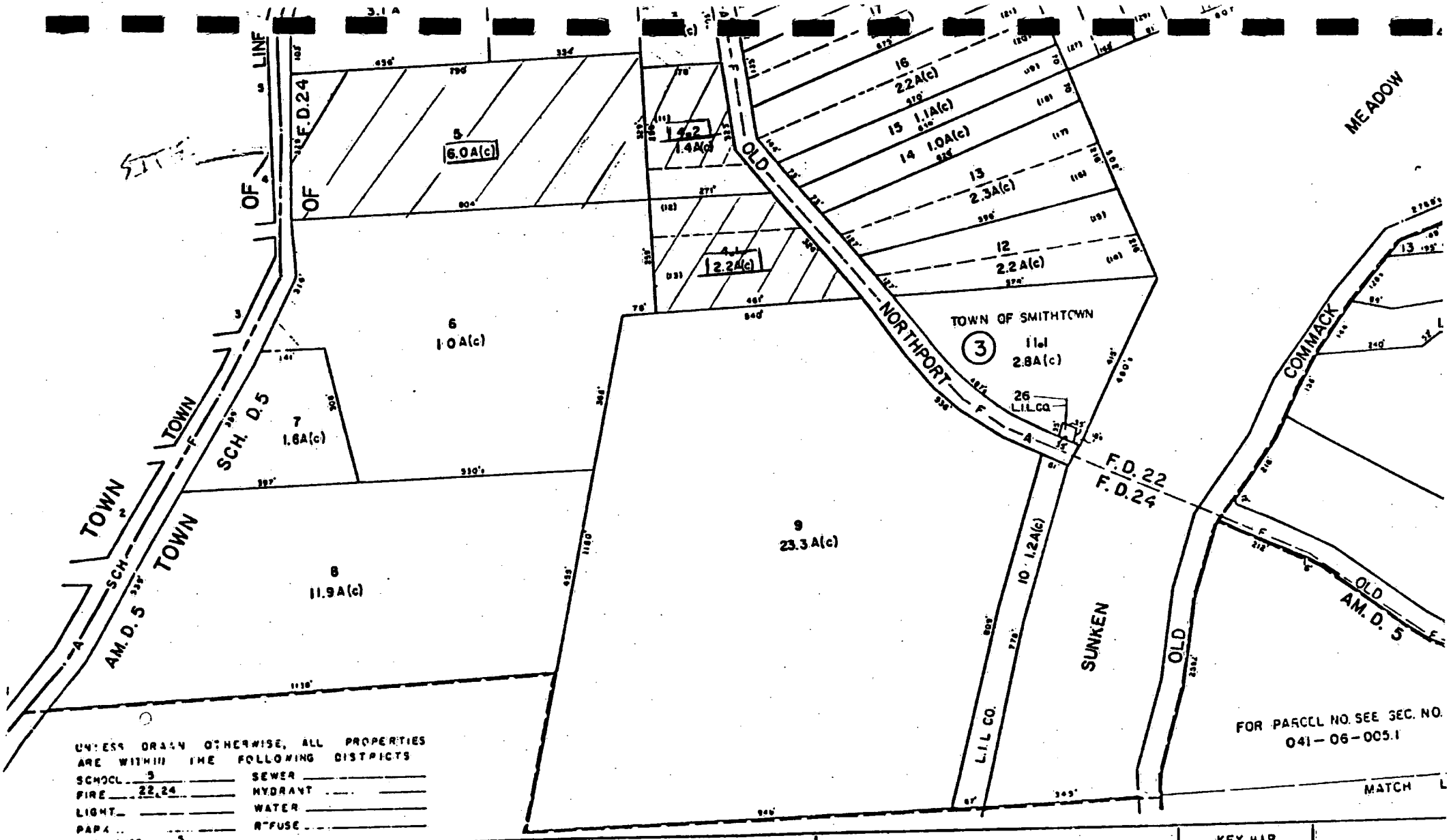
There is a well onsite which is used about 30 days per year to supply water for washing gravel. The site is completely fenced



NOTICE
MAINTENANCE, ALTERATION, SALE OR DISTRIBUTION OF ANY PORTION OF THE SUFFOLK COUNTY TAX MAP IS PROHIBITED WITHOUT WRITTEN PERMISSION OF THE REAL PROPERTY TAX SERVICE AGENCY

FEET	© COUNTY OF SUFFOLK Real Property Tax Service Agency County Center Riverhead, L. I., New York	TOWN OF SMITHTOWN VILLAGE OF DISTRICT NO. 0800 Date of Completion D	SECTION NO. 023 PROPERTY MAP

80



UNLESS DRAWN OTHERWISE, ALL PROPERTIES ARE WITHIN THE FOLLOWING DISTRICTS

SCHOOL	5	SEWER	
FIRE	22,24	HYDRANT	
LIGHT		WATER	
PARK		REFUSE	
AMBULANCE	5		

Legend

	Fire District Line	F	Hydrant District Line	H	Subdivision Lot No. (34)
	Water District Line	W	Refuse District Line	R	Deed Dimension 62'
	Light District Line	L	Block No.	(12)	Scaled Dimension 62's
	Park District Line	P	Parcel No.	23	Deed Area 12A(d)
...ict Line SCH	Sewer District Line	S	Subdivision Block No.	(21)	Calculated Area 12A(c)

KEY MAP

TOWN OF HUNTINGTON

011 | 100 | 023 | 024 | 025 | 041

SCAL

18

REFERENCE 9

S. P. Materials, Inc.
170 Townline Road
Kings Park, New York 11754

County of Suffolk

Town of Smithtown

MINING PERMIT ATTACHMENT

The following conditions are attached and part of Mining Permit Number 02834 issued to S.P. Materials, Town of Smithtown, Suffolk County. Permit issuance date 5/16/83. Expiration Date 5/16/86.

1. The permittee shall conduct all mining and reclamation operations in compliance with the approved mined land-use plan, Title 27 of Article 23 of the Environmental Conservation Law, and Subchapter D of Title 6 of the New York State Code Rules and Regulations (6NYCRR, Subchapter D, Parts 420-426).

2. The permittee shall indemnify and hold harmless the State of New York for all accounts, damages, costs and judgments of every name and description arising from its mining operations and reclamation of lands performed pursuant to this permit.

3. Other site-specific conditions described as follows:

   Mining will be permitted only on that site of 3.5 acres located south and west of Old Northport Road and east of Townline Road, Town of Smithtown.

4. This approval does not relieve the recipient of the need to obtain approvals which may be required by other State, Federal or local agencies.

REFERENCE 10

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PERMIT

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

PERMIT NO. 52-D-15

EXPIRATION DATE 7-01-84

☐ CONSTRUCTION ☒ INITIAL ISSUE ☐ REISSUANCE 10-83-0134

☒ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
S.P. Materials Inc.	170 Townline Road Kings Park, NY 11754	(516) 266-1000

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
Smithtown	Suffolk	Region I Stony Brook, New York 11794

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
Construction & Demolition Debris Disposal Site	Stephen D. Pomaro

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

SEE ATTACHED

ISSUE DATE	ISSUING OFFICER	SIGNATURE
7/1/83	Daniel J. Larkin Regional Permit Administrator	X [signature]

PERMITTEE COPY

85 11

Attachment
.-D-15
.P. Materials, Inc.

SPECIAL CONDITIONS

1. Wastes to be accepted shall be limited to fines, oversized rocks, and demolition debris, consisting of broken cobble, brick and wood.
2. Wastes not to be accepted shall include, but not be limited to, putrescible household waste (garbage), commercial waste, industrial and hazardous waste, cardboard paper, leaves, grass clippings, landscaping debris, septic waste, or any other wastes which might in any way affect groundwater quality.
3. Any materials found to be unsuitable shall be removed immediately upon request.
4. All landfilling activities shall be confined to the 3.5 acre proposed debris site as delineated on the map entitled "S.P. Materials, Area Map, Property at Kings Park, Town of Smithtown, Suffolk Co., N.Y.", dated March 31, 1976.
5. Access to and use of the facility shall be controlled by fencing, gates, signs or other suitable means.
6. Final closure shall include a minimum cover of 24 inches of sand and gravel. The final elevation of the fill shall not exceed surrounding existing grade. The site shall be graded to eliminate ponding of surface water.

RECEIVED
JUN 13 1983
ENVIRONMENTAL QUALITY
REGION 1

REFERENCE 11

File

New York State Department of Environmental Conservation
Division of Solid/Hazardous Waste
Building 40, SUNY
Stony Brook, New York 11794
(516) 751-2617

Henry G. Williams
Commissioner

September 28, 1984

S. P. Materials
170 Townline Road
Kings Park, New York 11754

Re: Inspection of September 21, 1984
Facility ID No. 52-D-15

Dear Mr. Pomaro:

This letter is to advise you that on a recent inspection of your site, unacceptable material was found (vehicle parts). The only materials you are allowed to dispose of are listed in the first special condition of your permit which states: "Wastes to be accepted shall be limited to fines, oversized rocks and demolition debris consisting of broken cobble, brick and wood."

This letter is also to advise you that you adequately cleaned up the unacceptable material found and discussed with you on September 18, 1984.

Very truly yours,

Robert A. Becherer

Robert A. Becherer, P.E.
Senior Sanitary Engineer

RAB:dm
cc: P. Barbato
R. Frey

88

1

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

FACILITY INSPECTION REPORT

FACILITY NAME: S.T. MATERIALS

LOCATION: P.O. BOX KINGS PARK, NY 11754

PERSONS INTERVIEWED & TITLES: STEVEN POMARO.

SITE SKETCH/COMMENTS (additional sheets attached ☐ YES ☐ NO)

THERE WAS SOME SMALL AMOUNT OF UNACCEPTABLE ON THE SITE. MR POMARO CLAIMED IT HAD MISTAKENLY BEEN DUMPED BY HIS PERSONNEL. MR POMARO WAS ADVISED ~~THAT~~ WHAT MATERIAL IS PERMITTED FOR DISPOSAL AT THE SITE.

INSPECTOR'S SIGNATURE

LEACHATE
1. Leachate is entering surface water. [59]
2. Leachate is known to be contravening groundwater standards.
3. Refuse is being placed into water. [57]

BURNING
4. Refuse is burning without permit or not under permit conditions. [56]
5. There is evidence of unapproved previous burning. [55]

COVER
6. Previous days refuse is not covered. [54]
7. Refuse is protruding through daily, intermediate or final cover.
8. Intermediate or final cover is not in place or improperly applied. [52]

GRADING
9. Depressions, ponding, cracked cover, or slopes steeper than 3 to 1 exist. [51]
10. Vegetative cover is missing or inadequate on completed areas.
11. Soil erosion or other drainage problems exist. [49]

SEPARATION DISTANCES
12. Refuse is closer than 50 feet to site boundaries. [48]
13. Refuse is being placed less than 5 feet above groundwater or bedrock.
14. Refuse is being placed too close to surface water. [46]

NUISANCE CONDITIONS
15. Odors are detectable off site. [45]
16. Blowing dust or dirt is a nuisance.
17. Papers are uncontrolled or are blowing off-site.
18. Methane gas is known to be leaving the site. [41]
19. Noise is a nuisance off-site.

OPERATION CONTROL
20. Operation Permit conditions are being violated. (List violations) [40]
21. Refuse is not sufficiently confined or controlled.
22. Refuse is spread in layers thicker than 2 feet.
23. Refuse is not compacted or compacted insufficiently.
24. The working face height is greater than 10 feet. [35]
25. Equipment on the site is not adequate for proper operation.

SAFETY AND HEALTH
26. Salvaging is uncontrolled or is creating a nuisance. [34]
27. Rodents, insects, birds, or other vectors are not controlled.
28. Unsafe conditions or equipment exist. (List items) [32]

ACCESS CONTROL
29. Access to the site is improper, unsafe, or inadequately controlled. [31]
30. The site is open without an attendant.
31. Information about the site is not posted. (e.g., hours of operation) [28]
32. Access to the operating area is poor or unsafe.

OTHER
33. Uncontrolled leachate is visible on, or near the site. [27]
34. The quality of cover material is inadequate.
35. The working face is steeper than a 3 to 1 slope. [22]
36. Monitoring wells are not operative.
37. Unapproved wastes have been deposited since last inspection.
38. Operator is unfamiliar with wite boundaries, operation plan or permit

MARK BOXES WITH "X" ONLY IF ANSWER IS YES

REGIONAL OFFICE COPY

1 TRANS.TYPE 1 ☐ Delete 2 ☐ Add | 2 FACILITY NO. 7 52015 | 8 DATE 891194 | 13 14 TIME 17 1315 | 20 CARD 21 TYPE 1 1 | 22 INSPECTOR'S NAME BEN HERSEY DOBERT | 36 37 38 | REMARKS | 72

20 CARD 21 TYPE 1 2

47 15-1 (8/80)

1

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

FACILITY INSPECTION REPORT

FACILITY NAME: JP MATERIALS

LOCATION: TOWN LINE

PERSONS INTERVIEWED & TITLES: NO ONE ON SITE AT TIME OF INSPECTION

SITE SKETCH/COMMENTS (additional sheets attached ☐ YES ☐ NO)

SITE WAS CLEANED UP FROM PREVIOUS VISIT OF 9/18/84. HOWEVER, TRUCK PARTS, (BRAKE DRUMS, ETC WERE LAYING AT THE TOP OF THE HOLE READY FOR BURIAL.

1 TRANS.TYPE 1 ☐ Delete 2 ☐ Add | 2 FACILITY NO. 7 | 8 DATE 13 | 14 TIME 17

52 D 15 | 9/21/84 | 1100

20 CARD 21 TYPE 1 1 | 22 INSPECTOR'S NAME 36 37 38 | REMARKS 72

SEE INSPECTOR'S REPORT

20 CARD 21 TYPE 1 2 | 22

LEACHATE
- 59 — 1. Leachate is entering surface water.
- 2. Leachate is known to be contravening groundwater standards.
- 57 — 3. Refuse is being placed into water.

BURNING
- 56 — 4. Refuse is burning without permit or not under permit conditions.
- 55 — 5. There is evidence of unapproved previous burning.

COVER
- 54 — 6. Previous days refuse is not covered.
- 7. Refuse is protruding through daily, intermediate or final cover.
- 52 — 8. Intermediate or final cover is not in place or improperly applied.

GRADING
- 51 — 9. Depressions, ponding, cracked cover, or slopes steeper than 3 to 1 exist.
- 10. Vegetative cover is missing or inadequate on completed areas.
- 49 — 11. Soil erosion or other drainage problems exist.

SEPARATION DISTANCES
- 48 — 12. Refuse is closer than 50 feet to site boundaries.
- 13. Refuse is being placed less than 5 feet above groundwater or bedrock.
- 46 — 14. Refuse is being placed too close to surface water.

NUISANCE CONDITIONS
- 45 — 15. Odors are detectable off site.
- 16. Blowing dust or dirt is a nuisance.
- 17. Papers are uncontrolled or are blowing off-site.
- 18. Methane gas is known to be leaving the site.
- 41 — 19. Noise is a nuisance off-site.

OPERATION CONTROL
- 40 — 20. Operation Permit conditions are being violated. (List violations)
- 21. Refuse is not sufficiently confined or controlled.
- 22. Refuse is spread in layers thicker than 2 feet.
- 23. Refuse is not compacted or compacted insufficiently.
- 24. The working face height is greater than 10 feet.
- 35 — 25. Equipment on the site is not adequate for proper operation.

SAFETY AND HEALTH
- 34 — 26. Salvaging is uncontrolled or is creating a nuisance.
- 27. Rodents, insects, birds, or other vectors are not controlled.
- 32 — 28. Unsafe conditions or equipment exist. (List items)

ACCESS CONTROL
- 31 — 29. Access to the site is improper, unsafe, or inadequately controlled.
- 30. The site is open without an attendant.
- 31. Information about the site is not posted. (e.g., hours of operation)
- 28 — 32. Access to the operating area is poor or unsafe.

OTHER
- 27 — 33. Uncontrolled leachate is visible on, or near the site.
- 34. The quality of cover material is inadequate.
- 35. The working face is steeper than a 3 to 1 slope.
- 36. Monitoring wells are not operative.
- 37. Unapproved wastes have been deposited since last inspection.
- 22 — 38. Operator is unfamiliar with site boundaries, operation plan or permit

MARK BOXES WITH "X" ONLY IF ANSWER IS YES

REGIONAL OFFICE COPY

Robert A Beck
INSPECTOR'S SIGNATURE

REFERENCE 13

17e

New York State Department of Environmental Conservation

MEMORANDUM

TO: Tony Candela, Region 1

FROM: T.S. Manickam, Bureau of Hazardous Site Control T. S. Manickam 11/21/89

SUBJECT: Final Phase I Reports - S.P. Materials, Inc., Kings Park, Suffolk County

DATE: Site I.D. No. 152093
November 21, 1989

Attached are five copies of the above-referenced final Phase I report. Please forward one copy of the report to the Suffolk County Health Department. We will send copies to the USEPA, State Health Department, Town, and owner.

S.P. Materials, Inc. - The site consists of two parcels, one parcel approximately 3.6 acres is used for sand and gravel operation, and the other parcel is approximately six acres which has various structures including a small office, workshop, a storage shed, a lagoon and various mining equipment. According to the owner a rusted drum was noted by NYSDEC personnel and hence the site was placed on the Registry. According to the report there was no external evidence of hazardous waste disposal on site. The Phase I report rcommends sampling of an site well if it is located in the downgradient direction and to collect soil samples from boring for chemical analysis along the edge of the C & D dump area prior to Phase II investigation. I concur with the consultant's recommendation.

Please call me at (518) 457-0639 if you have any questions or comments.

Attachments

bcc: E. Barcomb
J. Swartwout
M. Komoroske

File

TM/ch

REFERENCE 14

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

WORK PLAN

East Northport Landfill
Town of Huntington,
Suffolk County, New York

AUGUST 1988

Dvirka and Bartilucci
Consulting Engineers

94

SECTION 3.0 SITE HISTORY AND BACKGROUND

AUG. 1988

3.1 Site History

As described in Section 1.0 (Introduction), the Town of Huntington currently operates a 44 acre solid waste landfill located in East Northport, New York (Figure 1.0-1). Initial activities, which commenced at the site in 1935, consisted of sand mining operations and disposal (landfilling and open burning) of municipal solid waste. Prior to use of the site as a sand mine and for disposal of solid waste, the area was cultivated as farmland.

Currently, an average of 650 tons per day of refuse is received at the landfill site. Nearly fifty percent, or approximately 350 tons of the refuse, as well as ash residue generated by the town incinerators, is landfilled each day.

3.2 Site Background

3.2.1 Groundwater Monitoring

In 1979, the Town initiated a groundwater monitoring program to determine the nature and extent of leachate in the vicinity of the landfill. As part of this program, six (6) wells were installed along the perimeter of the landfill. In addition, 16 public water supply wells within a two-mile radius of the landfill were examined to determine if a leachate plume had impacted public water supplies in the vicinity of the landfill. Specific conductivity, pH, various inorganic chemicals, total dissolved solids and chemical oxygen demand (COD) were selected to delineate the leachate plume and to determine impacts on water supply. The location of the six (6) monitoring wells and public water supply wells utilized in the study are shown in Figures 3.2-1 and 3.2-2 respectively. These monitoring wells are no longer in existence.

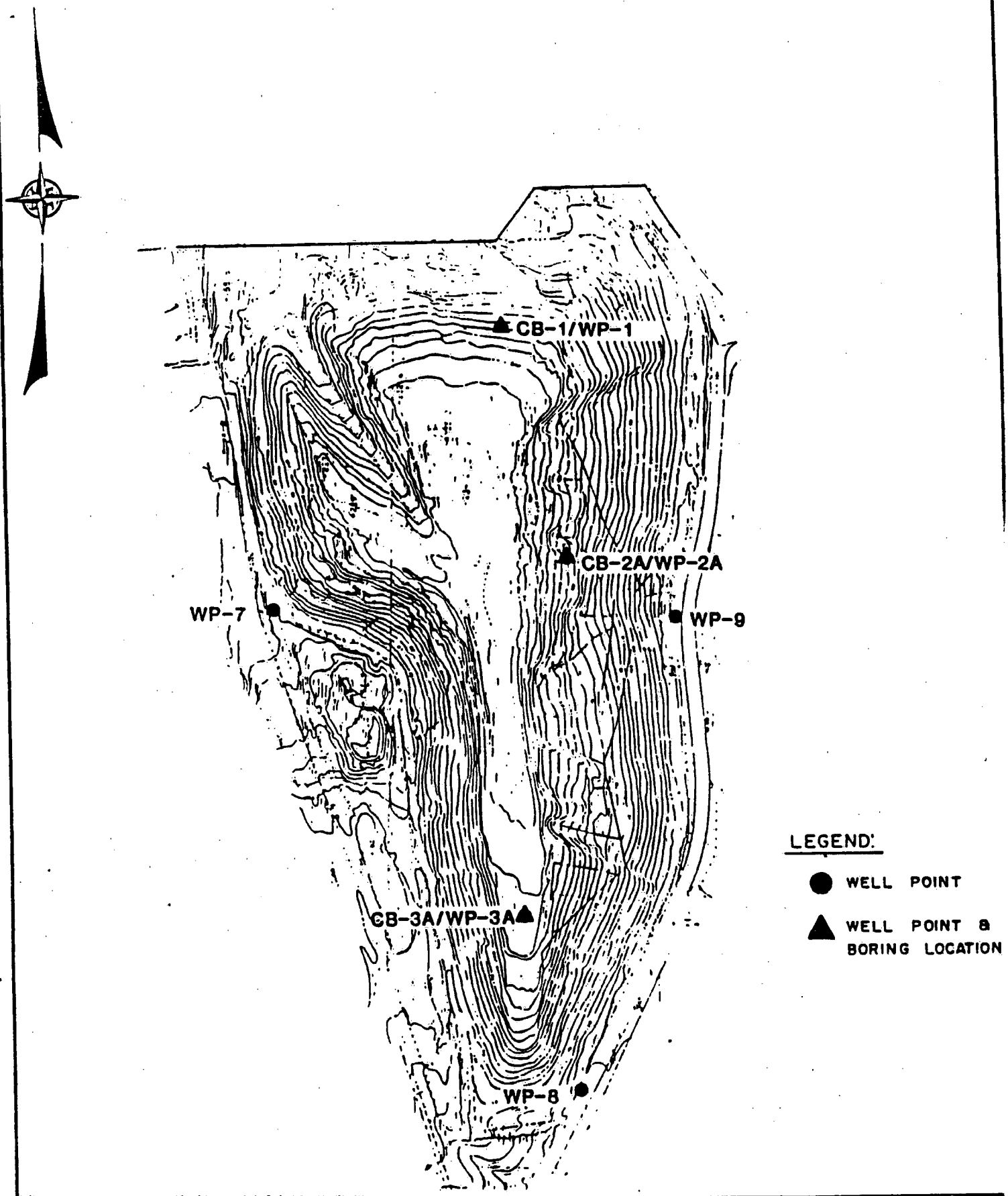
Results from this study indicated that leachate was present in the ground water and that it extended in a northeast direction (see Figure 3.2-3). Groundwater flow direction is confirmed by groundwater contours prepared by the United States Geological Survey (see Figure 3.2-4). Elevated concentrations of inorganic chemicals in relation to ambient levels were noted in two (2) shallow public water

supply wells, (S-15515 and S-15923). Well S-15515 (356 feet deep) is located 2,300 feet northwest of the landfill and Well S-15923 is located 2,000 feet south and slightly west at a depth of 263 feet. Although specific conductivity, sulfates, nitrates, total hardness and chlorides were high, it was concluded that source(s) other than the landfill impacted these two public water supply wells since the wells are not downgradient of the landfill. This information is provided in greater detail in a report entitled "Landfill Leachate Study - Phase I" prepared by H2M Corp. in February, 1979.

In 1980, the Suffolk County Department of Health Services (SCDHS) collected and analyzed drinking water samples from residential private wells in the vicinity of the landfill primarily along Meadow Glen Road, which is northeast of the site. Based on SCDHS data through 1986, the most prevalent organic chemical contaminant found in these private wells is tetrachloroethylene up to 140 ug/l, and trace levels of trichloroethane (up to 20 ug/l), trichloroethylene (up to seven [7] ug/l), and cis-dicloroethylene (up to eight [8] ug/l).

Evidence of chemical contamination of these private drinking water wells resulted in a consent order agreement between the Town of Huntington and NYSDEC in 1981. As part of the agreement, one (1) upgradient and three (3) downgradient groundwater monitoring well clusters were installed in 1982 (see Figure 3.2-5). Each of the three downgradient well clusters (CW1,CW2 and CW3) consisted of three wells screened at shallow, medium and deep depths. The upgradient well (UW1) was a single well with multiple screens varying in depth from shallow to deep. These wells are constructed of six (6) inch diameter PVC casing and five (5) inch PVC screens.

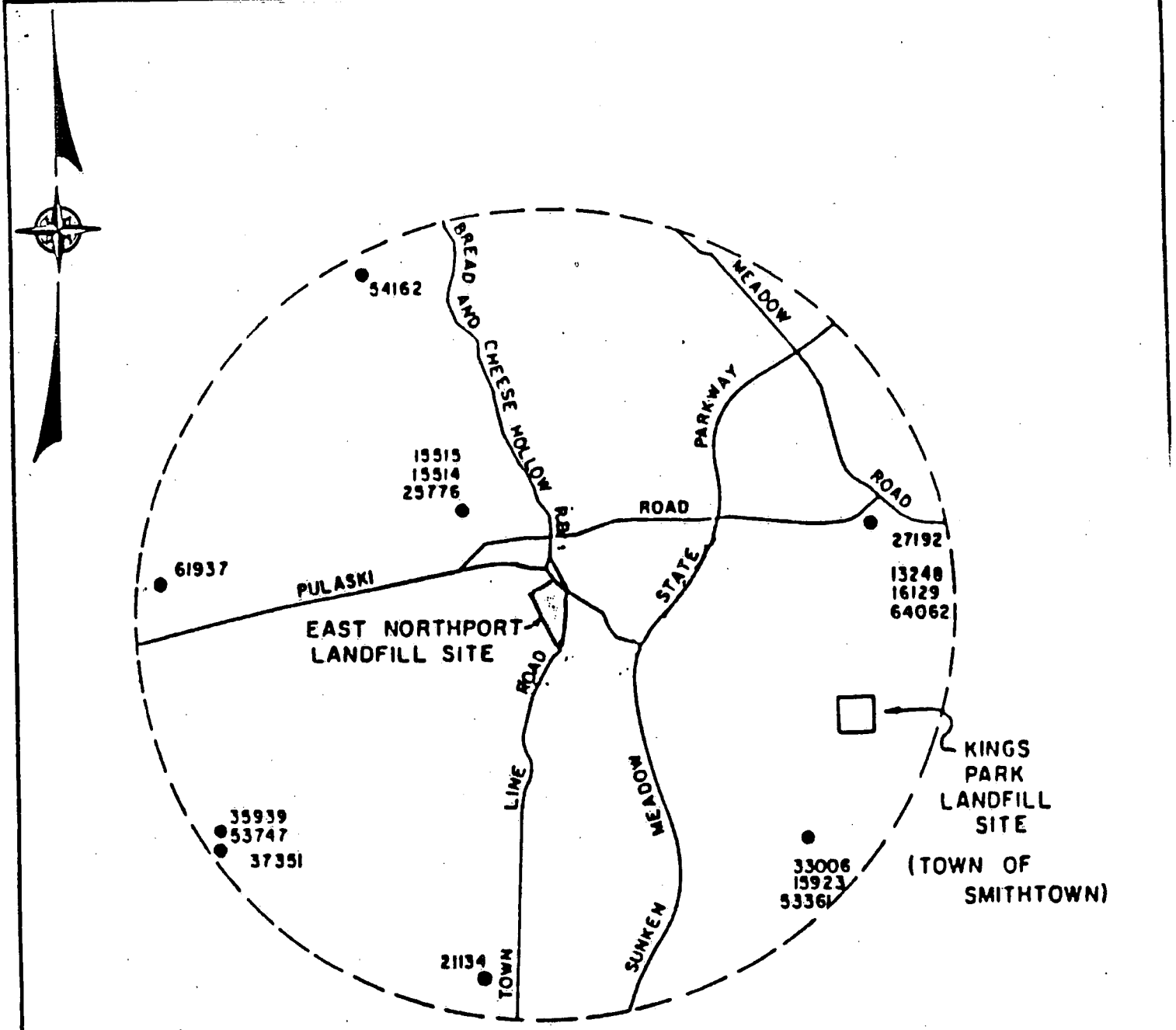
The wells in cluster CW1 are screened at 80, 93, and 112 feet below ground surface; CW2 wells are screened at 103, 117 and 155 feet; CW3 wells at 156, 170 and 266 feet. The upgradient well UW1 is screened at separate 10 foot intervals between 80 and 150 feet. Samples collected from these wells were analyzed for leachate indicators including ammonia, total dissolved solids, conductivity, total organic carbon, chloride, sulfate, iron, bicarbonate and pH, and were compared to the upgradient well to define leachate plume composition and extent, as well as the relative contribution of landfill leachate compared to existing groundwater contaminant concentrations.



EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Dvirka and

LOCATION OF THE PHASE I STUDY LEACHATE MONITORING WELLS



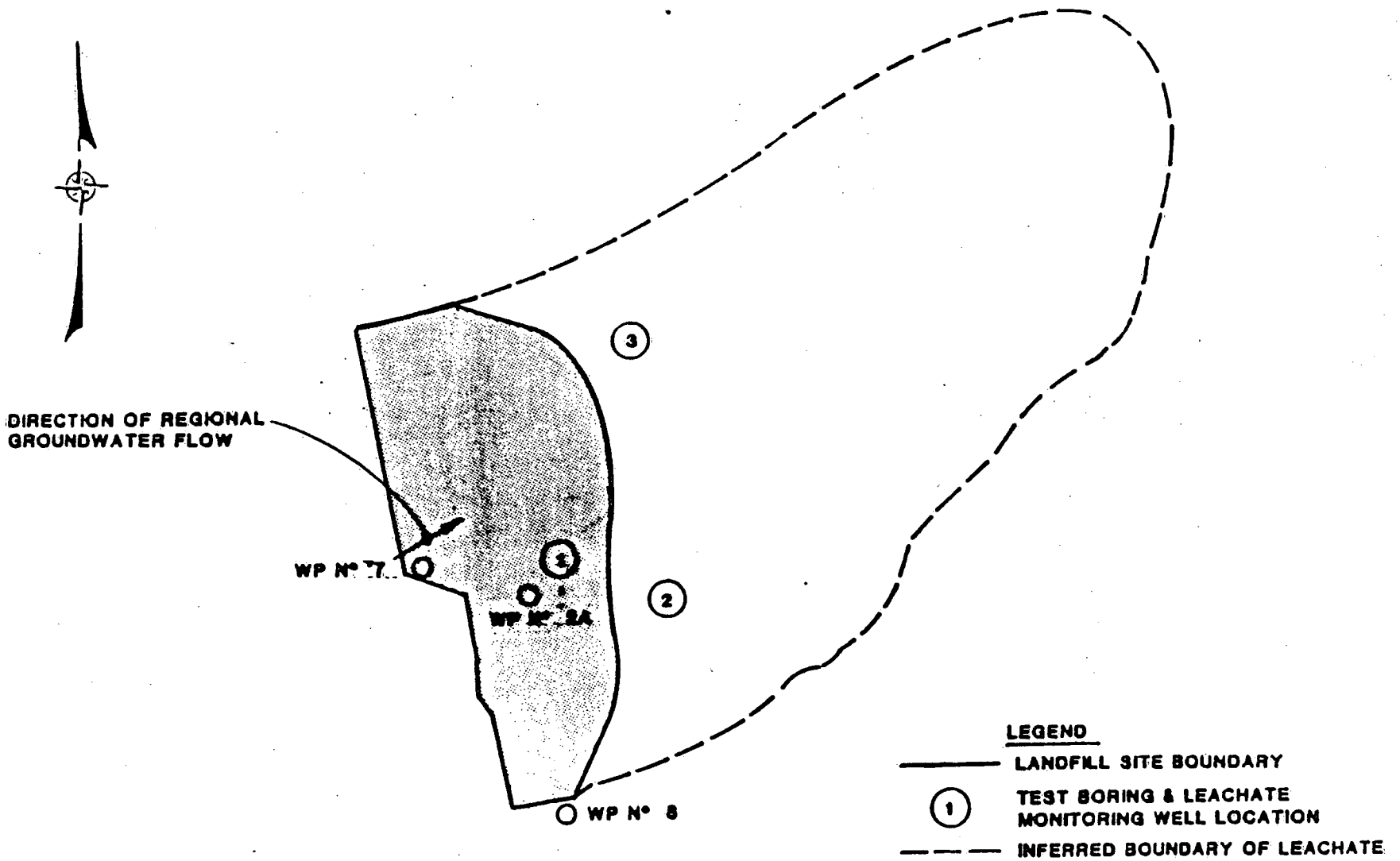
SOURCE: H2M CORP.

EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Dvirka and

LOCATION OF PUBLIC WATER SUPPLY WELLS SURROUNDING THE

98



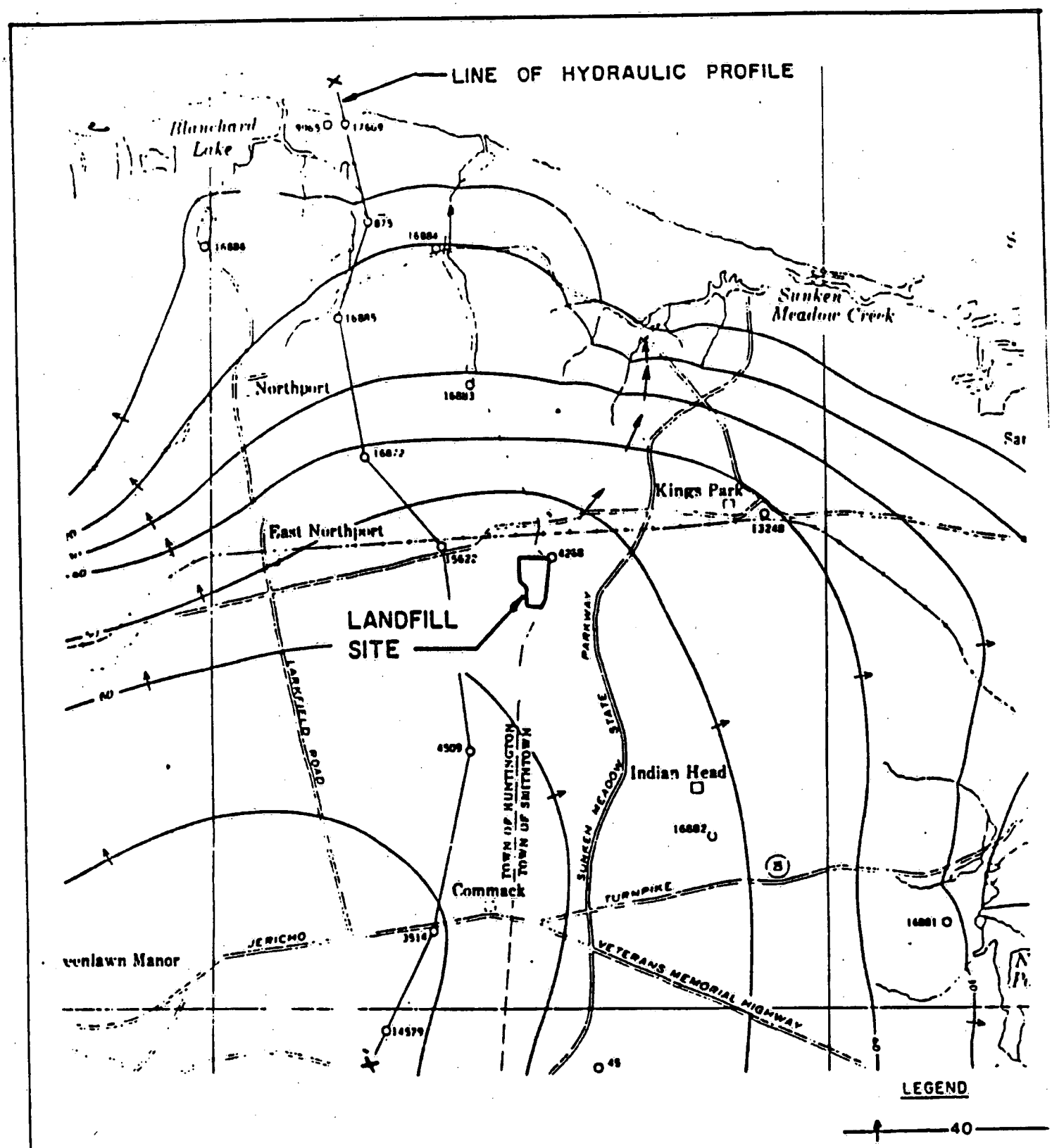
SOURCE: H2M CORP.

EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Dvirka and Bartilucci CONSULTING ENGINEERS

RESULTS OF PHASE I LANDFILL LEACHATE STUDY

FIGURE NO. 3.2-3



SOURCE: H2M CORP.

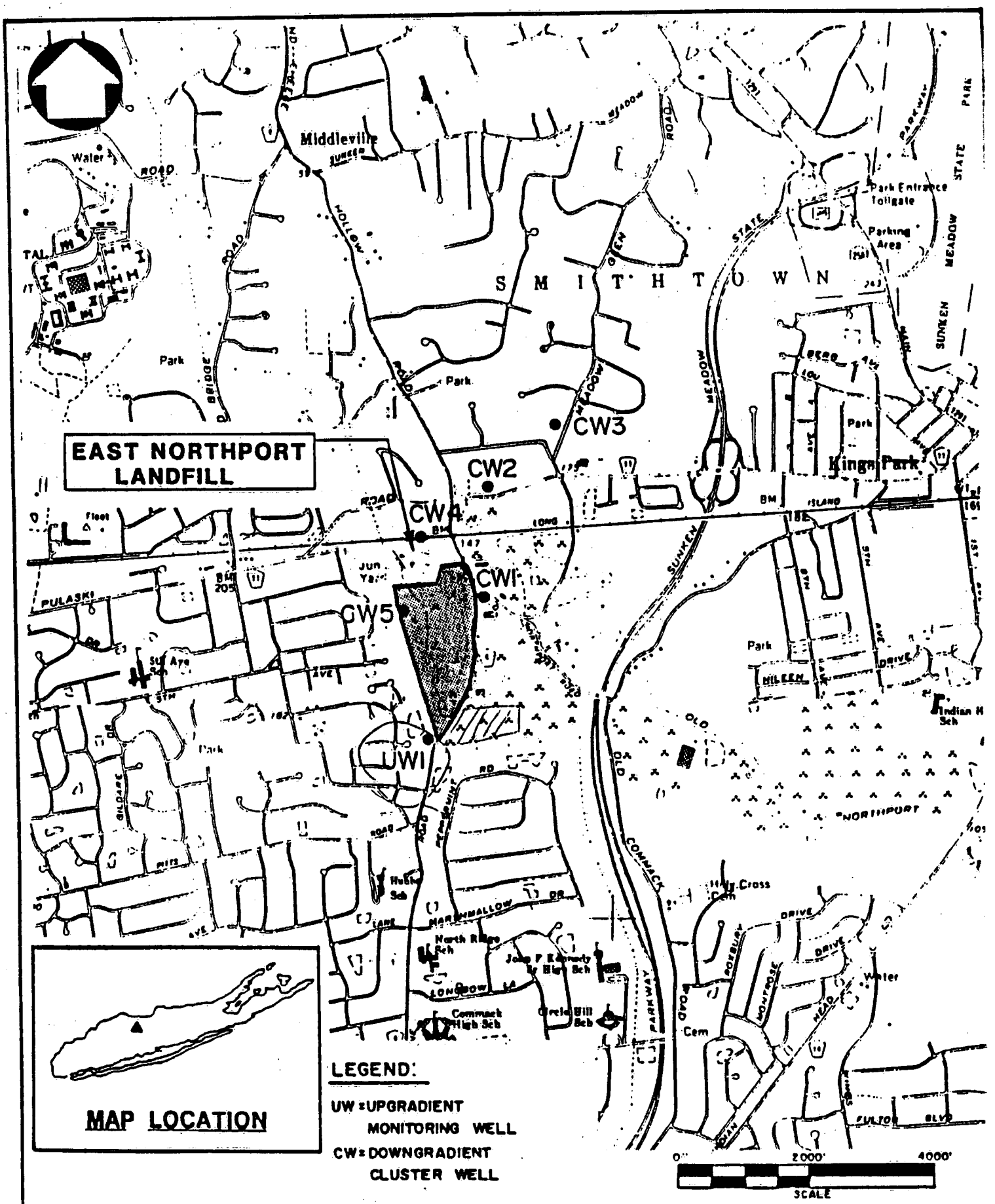
EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Dvirka and Bartilucci

GROUNDWATER CONTOURS IN THE LOCATION OF THE PROJECT SITE

100

FIGURE NO. 3.2-4



EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Dvirka

LOCATION OF EXISTING MONITORING

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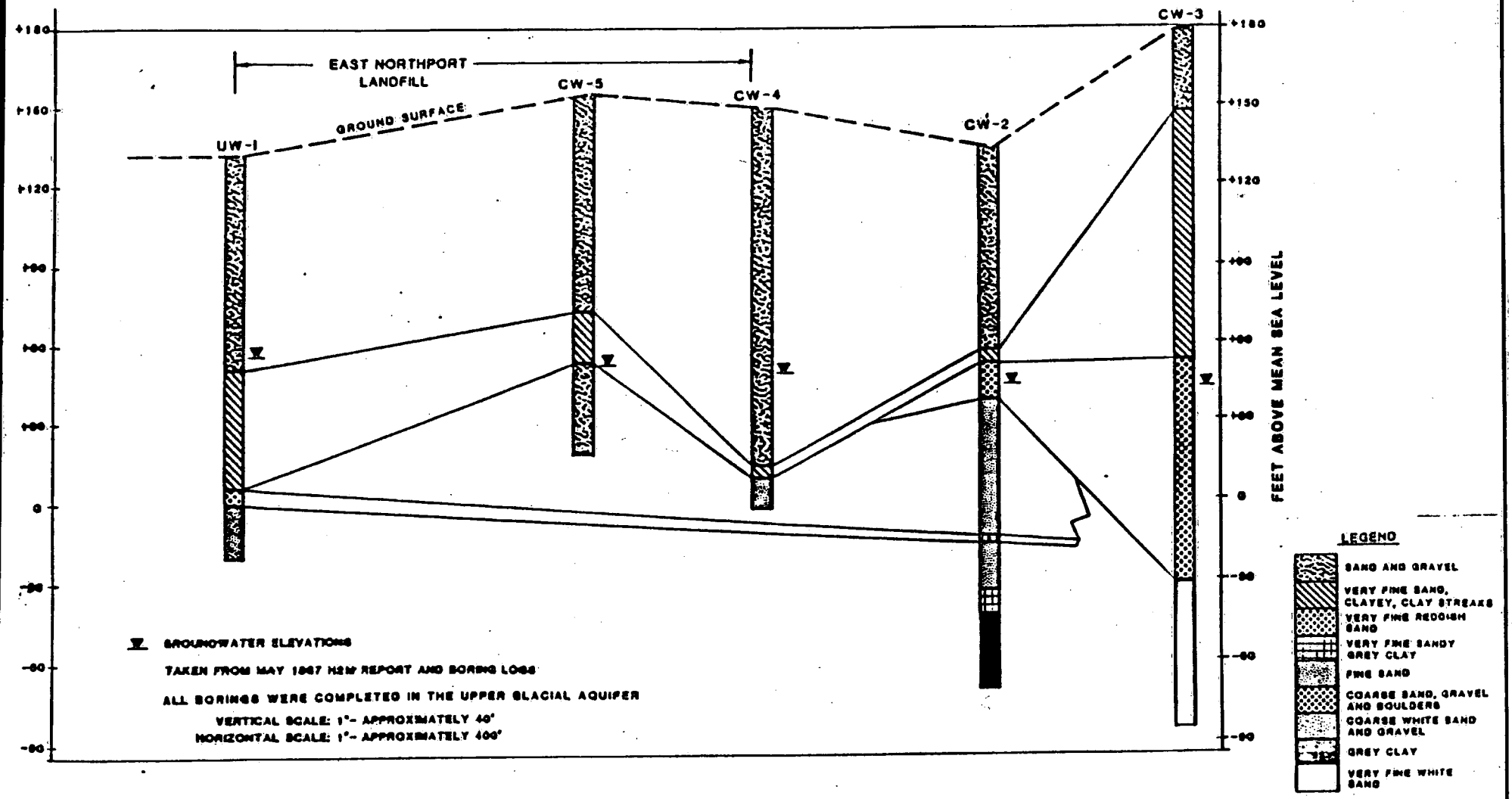
Results of the sampling program between 1982 and 1986 showed above ambient concentrations of ammonia in essentially all downgradient wells, particularly in the shallow and deep wells nearest the landfill (CW1), and to a lesser degree in the mid-depth and deep wells further from the landfill (CW2 and CW3). Both total dissolved solids concentrations and specific conductivity were observed to be the highest in the shallow and medium depths of well cluster CW1, the mid-depth well in cluster CW2 and the deep well in cluster CW3. Total dissolved solid concentrations in wells CW1S, CW1M, CW2M and CW3D were in excess of 1,000 mg/l, and greater than 500 mg/l in wells CW2S and CW2D. Total dissolved solid concentrations in the upgradient well (UW1) averaged less than 200 mg/l.

In addition, a comparison of chloride, total organic carbon and pH concentrations in the upgradient and downgradient wells shows that these constituents are also highest near the landfill at shallow and medium depths (CW1). These constituents decrease with distance from the landfill in well clusters CW2 and CW3, but generally remain higher than the upgradient well cluster. Heavy metals, pesticides and volatile organic chemicals were also sampled for during 1986. No pesticides and only trace amounts of volatile halogenated organics and heavy metals were detected in the monitoring wells. (Ethylbenzene at 13 ug/l was the highest concentration of organic chemicals detected.) More detailed information regarding collection and analysis of this data is contained in reports entitled "Groundwater Monitoring Report - East Northport Landfill" prepared by H2M Corp. in July, 1983 and February, 1986.

During 1987 two additional well clusters comprising two (2) wells each (CW4 and CW5) were installed to monitor groundwater at shallow and deep depths along the northern and western boundaries of the landfill site (see Figure 3.2-6). The shallow wells were installed at 115 to 125 feet and the deep wells at 140 to 150 feet. Groundwater samples from these monitoring wells were analyzed for purgeable organics, base neutral extractables, acid extractables as well as specific conductivity and pH. With the exception of pthalates (placticizers), only low levels of priority pollutants were detected. The concentration of pthalates, which are ubiquitous throughout the environment, were found in the field and trip blanks and may not be indicative of environmental conditions in the vicinity of the landfill.



EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

GEOLOGICAL CROSS-SECTION BASED ON EXISTING MONITORING WELLS

Dvirka and Bartilucci

FIGURE NO. 3.2-6

During the sampling program at well clusters CW4 and CW5, water levels were measured and the hydraulic gradient was estimated. In the immediate area of the landfill site, the hydraulic gradient was determine to be 0.003 ft./ft and the gradient decreased slightly to 0.002 ft./ft. in the residential area to the north. Further, the estimated horizontal groundwater velocities for the area were three (3) feet/day and two (2) feet/day in the vicinity of the landfill and to the north, respectively. Information pertaining to the 1987 study is contained in a report entitled "Phase II Hydrogeological Investigation" prepared by the H2M Corp. in May, 1987. A tabulation of the groundwater monitoring well data collected between 1982 and 1987 is provided in Tables 3.2-1 through 3.2-5. A geologic cross-section based on data obtained from the existing cluster monitoring wells is provided in Figure 3.2-6.

3.2.2 Landfill Gas Monitoring

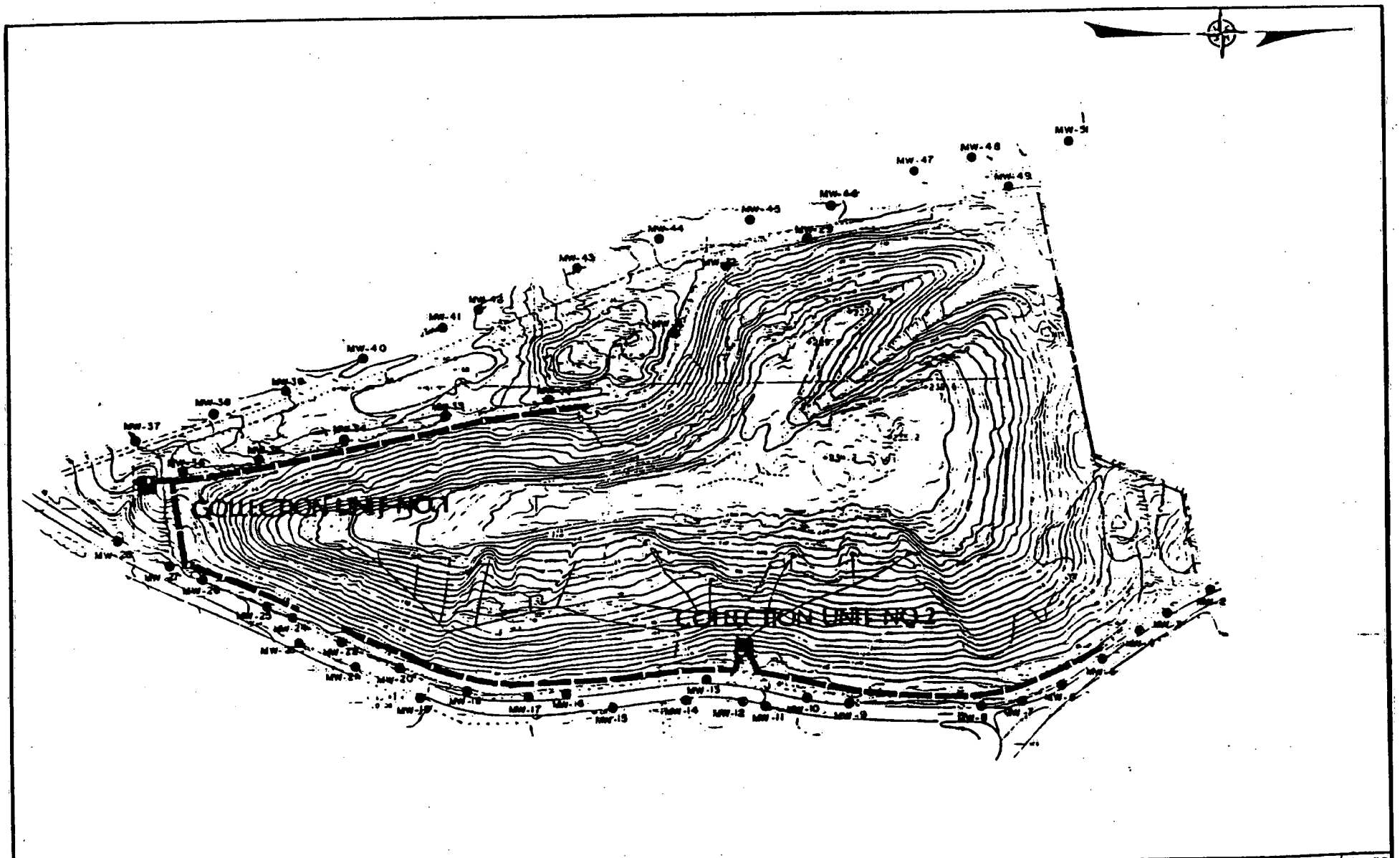
In 1978, the Town of Huntington initiated a methane gas monitoring and control program. Passive venting wells were installed to prevent off-site methane migration. In addition, monitoring wells were installed to determine the actual concentration of methane gas along the site boundary. The methane gas venting system was upgraded in 1979, with the installation of an active gas collection system along the southern portion of the landfill. The active system was further expanded with the addition of a separate active system along the eastern portion of the landfill in 1981, as illustrated in Figure 3.2-7.

An additional methane control system, referred to as an "air curtain" which creates a positive pressure, was installed in the maintenance garage with a continuous monitoring system during 1986. A total of 49 monitoring wells were also installed around the landfill in 1986, to further detect the extent of landfill gas migration (see Figure 3.2-7).

3.3 Nature and Extent of Problem

3.3.1 Groundwater Contamination

As a result of groundwater monitoring in the vicinity of the East Northport



Dvirka and Bartilucci

EAST NORTHPORT LANDFILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

LOCATION OF EXISTING LANDFILL GAS MONITORING AND CONTROL SYSTEMS

FIGURE NO. 3.2-7

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TABLE 3.2-1
EAST NORTHPORT LANDFILL
LEACHATE INDICATORS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	UWI			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Ammonia	--/2.0	0.2	0.5	(0.20	(0.2
Chloride	250/250	16	16	18	15
Detergents (MBAS)	.5/--		(0.04	(0.04	(0.04
Nitrate (NO_3-N)	10/10		5	3.3	3.6
Specific Conduct.	--/--	220	230	226	240
Total Dissolved Solids	1000/--	221	140	220	150
Total Organic Carbon (TOC)	--/--		3.8	2.2	1.7
pH	6.5-8.5		6.5	6.5	6.2
Iron	.3/.3	6.28	1.33	1.18	0.73
Lead	.025/.05		(2.00	(2.00	(2.0

Units are in milligrams/liter
GV= Guidance Value, all other values are Standards

TABLE 3.2-1 cont.
EAST NORTHPORT LANDFILL
LEACHATE INDICATORS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CWIS				CWIM				CWID			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Ammonia	--/2.0	490	490	520	500	430	420	330	330	2.6	0.2	67	0.71
Chloride	250/250	870	880	840	720	670	880	840	760	109	63	70	47
Detergents (MBAS)	.5/--		1.32	0.22	0.22		0.38	0.18	0.11		<0.04	<0.04	<0.04
Nitrate (NO3-N)	10/10		1.6	0.1	<0.10		<0.10	0.1	<0.1		<0.10	<0.10	<0.10
Specific Conduct.	--/--	7500	8200	8090	8430	4900	7000	7100	7500	550	390	425	304
Total Dissolved Solids	1000/--	3730	3300	3350	3160	2680	2900	3320	2980	452	270	390	180
Total Organic Carbon (TOC)	--/--		290	320	310		270	290	300		9.8	13	9
pH	6.5-8.5		7.4	7.7	7.3		7.6	7.7	7.5		7	6.8	6.5
Iron	.3/.3	7.25	2.21	3.08	2.57	10.2	0.77	3.43	4.48	1.61	3.85	4.97	5.3
Lead	.025/.05		<2.00	<2.00	<2.00		<2.00	<2.00	<2.0		<2.00	<2.00	<2.00

Units are in milligrams/liter
GV= Guidance Value, all other values are Standards

TABLE 3.2-1 cont.
EAST NORTHPORT LANDFILL
LEACHATE INDICATORS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW2S				CW2M				CW2D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Ammonia	--/2.0	0.6	0.69	2.3	0.71	4.3	4.4	13	2.6	1.4	6.8	5.6	1.1
Chloride	250/250	156	150	195	210	142	140	200	340	196	174	172	153
Detergents (MBAS)	.5/--		(0.04	(0.04	(0.04		0.28	(0.04	(0.04		(0.04	(0.04	(0.04
Nitrate (NO3-N)	10/10		2.6	2.1	2.2		(0.10	0.8	(0.10		0.8	0.8	1.8
Specific Conduct.	--/--	800	840	1010	1250	900	930	1390	1900	1000	460	1100	1120
Total Dissolved Solids	1000/--	162	560	840	820	655	520	1080	1290	784	270	790	670
Total Organic Carbon (TOC)	--/--		5.8	6.1	5.9		8.1	73	8.4		16	21	8.5
pH	6.5-8.5		6.2	6.7	6.4		6.5	7	6.3		6.6	6.9	6.5
Iron	.3/.3	0.73	1.7	1.01	0.68	2.71	0.89	0.61	0.85	18.5	3.65	4.91	5.47
Lead	.025/.05		(2.00	(2.00	(2.00		(2.00	(2.00	(2.00		4	4	(2.00

Units are in milligrams/liter
GV: Guidance Value, all other values are Standards

TABLE 3.2-1 cont.

EAST NORTHPORT LANDFILL
LEACHATE INDICATORS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW3S				CW3D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Ammonia	--/2.0	0.5	8.6	9.6	7.6	2.7	7.2	11.3	17
Chloride	250/250		182	99	104	198	16	200	196
Detergents (MBAS)	.5/--		0.1	(0.04	(0.04		0.12	0.09	(0.04
Nitrate (NO_3-N)	10/10		1.2	1.1	1.7		(0.10	(0.10	(0.10
Specific Conduct.	--/--	500	760	758	770	1450	1500	1410	2000
Total Dissolved Solids	1000/--	384	450	600	400	1110	980	1160	1070
Total Organic Carbon (TOC)	--/--		3.8	10	18		19	29	26
pH	6.5-8.5		6.4	6.6	6.2		6.9	7.1	6.9
Iron	.3/.3	0.07	0.95	0.24	0.52	2.83	4.41	2.46	2.83
Lead	.025/.05		2	(2.00	(2.0		3	(2.00	(2.00

Units are in milligrams/liter
GV= Guidance Value, all other values are Standards

TABLE 3.2-2
EAST NORTHPORT LANDFILL
VOLATILE HALOGENATED ORGANICS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	UWI			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Vinyl Chloride	5/.3 GV		<3		
Carbon Tetrachloride	5/.4 GV		<3		
Total Trihalomethane	--/--		<12		
Benzene	ND/1.0 GV		<3		
Toluene	50 GV/50 GV		<5		
Ethylbenzene	50 GV/50 GV		<3		
M-Xylene	50 GV/50 GV		<3		
O-Xylene	50 GV/50 GV		<3		
P-Xylene	50 GV/50 GV		<3		

*Units are in micrograms/liter
GV= Guidance Value, all other values are Standards

TABLE 3.2-2 cont.
EAST NORTHPORT LANDFILL
VOLATILE HALOGENATED ORGANICS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CWIS				CWIM				CWID			
		FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986	FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986	FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986
Vinyl Chloride	5/.3 GV		<3				<3				<2		
Carbon Tetrachloride	5/.4 GV		<3				<3				<2		
Total Trihalomethane	--/--		<12				<12				<10		
Benzene	ND/1.0 GV		<3			17*	<5				<10		
Toluene	50 GV/50 GV		<10				8				<5		
Ethylbenzene	50 GV/50 GV	15*	<3			15*	13				<5		
M-Xylene	50 GV/50 GV		<3				<3				<5		
O-Xylene	50 GV/50 GV		<3				<3				<10		
P-Xylene	50 GV/50 GV		<3				<3				<10		

*Units are in micrograms/liter
GV= Guidance Value, all other values are Standards

February results provided by Suffolk County Department of Health Services.

TABLE 3.2-2 cont.
EAST NORTHPORT LANDFILL
VOLATILE HALOGENATED ORGANICS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CW2S				CW2M				CW2D			
		FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986	FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986	FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986
Vinyl Chloride	5/.3 GV		<3				<3				<3		
Carbon Tetrachloride	5/.4 GV		<3				<3				<3		
Total Trihalomethane	--/--		<12				<12				<12		
Benzene	ND/1.0 GV		<3				<3				<3		
Toluene	50 GV/50 GV		<3				<3				<3		
Ethylbenzene	50 GV/50 GV		<3				<3				<3		
M-Xylene	50 GV/50 GV		<3				<3				<3		
O-Xylene	50 GV/50 GV		<3				<3				<3		
P-Xylene	50 GV/50 GV		<3				<3				<3		
Tetrachloroethene	--/--									25*			

*Units are in micrograms/liter
GV: Guidance Value, all other values are Standards

February results provided by Suffolk County Department of Health Services.

TABLE 3.2-2 cont.
EAST NORTHPORT LANDFILL
VOLATILE HALOGENATED ORGANICS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CW5S				CW5M	CW5D			
		FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986	FEB. 1984	FEB. 1984	APRIL 1986	AUG. 1986	NOV. 1986
Vinyl Chloride	5/.3 GV		<2	<2				<2	<2	
Carbon Tetrachloride	5/.4 GV		<2	<1				<2	<1	
Total Trihalomethane	--/--		<10	<4				<10	<4	
Benzene	ND/1.0 GV		<5	<1				<5	<1	
Toluene	50 GV/50 GV		<5	<1				<5	<1	
Ethylbenzene	50 GV/50 GV		<5	<1				<5	<1	
M-Xylene	50 GV/50 GV		<5	<1				<5	<1	
O-Xylene	50 GV/50 GV		<5	<1				<5	<1	
P-Xylene	50 GV/50 GV		<5	<1				<5	<1	
Chlorobenzene	20 GV/20			<2		15*			<1	
cis-1,1-dichloroethylene trans-1,1-dichloroethylene	.07 GV/.07 GV			6		12*			6	
Trichloroethylene	10/3 GV			<1					9	
Tetrachloroethylene										
1,1,2,2-tetrachloroethane	.2 GV/.2 GV			<4		15*			9	
Trichloroethene	--/--						23*			

*Units are in micrograms/liter
GV= Guidance Value, all other values are Standards

February results provided by Suffolk County Department of Health Services.

TABLE 3.2-3
EAST NORTHPORT LANDFILL
PRIORITY POLLUTANT ANALYSIS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW4S		CW4D	
		APRIL 1987	MAY 1987	APRIL 1987	MAY 1987
BASE NEUTRAL EXTRACTABLES					
Bis(2 ethylhexyl)-phthalate	4200*/4 GV	73∎		85∎	
PURGEABLE ORGANICS					
1,1-Dichloroethane	50 GV/50 GV				5
Cis/trans-1,2-Di-chloroethene	--/--				6
Tetrachloroethene					10

All values in micrograms/liter
∎Analyte found in Method Blank
*Not included in 100 ug/l summation criterion
GV: Guidance Value, all other values are Standards
NOTE: All Priority Pollutants analyzed, however, only detectable values listed on table.

TABLE 3.2-3 cont.
EAST NORTHPORT LANDFILL
PRIORITY POLLUTANT ANALYSIS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CWSS		CWSD	
		APRIL 1987	MAY 1987	APRIL 1987	MAY 1987
BASE NEUTRAL EXTRACTABLES					
Bis(2 ethylhexyl)-phthalate	4200*/4 GV	200∎		360∎	

All values in micrograms/liter
∎Analyte found in Method Blank
*Not included in 100 ug/l summation criterion
GV= Guidance Value, all other values are Standards
NOTE: All Priority Pollutants analyzed, however, only detectable values listed on table.

TABLE 3.2-4
EAST NORTHPORT LANDFILL
PESTICIDES

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	UWI			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Lindane	--/--		(0.03		
Heptachlor	ND/.009		(0.03		
Aldrin	ND/.002 GV		(0.04#		
Heptachlor Exposide	ND/.009		(0.15#		
Dieldrin	ND/.0009		(0.20#		
Endrin	ND/.2		(0.50#		
o,p'DDT	ND/.01		(0.40#		
p,p'DDT	ND/.01		(0.40#		
Methoxychlor	35/35		(1.00		
Toxaphene	ND/.01 GV		(5.00#		
Chlordane	.1/.02 GV		(2.00#		

#Elevated detection limit due to sample matrix interference
*Units are in micrograms/liter
GV= Guidance Value, all other values are Standards

TABLE 3.2-4 cont.

EAST NORTHPORT LANDFILL

PESTICIDES

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CWIS				CWIM				CWID			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Lindane	--/--		(0.05#				(0.03				(0.03		
Heptachlor	ND/.009		(0.05#				(0.03				(0.03		
Aldrin	ND/.002 GV		(0.05#				(0.04#				(0.11#		
Heptachlor Epoxide	ND/.009		(0.05#				(0.06#				(0.60#		
Dieldrin	ND/.0009		(0.01#				(0.12#				(1.30#		
Endrin	ND/.2		(0.24#				(0.25#				(2.00#		
o,p'DDT	ND/.01		(0.40#				(0.47#				(2.50#		
p,p'DDT	ND/.01		(0.16#				(0.24#				(3.00#		
Methoxychlor	35/35		(1.00				(1.00				(1.00		
Toxaphene	ND/.01 GV		(2.50				(2.50				(25.00#		
Chlordane	.1/.02 GV		(0.50				(0.50				(5.00#		

#Elevated detection limit due to sample matrix interference

*Units are in micrograms/liter

GV= Guidance Value, all other values ae Standards

TABLE 3.2-4 cont.
EAST NORTHPORT LANDFILL
PESTICIDES

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CW2S				CW2M				CW2D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Lindane	--/--		<0.03				<0.13#				<0.03		
Heptachlor	ND/.009		<0.03				<0.16#				<0.03		
Aldrin	ND/.002 GV		<0.03				<0.03				<0.03		
Heptachlor Exposide	ND/.009		<0.03				<0.05#				<0.03		
Dieldrin	ND/.0009		<0.04				<0.04				<0.04		
Endrin	ND/.2		<0.06				<0.06				<0.06		
o,p'DDT	ND/.01		<0.07				<0.07				<0.07		
p,p'DDT	ND/.01		<0.09				<0.09				<0.09		
Methoxychlor	35/35		<1.00				<1.00				<1.00		
Toxaphene	ND/.01 GV		<2.50				<2.50				<2.50		
Chlordane	.1/.02 GV		<0.50				<0.50				<0.50		

#Elevated detection limit due to sample matrix interference
*Units are in micrograms/liter
GV: Guidance Value, all other values ae Standards

TABLE 3.2-4 cont.
EAST NORTHPORT LANDFILL
PESTICIDES

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS*	CW3S				CW3D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Lindane	--/--		<0.03	<0.03			<0.03	<0.03	
Heptachlor	ND/.009		<0.03	<0.03			<0.03	<0.03	
Aldrin	ND/.002 GV		<0.03	<0.03			<0.03	<0.03	
Heptachlor Epoxide	ND/.009		<0.05#	<0.03			<0.03	<0.03	
Dieldrin	ND/.0009		<0.04	<0.04			<0.04	<0.04	
Endrin	ND/.2		<0.06	<0.06			<0.06	<0.06	
o,p'DDT	ND/.01		<0.07	<0.07			<0.07	<0.07	
p,p'DDT	ND/.01		<0.09	<0.09			<0.09	<0.09	
Methoxychlor	35/35		<1.00	<1.00			<1.00	<1.00	
Toxaphene	ND/.01 GV		<2.50	<2.50			<2.50	<2.50	
Chlordane	.1/.02 GV		<0.50	<0.50			<0.50	<0.50	

#Elevated detection limit due to sample matrix interference
*Units are in micrograms/liter
GV= Guidance Value, all other values ae Standards

TABLE 3.2-5
EAST NORTHPORT LANDFILL
OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	UW1			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Hexavalent Chromium	--/.05		<0.02		
BOD-5	--/--		<2.0		
COD	--/--		<15		
Phenols	.001/.001		<1.0		
Sulfate	250/250		40		
Arsenic	.025/.05		<2.0		
Calcium	--/--		18.9		
Cadmium	.01/.01		<1.0		
Copper	1.0/.2		<0.02		
Manganese	.3/.3		0.51		
Mercury	.002/.002		<0.5		
Selenium	.02/.01		<2.0		
Silver	.05/.05		<0.02		
Zinc	5.0/.3		<0.02		
Chromium	--/.05		<0.02		
Aluminum	--/--		<0.20		
TKN	--/--		0.62		
Total Nitrogen	--/--		5.62		
T. Coli Bacteria	--/--		<2.0		
Color	--/--		10		
Odor (Cold)	--/--		0		
Sodium	--/--		11.2		
Nitrite (NO2-N)	--/--		<0.1		
Total Alkalinity	--/--		22		
Magnesium	3.5 GV/3.5		7.6		
Hardness	--/--		78.4		

Units are in milligrams/liter
GV = Guidance Value, all other values are standards

TABLE 3.2-5 cont.
EAST NORTHPORT LANDFILL
OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CWIS			CWIM			CWID		
		APRIL 1986	AUG. 1986	NOV. 1986	APRIL 1986	AUG. 1986	NOV. 1986	APRIL 1986	AUG. 1986	NOV. 1986
Hexavalent Chromium	--/.05	<0.02			<0.02			<0.02		
BOD-5	--/--	29			13			2		
COD	--/--	900			770			41		
Phenols	.001/.001	14			11			<1.0		
Sulfate	250/250	<4.0			<4.0			7		
Arsenic	.025/.05	9			<2.0			2		
Calcium	--/--	14.2			7.4			17.7		
Cadmium	.01/.01	<1.0			<1.0			<1.0		
Copper	1.0/.2	<0.02			<0.02			<0.02		
Manganese	.3/.3	0.33			0.03			1.55		
Mercury	.002/.002	0.7			<0.5			<0.5		
Selenium	.02/.01	10			6.5			<2.0		
Silver	.05/.05	<0.02			<0.02			<0.02		
Zinc	5.0/.3	0.18			0.02			0.03		
Chromium	--/.05	<0.02			<0.02			<0.20		
Aluminum	--/--	<0.20			<0.02			<0.20		
TKN	--/--	520			430			<0.20		
Total Nitrogen	--/--	522			430			0.2		
T. Coli Bacteria	--/--	<2.0			<2.0			27		
Color	--/--	500			600			30		
Odor (Cold)	--/--	24			35			0		
Sodium	--/--	925			860			50		
Nitrite (NO2-N)	--/--	<0.1			<0.1			<0.1		
Total Alkalinity	--/--	3200			2600			95		
Magnesium	3.5 GV/3.5	47			30			12.2		
Hardness	--/--	228			142			94.3		

Units are in milligrams/liter
GV : Guidance Value, all other values are standards

TABLE 3.2-5 cont.
EAST NORTHPORT LANDFILL
OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW2S				CW2M				CW2D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Hexavalent Chromium	--/.05		<0.02				<0.02				<0.02		
BOD-5	--/--		<2.0				2				4		
COD	--/--		<15.0				45				32		
Phenols	.001/.001		<1.0				<1.0				<1.0		
Sulfate	250/250		70				42				18		
Arsenic	.025/.05		<2.0				<2.0				4		
Calcium	--/--		82				71				18.3		
Cadmium	.01/.01		<1.0				<1.0				<1.0		
Copper	1.0/.2		<0.02				<0.02				<0.02		
Manganese	.3/.3		0.08				7.36				0.27		
Mercury	.002/.002		<0.5				<0.5				<0.5		
Selenium	.02/.01		4				<2.0				<2.0		
Silver	.05/.05		<0.02				<0.02				<0.02		
Zinc	5.0/.3		0.02				0.02				0.02		
Chromium	--/.05		<0.02				<0.02				<0.02		
Aluminum	--/--		<0.02				<0.02				<0.02		
TKN	--/--		0.96				4.7				6.9		
Total Nitrogen	--/--		3.56				4.7				7.7		
T. Coli Bacteria	--/--		1600				350				170		
Color	--/--		10				5				10		
Odor (Cold)	--/--		0				0				0		
Sodium	--/--		63				73				94		
Nitrite (NO2-N)	--/--		<0.1				<0.1				<0.1		
Total Alkalinity	--/--		98				210				320		
Magnesium	3.5 GV/3.5		12.2				16.7				4.1		
Hardness	--/--		255				246				62.6		

Units are in milligrams/liter
GV : Guidance Value, all other values are standards

TABLE 3.2-5 cont.
EAST NORTHPORT LANDFILL
OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW3S				CW3D			
		DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986	DEC. 1982	APRIL 1986	AUG. 1986	NOV. 1986
Hexavalent Chromium	--/.05		<0.02	<0.02			<0.02	<0.01	
BOD-5	--/--		4.7	3			7.4	2	
COD	--/--		38	<15.0			80	50	
Phenols	.001/.001		6.4	2			<1.0	4	
Sulfate	250/250		24	145			210	280	
Arsenic	.025/.05		<2.0	<2.0			<2.0	<2.0	
Calcium	--/--		72	51.1			74	70.9	
Cadmium	.01/.01		<1.0	<1.00			<1.0	<1.00	
Copper	1.0/.2		<0.02	0.02			<0.02	<0.02	
Manganese	.3/.3		4.95	0.06			2.65	11.9	
Mercury	.002/.002		<0.5	<0.50			<0.5	<0.50	
Selenium	.02/.01		3	2.5			5	4	
Silver	.05/.05		<0.02	<0.01			<0.02	<0.01	
Zinc	5.0/.3		0.02	<0.02			0.02	<0.02	
Chromium	--/.05		<0.02	<0.01			<0.02	<0.01	
Aluminum	--/--		<0.02	<0.02			<0.02	<0.02	
TKN	--/--		8.7	9.7			7.7	29	
Total Nitrogen	--/--		9.9	10.8			7.7	29	
T. Coli Bacteria	--/--		2	8			1600	1600	
Color	--/--		10	<5.0			100	20	
Odor (Cold)	--/--		3	0			17	0	
Sodium	--/--		61.2	51.6			206	249	
Nitrite (NO2-N)	--/--		<0.1	<.10			<0.1	<0.10	
Total Alkalinity	--/--		210	193			35.5	550	
Magnesium	3.5 GV/3.5		17.5	13.3			30	34.2	
Hardness	--/--		252	182			308	317	

Units are in milligrams/liter
GV : Guidance Value, all other values are standards

TABLE 3.2-5 cont.

EAST NORTHPORT LANDFILL

OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW4S		CW4D	
		APRIL 1987	MAY 1987	APRIL 1987	MAY 1987
Antimony	.003/.003	<0.06	<60.0	<0.06	<60.0
Arsenic	.025/.05	8	35	7	22
Beryllium	.003/.003	<5.0	<5.0	<5.0	<5.0
Cadmium	.01/.01	<5.0	<5.0	<5.0	<5.0
Chromium	--/.05	0.04	<0.02	<0.02	<0.02
Copper	1.0/.2	0.29	0.15	0.06	0.08
Lead	.025/.05	17.5	63	55	48
Mercury	.002/.002	0.7	<0.50	<0.50	<0.50
Nickel	--/--	<0.04	<0.04	<0.04	<0.04
Selenium	.02/.01	<5.0	<5.0	<5.0	<5.0
Silver	.05/.05	<0.01	<0.02	<0.01	<0.02
Thallium	.004 GV/.004 GV	<10.0	<5.0	<10.0	<5.0
Zinc	5.0/.3	0.1	0.16	0.14	0.19
Iron	.3/.3	1.8	5.1	2.04	2.31
Cyanide	.2/.1	<10.0		<10.0	
Spec. Conductivity	--/--	1770	1970	990	1010
Chloride	250/250	280	105	199	15
pH	6.5-8.5	5.5	6.9	5.6	6.3
Total Dissolved Solids	1000/--	970	1250	650	700
Total Organic Carbon	--/--	11	11	14	9
Ammonia	--/2.0	3.3	2.1	0.13	0.17

Units are in milligrams/liter

GV = Guidance Value, all other values are standards

TABLE 3.2-5 cont.

EAST NORTHPORT LANDFILL
OTHER CONSTITUENTS

CONSTITUENTS	GROUNDWATER AND DRINKING WATER STANDARDS	CW5S		CW5D	
		APRIL 1987	MAY 1987	APRIL 1987	MAY 1987
Antimony	.003/.003	<0.06	<60.0	<0.06	<60.0
Arsenic	.025/.05	8	<5.0	<5.0	20
Beryllium	.003/.003	<5.0	<5.0	<5.0	<5.0
Cadmium	.01/.01	<5.0	<5.0	<5.0	<5.0
Chromium	--/.05	0.01	<0.02	<0.02	0.03
Copper	1.0/.2	0.18	0.06	0.04	0.03
Lead	.025/.05	36	20	34	17
Mercury	.002/.002	<0.50	<0.50	1.2	<0.50
Nickel	--/--	<0.04	<0.04	<0.04	<0.04
Selenium	.02/.01	<5.0	<5.0	<5.0	<5.0
Silver	.05/.05	<0.01	<0.02	<0.01	<0.02
Thallium	.004 GV/.004 GV	<10.0	<5.0	<10.0	<5.0
Zinc	5.0/.3	0.11	0.07	0.07	0.05
Iron	.3/.3	3.19	1.6	6.45	1.78
Cyanide	.2/.1	<10.0		<10.0	
Spec. Conductivity	--/--	451	392	214	156
Chloride	250/250	11	<2.0	19	7
pH	6.5-8.5	5.2	6	5.6	5.9
Total Dissolved Solids	1000/--	330	270	150	80
Total Organic Carbon	--/--	15	12.1	6.2	3.3
Ammonia	--/2.0	0.93	<0.02	0.07	0.97

Units are in milligrams/liter
GV = Guidance Value, all other values are standards

REFERENCE 15

File copy

Town of Huntington, N.Y.

Inter-Office Memorandum

Date: August 13, 1984

To: Nicholas A. Sordi, Town Attorney

From: M.E. White for R.B. Ignatow, Director, Environmental Control

Michael E. White

Re: Summary Report - SCDHS Private Well Sampling Data Available From the Vicinity of the East Northport Landfill for the Years 1972-1983

As per your request the following is a summary I have prepared of the SCDHS private well sampling data available from Fort Salonga and Kings Park for the years 1972-1983. (Copy of computer printout attached.)

This summary assessment of the available information, specifically the computer printout of data (originally transmitted from SCDHS 5/29/84), is an initial comparison of these sampling data with N.Y.S. Drinking Water and Groundwater Standards and/or guidelines. The summary is presented in the form of a list of the sampling results for wells that reveal high concentrations of certain water quality indicator parameters which could be attributed to the East Northport landfill/incinerator facility.

Also, the sample results included, select the data where standards and/or guidelines for health related parameters are exceeded and those wells shown on the SCDHS map entitled "Location of the Contaminated Drinking Water Wells - Town of Huntington IV-4" dated 3/84, and not those naturally occurring or only related to aesthetic problems. Note also that where such parameters were exceeded I have indicated other related water problems present in the samples.

In addition, I have attached, from the report entitled "Groundwater Monitoring Report -East Northport Landfill" dated July 1983 by H2M, the following:

1. A copy of Appendix I - Description of Key Leachate Parameters
2. A copy of Table 5-2 - Groundwater monitoring constituents to be tested for on a quarterly basis
3. A copy of Table 5-1 - Groundwater monitoring constituents to be tested for on an annual basis.

Within the sampling data set reviewed, specifically referenced earlier, there were 11 samples which revealed high concentrations or contravention of inorganic chemical standards/guidelines. They are as follows:

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Zimmerman 71 Meadow Glen Road Kings Park	Chlorides, elevated sodium
Smith 78 Upper Dock Road Kings Park	Nitrate
* Siira East Northport Rd. Kings Park	Chlorides elevated sodium presence of free ammonia and sulfate
PYZ 284 Old Commack Road Kings Park	Nitrate
* Presti 168 Townline Road Kings Park	Chlorides elevated sodium presence of free ammonia and MBAS
Mullady 585 E. Northport Road Kings Park	Nitrate presence of sulfate
* Matuz 150 Townline Road Kings Park (2 samplings 6/10/80, 3/10/82)	Chlorides elevated sodium presence of free ammonia
Lauben 565 Pulaski Road Kings Park	Nitrate
* Huntington Ready Mix E. Northport Road Kings Park	Chlorides elevated sodium presence of free ammonia and sulfate
* Duerwald Construction 168 Townline Road Kings Park	Chlorides elevated sodium presence of MBAS
Crecwsz 276 Old Commack Rd. Kings Park	Nitrate

* Also note that the majority of these samples showed high specific conductivity values and elevated values for iron, manganese and zinc.

There were also nine samples which revealed high concenterations or contravention of organic chemical standards/guidelines. They are as follows:

Craw 31 Meadow Glen Road Fort Salonga	Tetrachloroethylene
Marino 15 Major Trescott Lane Fort Salonga	Trichloroethylene
Miller 8 Woodmere Drive Fort Salonga	Trichloroethane
Moran Soundview Drive Fort Salonga	Trichloroethane
Scala 54 Meadow Glen Road Fort Salonga	Tetrachloroethylene
Taylor 27 Meadow Glen Road Fort Salonga	Tetrachloroethylene
Tyderman 33 Meadow Glen Road Fort Salonga	Tetrachloroethylene
Ryan 19 Meadow Glen Road Fort Salonga	Trichloroethane
Taimi 15 Meadow Glen Road Kings Park	Trichloroethane

Importantly, I remain available to meet with you and advise you on the environmental aspects of these data and related groundwater problem. However, I reiterate my concerns regarding any presumption of these sampling results. This summary report is provided at your request for the purpose, as you said, of making the information more comprehensible to you. In no way does this represent a complete or final product or conclusive study. Such a study, although not presently available, would require much further data, analysis, interpretation and SCDHS coordination.

Finally, I remind you of the SCDHS request for confidentiality of these data to protect the individuals sampled.

REFERENCE 16

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE II INVESTIGATION

AMFAR ASPHALT CORPORATION
KINGS PARK, SMITHTOWN, NEW YORK
NYSDEC SITE NO. 152128

PREPARED FOR

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 WOLF ROAD
ALBANY, NEW YORK 12233-0001

STATE OF NEW YORK
YUAN SHAN E. CHEN
No. 062683
LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK
THOMAS E. PEISE
LIC. No. 057131-1
LICENSED PROFESSIONAL ENGINEER

PREPARED BY

YEC, INC.
Clarkstown Executive Park
612 Corporate Way
Valley Cottage, New York 10989

YEC, INC.
612 CORPORATE WAY
SUITE 4M
CLARKSTOWN EXECUTIVE PARK
VALLEY COTTAGE, NY 10989

In Association With

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, NY 10965

October 1990

131 7

REFERENCE 17

Department of Environmental Conservation

Division of Hazardous Waste Remediation

Quarterly Status Report of Inactive Hazardous Waste Disposal Sites

April 1992

New York State Department of Environmental Conservation

MARIO M. CUOMO, *Governor* THOMAS C. JORLING, *Commissioner*

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REFERENCE 24

As of July 1984, EPA had designated 17 sole source aquifers (see EPA, 1983, 1984).[12]

---

[11]45 FR 51621. EPA has indicated that it "will not be concerned with reviewing on an individual basis, small isolated commitments of financial assistance such as individual home mortgage loans."

[12]Designated aquifers are:

1. Edwards Aquifer, TX (petition received 1/3/75, designated 12/16/75)
2. Nassau/Suffolk Counties Long Island, NY (petition received 1/21/75, designated 6/21/78)
3. Maryland Piedmont (petition received 10/1/75, designated 8/27/80)
4. Northern Guam (petition received 11/20/75, designated 4/26/78)
5. Fresno County, CA (petition received 8/9/76, designated 9/10/79)
6. Spokane-Rathdrum Prairie, WA-ID (petition received 10/4/76, designated 2/9/78)
7. Biscayne Aquifer, FL (petition received 5/8/78, designated 10/11/79)
8. Buried Valley, NJ (petition received 1/16/79, designated 5/8/80)
9. Cape Cod, MA (petition received 3/4/81, designated 7/31/82)
10. Whidbey Island, WA (petition received 4/31/81, designated 4/6/82)
11. Camon Island, WA (petition received 4/31/81, designated 4/6/81)
12. Kings/Queens Counties, NY (designated 1/24/84)

REFERENCE 30

CHLORDANE

CDN

Common Synonyms	Liquid	Brown	Sharp odor
Chlordan 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene Toxichlor; Octa-klor Velsicol 1068	Sinks in water.		

AVOID CONTACT WITH LIQUID. KEEP PEOPLE AWAY
Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves).
Stop discharge if possible.
Call fire department.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

Not flammable but solution may be combustible.
POISONOUS GASES MAY BE PRODUCED IN FIRE.
Extinguish with dry chemicals, foam or carbon dioxide.
Water may be ineffective on fire.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.

LIQUID OR SOLUTION
POISONOUS IF SWALLOWED OR IF SKIN IS EXPOSED.
Irritating to skin and eyes.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
DO NOT RUB AFFECTED AREAS.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.
IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.

Water Pollution

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
May be dangerous if it enters water intakes.

Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Issue warning-poison
Restrict access
Should be removed
Chemical and physical treatment

2. LABEL

2.1 Category: None
2.2 Class: Not pertinent

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Not listed
3.2 Formula: $C_{10}H_6Cl_8$
3.3 IMO/UN Designation: 6.1/2762
3.4 DOT ID No.: 2762
3.5 CAS Registry No.: 57-74-9

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Brown
4.3 Odor: Penetrating; aromatic; slightly pungent, like chlorine

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Respirator for sprays, fogs, or dust; goggles; rubber gloves.
5.2 Symptoms Following Exposure: Moderately irritating to eyes and skin. Injection, absorption through skin, or inhalation of mist or dust may cause excitability, convulsions, nausea, vomiting, diarrhea, and some local irritation of the gastrointestinal tract.
5.3 Treatment of Exposure: INHALATION: administer oxygen and give fluid therapy; do not give epinephrine, since it may induce ventricular fibrillation; enforce complete rest. EYES: flush with water for at least 15 min. SKIN: wash off skin with adequate quantities of soap and water; do NOT scrub. INGESTION: induce vomiting and follow with gastric lavage and administration of saline cathartic; ether and barbiturates may be used to control convulsions; oxygen and fluid therapy are also recommended; do NOT give epinephrine. Since no specific antidotes are known, symptomatic therapy must be accompanied by complete rest.
5.4 Threshold Limit Value: 0.5 mg/m³
5.5 Short Term Inhalation Limits: 2 mg/m³ for 30 min.
5.6 Toxicity by Ingestion: Grade 3, oral LD_{50} = 283 mg/kg (rat)
5.7 Late Toxicity: Possible liver damage; loss of appetite and weight.
5.8 Vapor (Gas) Irritant Characteristics: Data not available
5.9 Liquid or Solid Irritant Characteristics: Data not available
5.10 Odor Threshold: Data not available
5.11 IDLH Value: 500 mg/m³

6. FIRE HAZARDS

6.1 Flash Point: Solution: 225°F O.C.; 132°F C.C. Solid is not flammable.
6.2 Flammable Limits in Air: 0.7%-6% (kerosene solution)
6.3 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide
6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective on solution fire.
6.5 Special Hazards of Combustion Products: Irritating and toxic hydrogen chloride and phosgene gases may be formed when kerosene solution of compound burns.
6.6 Behavior in Fire: Not pertinent
6.7 Ignition Temperature: 410°F (kerosene solvent)
6.8 Electrical Hazard: Data not available
6.9 Burning Rate: Not pertinent

(Continued)

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable to 160°F
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: Data not available

8. WATER POLLUTION

8.1 Aquatic Toxicity: 0.5 ppm/96 hr/goldfish/TL_m/fresh water
8.2 Waterfowl Toxicity: LD_{50} = 1,200 mg/kg
8.3 Biological Oxygen Demand (BOD): Data not available
8.4 Food Chain Concentration Potential: High

9. SHIPPING INFORMATION

9.1 Grades of Purity: Technical. A variety of dusts, powders, and solutions in kerosene containing 2-60% chlordane are shipped.
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open (flame arrester)

10. HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

A-X-Y

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: Combustible liquid
11.2 NAS Hazard Rating for Bulk Water Transportation: Not listed
11.3 NFPA Hazard Classification: Not listed

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 16°C and 1 atm: Liquid
12.2 Molecular Weight: 409.8
12.3 Boiling Point at 1 atm: Decomposes
12.4 Freezing Point: Not pertinent
12.5 Critical Temperature: Not pertinent
12.6 Critical Pressure: Not pertinent
12.7 Specific Gravity: 1.6 at 20°C (liquid)
12.8 Liquid Surface Tension: (est.) 25 dynes/cm = 0.025 N/m at 20°C
12.9 Liquid Water Interfacial Tension: (est.) 50 dynes/cm = 0.05 N/m at 20°C
12.10 Vapor (Gas) Specific Gravity: Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
12.12 Latent Heat of Vaporization: Not pertinent
12.13 Heat of Combustion: (est.) −4,000 Btu/lb = −2,200 cal/g = −9.2 × 10⁶ J/kg
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: Data not available
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: Data not available

*Properties refer to undiluted, technical-grade chlordane.

6. FIRE HAZARDS (Continued)

6.10 Adiabatic Flame Temperature: Data not available
6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

APPENDIX E

EPA 2070-13 FORMS

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
NY	

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
SP Materials, Inc.	170 Town Line Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST
Kings Park	NY	11754	Suffolk	103	02

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40 52 00.0	73 17 00.0	X A. PRIVATE _ B. FEDERAL _____ _ C. STATE _ D. COUNTY _ E. MUNICIPAL _ F. OTHER _____ _ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
05 / 05 / 92	X ACTIVE _ INACTIVE	1983 / Present ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
_ A. EPA _ B. EPA CONTRACTOR _____ (Name of firm) _ C. MUNICIPAL _ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
_ E. STATE X F. STATE CONTRACTOR YEC, INC. (Name of firm) _ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Andrew Kahn	Staff Geologist	YEC, Inc.	(914)268320

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
Ira Bickoff	Staff Geologist	YEC, Inc.	(914)268320
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Steven Pomaro	Owner	75 Longfellow Drive	(516)266100
		Kings Park, NY 11754	( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:45 AM	Overcast, 5-10 MPH Southwest Wind

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Mark Mecca	YEC, Inc.	(914)268320

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Mark Mecca	YEC, Inc.		9142683203	12 / 2 / 92

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- _ A. SOLID
- _ B. POWDER, FINES
- _ C. SLUDGE
- _ D. OTHER None (Specify)
- _ E. SLURRY
- _ F. LIQUID
- _ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- _ A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- _ D. PERSISTENT
- _ E. SOLUBLE
- _ F. INFECTIOUS
- _ G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- _ K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			No Waste Observed During
PSD	PESTICIDES			Site Inspection
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers) In Groundwater and Soil

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04/STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	Iron	NA		1030	ug/L
IOC	Manganese	NA		14,500	ug/L
PSD	alpha-Chlordane	57-74-9		3.0	ug/L
PSD	gamma-Chlordane	57-74-9		2.2	ug/L

V. FEEDSTOCKS (See Appendix for CAS Numbers) NOT APPLICABLE

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

YEC Site Inspection, 1992, SP Materials, Inc.
Phase II Investigation, SP Materials, YEC, Inc., 1992

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A. GROUNDWATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

01 B. SURFACE WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Surface Water samples not collected

01 C. CONTAMINATION OF AIR — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Air samples not collected

01 D. FIRE/EXPLOSIVE CONDITIONS — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Site not declared a fire/explosion threat by Fire Marshall.

01 E. DIRECT CONTACT — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Direct Contact is not a concern.

01 F. CONTAMINATION OF SOIL — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

01 G. DRINKING WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Observed

01 H. WORKER EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

01 I. POPULATION EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 _ J. DAMAGE TO FLORA — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

None Reported

01 _ K. DAMAGE TO FAUNA — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None Reported

01 _ L. CONTAMINATION OF FOOD CHAIN — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

None Reported

01 _ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No waste present on surface at site.

01 _ N. DAMAGE TO OFFSITE PROPERTY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

01 _ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

01 _ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None Reported

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

No other known hazards present at the site.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

No waste observed at the site during YEC 1992 Site Inspection. C&D material accepted in the past was reportedledly buried on site.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

YEC, Inc. - Site Inspection Report, SP Materials, 1992.
Phase I Investigation, SP Materials, YEC, Inc., 1989

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
_ A. NPDES				
_ B. UIC				
_ C. AIR				
_ D. RCRA				
_ E. RCRA INTERIM STATUS				
_ F. SPCC PLAN				
X G. STATE (specify)	10-83-0134	7/1/83	7/1/84	Construction and Demo.
X H. LOCAL (specify)	1023-30-0059	5/16/83	5/16/86	Mining Permit
_ I. OTHER (specify)				
_ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
_ A. SURFACE IMPOUNDMENT		
_ B. PILES		
_ C. DRUMS, ABOVE GROUND		
_ D. TANK, ABOVE GROUND		
_ E. TANK, BELOW GROUND		
X F. LANDFILL	20 Truck LOads	
_ G. LANDFARM		
_ H. OPEN DUMP		
_ I. OTHER _____ (specify)		

04 TREATMENT (check all that apply)

_ A. INCINERATION
_ B. UNDERGROUND INJECTION
_ C. CHEMICAL/PHYSICAL
_ D. BIOLOGICAL
_ E. WASTE OIL PROCESSING
_ F. SOLVENT RECOVERY
_ G. OTHER RECYCLING/RECOVERY
_ H. OTHER _____ (specify)

None

05 OTHER
3 A. BUILDINGS ONSITE

06 AREA OF SITE
9.6 (acres)

07 COMMENTS

A maximum of 20 truck loads was accepted under the C&D permit.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (check one)

X A. ADEQUATE, SECURE _ B. MODERATE _ C. INADEQUATE, POOR _ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

None

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: _ YES X NO
02 COMMENTS

C&D waste was buried and covered over. Site is entirely fenced in.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

YEC site inspection, SP Materials, 1992.
NYSDEC Region 1 Files
Interview with owner, Steven Pomaro

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE: NY	01 SITE NUMBER:

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (check as applicable)

	SURFACE	WELL
COMMUNITY	A. _	A. X
NON-COMMUNITY	B. _	B. X

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. _	B. _	C. _
D. _	E. _	F. _

03 DISTANCE TO SITE

A. 1 (mi)
B. 0.6 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (check one)

X A. ONLY SOURCE FOR DRINKING
_ B. DRINKING (other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
_ C. COMMERCIAL INDUSTRIAL IRRIGATION (Limited other sources available)
_ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUNDWATER _____

03 DISTANCE TO NEAREST DRINKING WATER WELL _____ (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
40-65 (ft)	Northeast	0-50 (ft)	_____ (gpd)	X YES _ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

Within a three mile radius of the site, there are Suffolk County Water Authority Wells, the Greenlawn well field, Kings Park Psychiatric Center wells, and a Northport VA Hospital well. Private wells also exist.

10 RECHARGE AREA		11 DISCHARGE AREA	
X YES _ NO	COMMENTS	_ YES _ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X A. RESERVOIR, RECREATION DRINKING WATER SOURCE
_ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
_ C. COMMERCIAL INDUSTRIAL
_ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Willow Pond	_	3 (mi)
	_	(mi)
	_	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 8,921 NO. OF PERSONS	B. 33,026 NO. OF PERSONS	C. 76,799 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION .15 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 1000

04 DISTANCE TO NEAREST OFF-SITE BUILDING .1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within written vicinity of site, e.g., rural, village, densely populated urban area)

The site is located in a residential area.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 6 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE: NY	01 SITE NUMBER:

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

_ A. 10^{-6} - 10^{-8} cm/sec _ B. 10^{-4} - 10^{-6} cm/sec _ C. 10^{-4} - 10^{-3} cm/sec X D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

X A. IMPERMEABLE (Less than 10^{-6} cm/sec) _ B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) _ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) _ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL Ph
Apprx. 1200 (ft)	NA (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
21 (in)	2.5 (in)	1 %	NNE	1 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 _ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTAURINE: A. >2 (mi) OTHER: B. >1 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

>1 (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. NA (mi)	B. 0.15 (mi)	C. 1 (mi)	D. 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located east of Townline Road, west of Old Northport Road, north of Jericho Turnpike and south of the Long Island Railroad in the Town of Smithtown, Suffolk County, New York. The site is approximately three miles south of the Long Island Sound and Sunken Meadow Creek is approximately 2.4 miles to the northeast (Ref. 11).

The site is fairly level with a 20 foot change in elevation from the north west corner of the site to the north west corner of the top of the excavation pit (930 feet) with the elevation decreasing towards the south west (Plate A). The pit is located in the south east section of the site and the bottom is approximately 27 feet below grade. A berm rises about 32 feet above the rim of the pit immediately east of the excavation. The surrounding area is approximately level with most of the site. The southeast section of the site is at a lower elevation than the areas immediately to the east (Old Northport Road), to the north, and to the northwest (Townline Road) and could receive surface runoff from these areas. The site is unpaved sand and gravel and because precipitation percolates rapidly into these highly permeable materials, overland flow would be negligible.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Phase I Investigation, SP Materials, YEC, Inc. , 1989.
Phase II Investigation, SP Materials, YEC, Inc., 1992.
USGS, Hydrologic Investigations Atlas HA-709, Sheet 1.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4	Aquatec Labs, Vermont	Currently
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	2	Aquatec Labs, Vermont	Currently
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU PI 101 (PID)	No readings > Background during drilling
CGI (MSA 261)	No explosive conditions reported during drilling

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND X AERIAL

02 IN CUSTODY OF YEC, Inc. Valley Cottage, NY (Name of organization or individual)

03 MAPS X YES _ NO

04 LOCATION OF MAPS YEC, Inc. Valley Cottage, NY

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

YEC, Inc. Field Notes from monitoring well installation
YEC, Inc., Phase II Investigation, SP Materials, 1992.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable)		
01 NAME Steven Pomaro	02 D+B NUMBER		08 NAME SP Materials	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 75 Longfellow Road	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.) 170 Town Line Road	11 SIC CODE	
05 CITY Kings Park	06 STATE NY	07 ZIP CODE 11754	12 CITY Kings Park	13 STATE NY	14 ZIP CODE 11754
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (If applicable; list most recent first)		
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with Owner, Tax Maps

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE: NY	01 SITE NUMBER:

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME: Steven Pomaro	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 75 Long Fellow Road	04 SIC CODE:
05 CITY: Kings Park	06 STATE: NY
07 ZIP CODE: 11754	
08 YEARS OF OPERATION: 9	09 NAME OF OWNER: Steven Pomaro

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME: SP Materials	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.): 170 Town Line Road	13 SIC CODE:
14 CITY: Kings Park	15 STATE: NY
16 ZIP CODE: 11754	

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:
05 CITY:	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER:

PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)

10 NAME:	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:
05 CITY:	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER:

10 NAME:	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:
05 CITY:	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER:

10 NAME:	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with owner, Tax Maps

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
NY	

II. ON-SITE GENERATOR No on-site generators of waste.

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(s)

01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE NY	01 SITE NUMBER

II. PAST RESPONSE ACTIVITIES NONE

01 A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE	03 AGENCY	
01 G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE	03 AGENCY	
01 H. ON SITE BURIAL 04 DESCRIPTION	02 DATE	03 AGENCY	
01 I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY	
01 J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY	
01 K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY	
01 L. ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY	
01 M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY	
01 N. CUTOFF WALLS 04 DESCRIPTION	02 DATE	03 AGENCY	
01 O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE	03 AGENCY	
01 P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE	03 AGENCY	
01 Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE	03 AGENCY	

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE NY	01 SITE NUMBER

II. PAST RESPONSE ACTIVITIES (Continued) NONE

01 R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC Region 1 Files
YEC, Inc. Phase I Investigation, SP Materials, 1989.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE NY	01 SITE NUMBER

II. ENFORCEMENT INFORMATION NONE

01 PAST REGULATORY/ENFORCEMENT ACTION _ YES _ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NYSDEC Region 1 Files
YEC, Inc. Phase I Investigation, SP Materials

EPA FORM 2070-13 (7-81)

APPENDIX F

LIST OF SUPPORTING DOCUMENTATION

LIST OF SUPPORTING DOCUMENTATION

1 REFERENCE DOCUMENTATION

USGS 7.5 minute Series (Topographic) Quadrangle, Greenlawn and Northport, New York, 1969 (Reference 18).

Suter, R., et al., 1949. Mapping of Geologic Formations and Aquifers of Long Island, New York, USGS Bulletin GW-18, Albany, N.Y. (Reference 19).

Smolensky, D.A., et al., 1989. Hydrologic Framework of Long Island, New York, USGS Hydrologic Investigations Atlas, Albany, N.Y. (Reference 20).

Lubke, E.R., 1964. Hydrogeology of the Huntington - Smithtown Area, Suffolk County, New York, USGS Water-Supply Paper 1669-D., Washington D.C. (Reference 21).

Mack, T., Maus, P.E. Direction of Contaminant Plumes in Ground Water of Long Island, New York, By Electromagnetic Terrain- Conductivity Surveys, USGS Water-Resources Investigations Report 86-4045 (Reference 22).

Warner, J.W. et al., 1975. Soil Survey of Suffolk County, New York, United States Department of Agriculture, Soil Conservation Service, April 1975 (Reference 23).

Doriski, T.P., 1987. Potentiometric-Surface of the Water-Table, Magothy & Lloyd Aquifers on Long Island, New York, USGS Water-Resources Investigations Report 86-4189 (Reference 25).

Fetter, C.W., 1988. *Applied Hydrogeology*, second ed., Merrill Publishing Co., Columbus Ohio (Reference 26).

Dragun, J., 1988. *The Soil Chemistry of Hazardous Materials*, Hazardous Materials Control Research Institute, Silver Spring, Maryland (Reference 27).

Eckhardt, A.V., et al. 1989. Relation Between Land Use and Ground-Water Quality In The Upper Glacial Aquifer In Nassau and Suffolk Counties, Long Island, New York, USGS Water-Resources Investigations Report 86-4142 (Reference 28).

Lewis, R.S., Sr. and N.I.Sax, 1987. *Hawley's Condensed Chemical Dictionary*, eleventh ed. Van Nostrand Reinhold, New York, N.Y. (Reference 29).

Bassow, H., 1983. *Land Pollution Chemistry: An Experimenters Source Book*, Hayden Book Company, Inc., Rochelle Park, N.J. (Reference 31).

LIST OF SUPPORTING DOCUMENTATION
(Continued)

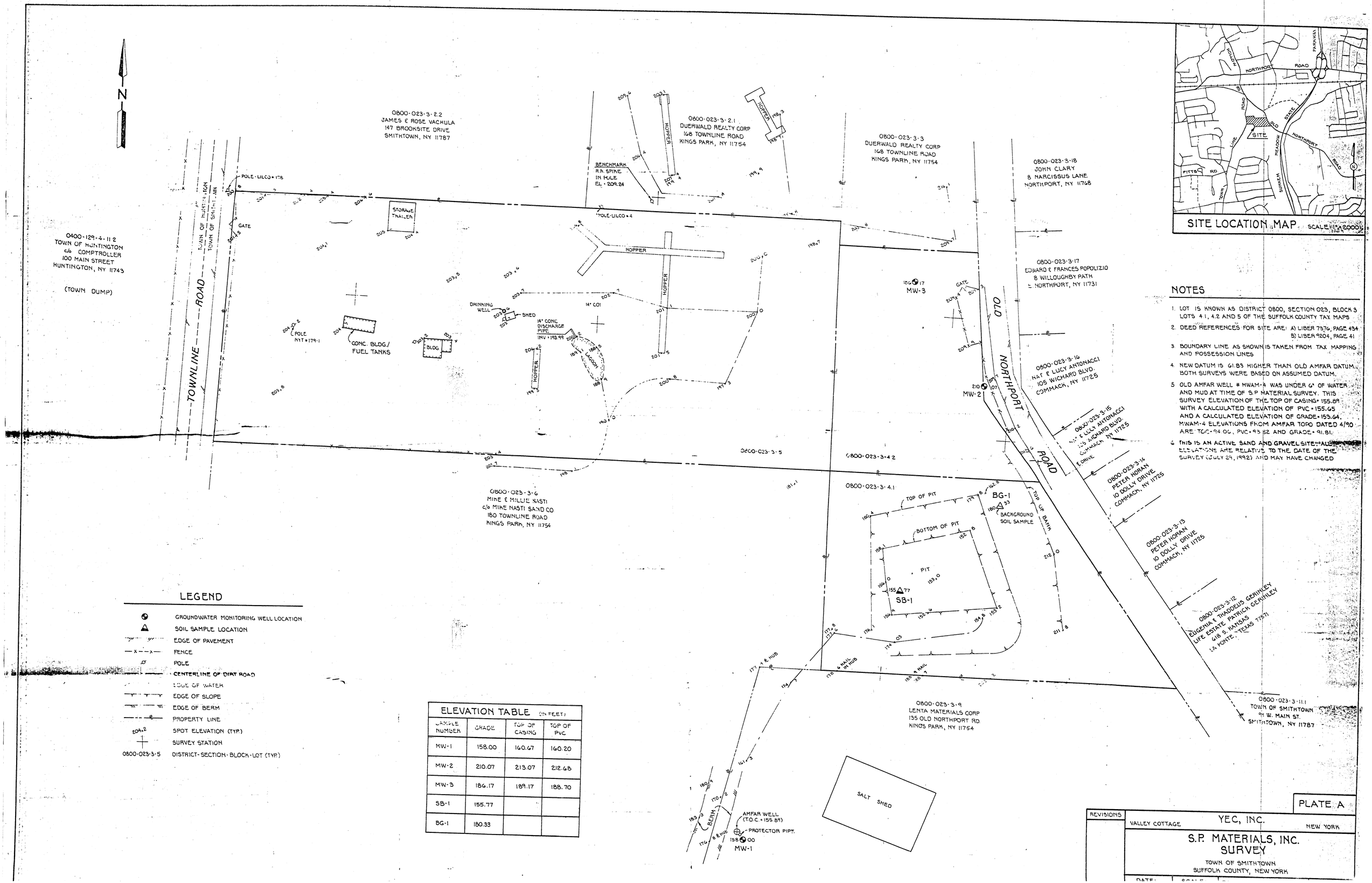
II SUBCONTRACTOR OR SUBCONSULTANT REPORTS

- II.i Soil Gas Survey (Reference 2)
- II.ii Data Validation Report (Reference 5)
- II.iii Analytical Data Package (Reference 4)
- II.iv Grain Size Analysis (Reference 6)

III HEALTH AND SAFETY PLAN (Reference 1)

IV SITE INSPECTION REPORT (Reference 12)

V SAMPLING LOGS (Reference 3)



NOTES

1. LOT IS KNOWN AS DISTRICT 0800, SECTION 023, BLOCK 3 LOTS 4.1, 4.2 AND 5 OF THE SUFFOLK COUNTY TAX MAPS
2. DEED REFERENCES FOR SITE ARE: A) LIBER 7376, PAGE 434
   B) LIBER 9204, PAGE 41
3. BOUNDARY LINE AS SHOWN IS TAKEN FROM TAX MAPPING AND POSSESSION LINES
4. NEW DATUM IS 61.83 HIGHER THAN OLD AMFAR DATUM. BOTH SURVEYS WERE BASED ON ASSUMED DATUM.
5. OLD AMFAR WELL # MWAM-4 WAS UNDER 6" OF WATER AND MUD AT TIME OF S.P MATERIAL SURVEY. THIS SURVEY ELEVATION OF THE TOP OF CASING = 155.89 WITH A CALCULATED ELEVATION OF PVC = 155.65 AND A CALCULATED ELEVATION OF GRADE = 153.64. MWAM-4 ELEVATIONS FROM AMFAR TOPO DATED 4/90 ARE: TOC = 94.02, PVC = 93.82 AND GRADE = 91.81.
6. THIS IS AN ACTIVE SAND AND GRAVEL SITE. ALL ELEVATIONS ARE RELATIVE TO THE DATE OF THE SURVEY (JULY 29, 1992) AND MAY HAVE CHANGED

LEGEND

- GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- EDGE OF PAVEMENT
- FENCE
- POLE
- CENTERLINE OF DIRT ROAD
- EDGE OF WATER
- EDGE OF SLOPE
- EDGE OF BERM
- PROPERTY LINE
- 204.2 SPOT ELEVATION (TYP.)
- SURVEY STATION
- 0800-023-3-5 DISTRICT-SECTION-BLOCK-LOT (TYP.)

ELEVATION TABLE (IN FEET)

SAMPLE NUMBER	GRADE	TOP OF CASING	TOP OF PVC
MW-1	158.00	160.67	160.20
MW-2	210.07	213.07	212.68
MW-3	186.17	189.17	188.70
SB-1	155.77		
BG-1	180.33		

PLATE A

REVISIONS	YEC, INC.
	VALLEY COTTAGE — NEW YORK
	S.P. MATERIALS, INC. SURVEY
	TOWN OF SMITHTOWN
	SUFFOLK COUNTY, NEW YORK
	DATE: SCALE:

Report No.: 8003-352
Rev. No.: 1

FINAL
SITE INSPECTION
SP MATERIALS, INC.
KINGS PARK, SUFFOLK COUNTY, NEW YORK

PREPARED UNDER

WORK ASSIGNMENT NO. 038-2JZZ
CONTRACT NO. 68-W9-0051

August 1, 1995

VOLUME 2 OF 2
Revised: 8/9/95

REFERENCE NO. 3

Reference Number 3 has been deleted from this report.

REFERENCE NO. 4

REF-#3247

NYD986886174

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

S.P.Materials, Inc.

Site No.152093

Kings Park, Suffolk County

SEPTEMBER, 1989

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., Director

By:

YEC, INC.

UNDER CONTRACT TO

LAWLER, MATUSKY & SKELLY ENGINEERS

Ref. 4

ENGINEERING INVESTIGATIONS AT
INACTIVE HAZARDOUS WASTE SITES
IN THE STATE OF NEW YORK
PHASE I INVESTIGATIONS

S.P. Materials, Inc.
Kings Park, Suffolk County
NYSDEC I.D. No. 152093

Prepared for

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233-0001

STATE OF NEW YORK
YUAN SHAN E. CHEN
No. 062683
LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK
EDWARD A. MAIKISH
No. 055116
LICENSED PROFESSIONAL ENGINEER

Prepared by

YEC, INC.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, New York 10989

In Association with

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

September 1989

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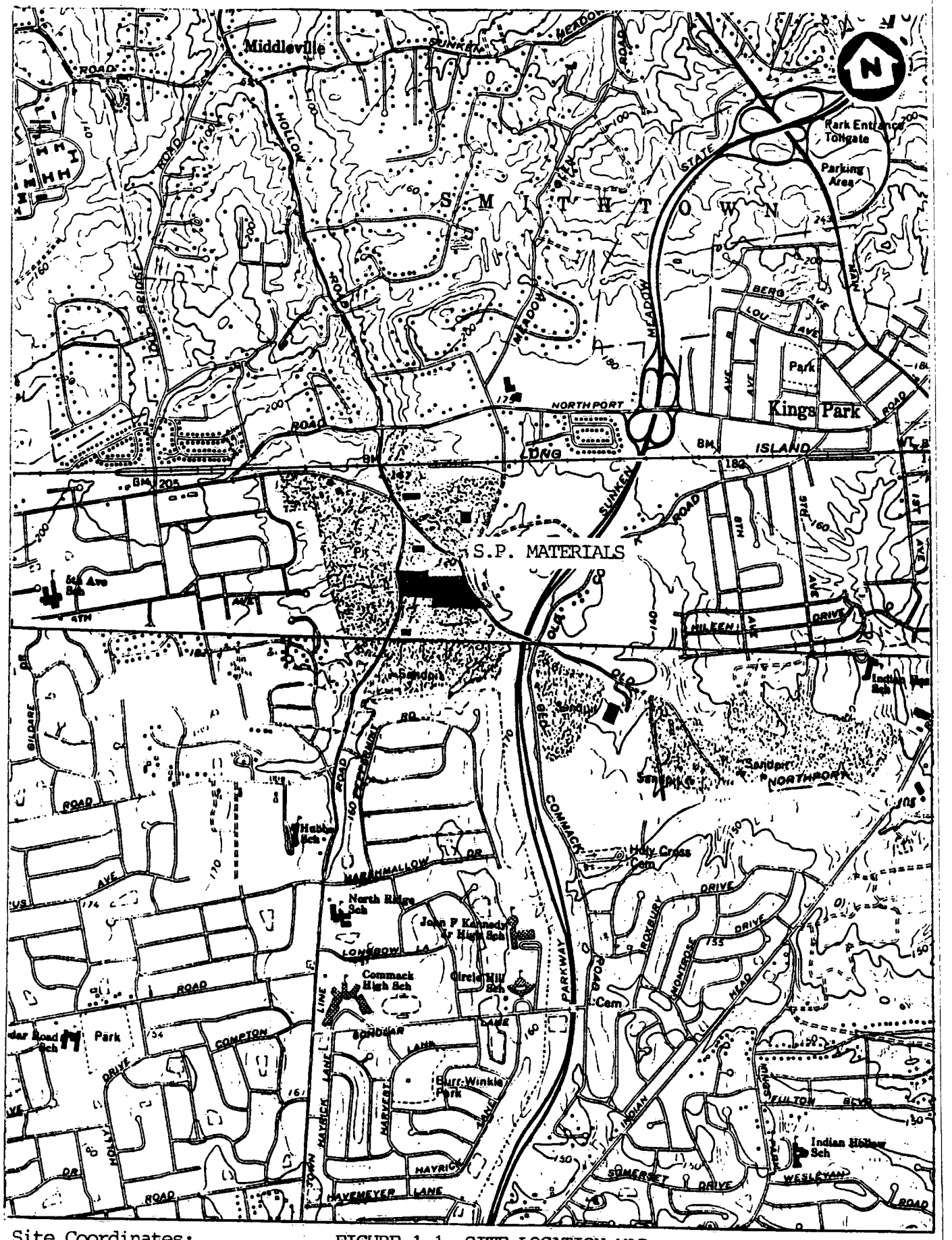
1. EXECUTIVE SUMMARY

S.P. Materials, Inc. (NYSDEC I.D. # 152093) is located at 170 Town Line Road in the Hamlet of Kings Park, New York (Figures 1-1 and 1-2). In 1973, Mr. Stephen Pomaro purchased 6 acres from a sand company owned by Mike Nasti. In 1981, an additional 1.4 acre parcel was purchased and shortly thereafter, a 2.2 acre parcel was purchased. The last two parcels, approximately 3.6 acres located south and west of Old Northport Road and east of Town Line Road is used for sand and gravel operation. The total area of the site is approximately 9.6 acres. A three year renewable mining permit was issued by the Town of Smithtown on May 16, 1983. Beginning at that time, raw mine material was removed from the pit, processed, sold and delivered with S.P. Materials' own trucks.

A one year, renewable, construction and demolition debris landfill permit was issued on July 1, 1983 by New York State Department of Environmental Conservation and expired on July 1, 1984. During the first period, approximately 15 to 20 dump truck loads of construction debris were dumped and these debris were covered with a good quality clay earth. According to Mr. Stephen Pomaro, the owner of the site, a NYSDEC representative inspected the site in the spring of 1984 and noted a rusted drum on the site and placed S.P. Materials on NYSDEC's list of Inactive Hazardous Waste Sites. Mr. Pomaro reports that mining will continue for as long as there is good material, but the pit will



Site Coordinates:
Longitude: 73 17'00"
Latitude : 40 52'00"

FIGURE 1-1: SITE LOCATION MAP
S.P.Materials, Kings Park
New York

Source: USGS Quadrangle Map, 1967
Scale: 1 inch = 2000 fee

Northport and Greenlawn Quadrangles

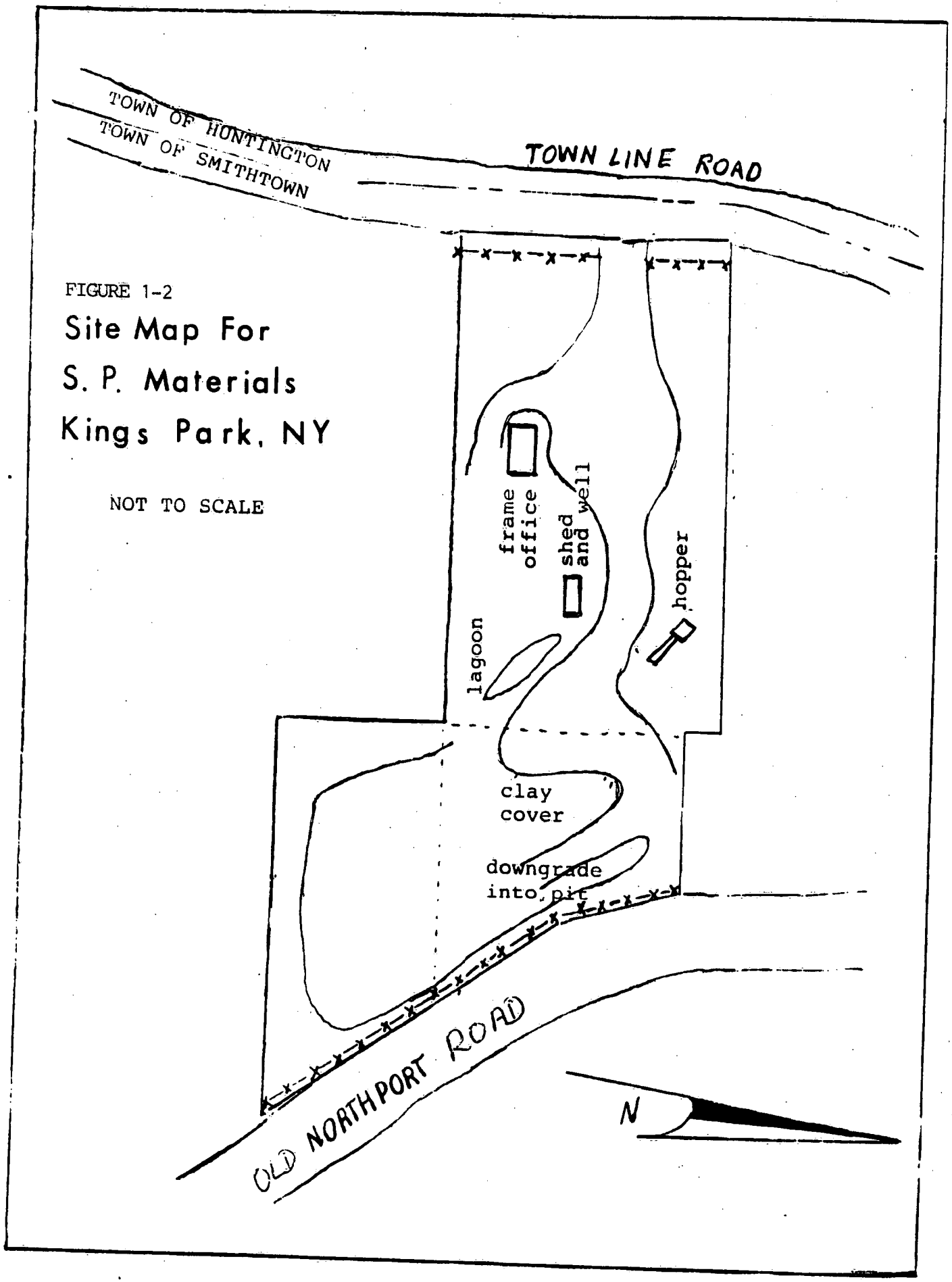


FIGURE 1-2

Site Map For
S. P. Materials
Kings Park, NY

NOT TO SCALE

not be filled in until the site has been removed from the hazardous waste site list.

The site is completely fenced from both Town Line and Old Northport Roads with chain link fencing and has lockable gates.

A preliminary application of the Hazard Ranking System (HRS) was completed to quantify risks associated with the site. A detailed environmental site assessment to fully evaluate the site was not conducted. A preliminary HRS score was completed on the basis of the available data. It should be noted that without a full environmental assessment, an unrealistically low HRS score may result.

Under the HRS, three numerical scores are computed to express the site's relative risk or damage to the population and the environment. The three scores are described below:

- S_M reflects the potential for harm to human or the environment from migration of a hazardous substance away from the facility via groundwater, surface water, or air. It is a composite of separate scores for each of the three routes (S_{gw} = groundwater route score, S_{sw} = surface water route score, and S_a = air route score).

- S_{FE} reflects the potential for harm from substances that can explode or cause fires.

7

- S_{DC} reflects the potential for harm from direct contact with hazardous substances at the facility (i.e., no migration need be involved).

The preliminary HRS score was:

S_M = Not Scored (S_{gw} = Not Scored; S_{sw} = 0; S_a = 0)

S_{FE} = Not Scored

S_{DC} = 0

HRS score for groundwater was not computed because of lack of on-site groundwater analytical data. Fire and explosion was not scored because the site was not declared a fire/explosion threat by the Code Enforcement Bureau Director. In order to assess the site, it is recommended that a water sample be collected from the on-site well and that a one-day soil boring or testpit program be conducted to take soil samples along the edge of the C & D dump area.

2. PURPOSE

Under contract to Lawler, Matusky and Skelly Engineers, which is in turn under contract to the New York State Department of Environmental Conservation (NYSDEC) Superfund Program, YEC, Inc. conducted this Phase I Investigation at the S. P. Materials, Inc. The purpose of this investigation was to provide a preliminary evaluation of the potential hazardous waste present at the site, to estimate the potential pollutant migration pathways leading off site, and to determine natural resources or extent of the human population that might be affected by the pollutants. The evaluation includes preparation of a narrative site description, initial characterization of the hazardous substances on site, and calculation of a preliminary HRS score. This assessment will be used to determine what additional actions, if any, should be conducted at this site.

3. SCOPE OF WORK

The Phase I effort involved the following tasks:

- A review of available information from state, county, municipal, and federal files;
- Interviews with individuals knowledgeable about the site; and
- Physical inspection of the site on January 11, 1989 that included review of USGS 7.5-minute topographic maps. No samples were collected, although real time air monitoring was performed during the site inspection using an HNu photoionization organic vapor detector.

Photographs were taken during the site inspection and are included in Appendix A. All observations were recorded in a field log book and are reported in the United States Environmental Protection Agency (USEPA) Site Inspection Report form 2070-13 presented in Section 5.5 of this report.

Table 3-1 lists the information sources contacted for the Phase I investigation.

Table 3-1

SOURCES CONTACTED FOR THE NYSDEC PHASE I

INVESTIGATION AT S.P. MATERIALS, INC.

AGENCIES CONTACTED

U.S. Environmental Protection Agency, Region II
26 Federal Plaza, Room 900
New York, New York 10278
(212) 264 6696
Contact: Ben Conetta
Date: 9/6/88
Information Gathered: No Files/Information

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 12233-0001
(518) 457 0639
Contact: Mike Komoroske
Date: 8/8/88
Information Gathered: No Files/Information.

New York State Department of Environmental Conservation
Region 1
Division of Solid Waste
SUNY Campus - Building 40
Stony Brook, New York 11794
(516) 751 7900
Contact: Bob Galli
Date: 1/5/89
Information Gathered: File Search for the Site.

Suffolk County Soil & Water Conservation District
164 Old Country Road
Peconic Plaza
Riverhead, New York 11901
(516) 727 2315
Contact: Stanley Pauzer
Date: 8/1/88
Information Gathered: Soil Survey of Suffolk County, New York.

Table 3-1 (Cont.)

Suffolk County Department of Health Services
Bureau of Drinking Water
225 Rabro Drive East
Hauppauge, NY 11788
(516) 348 2895
Contact: Steve Cary
Date: 11/29/88
Information Gathered: No Information.

Suffolk County Department of Health Services
Hazardous Materials Management
15 Horseblock Place
Farmingville, NY 11738
(516) 451 4647
Contact: Otto Reneberg
Date: 11/28/88
Information Gathered: File Search for the Site.

Long Island Regional Planning Board
H.Lee Dennison Office Building
Veterans Memorial Highway
Hauppauge, New York 11787
(516) 360 5191
Contact: Roy Fedelem
Date: 12/22/88
Information Gathered: Census Tract and Population.

Suffolk County Water Authority
Oakdale
Long Island, NY 11769
(516) 589 5200
Contact: E.J. Rosavitch, P.E.
Date: 1/12/89
Information Gathered: No Information.

Bureau Director
Code Enforcement Bureau
65 Maple Avenue
Smithtown, NY 11787
(516) 360 7553
Contact: Mr. John Valentine
Date: 1/5/89
Information Gathered: The site was not declared as a threat from fire or explosion.

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Table 3-1 (Cont.)

New York State Department of Environmental Conservation
Region 1
SUNY Campus - Building 40
Stony Brook, New York 11794
(516) 751 7900
Contact: Michael Scheibel
Date: 1/12/89
Information Gathered: Critical Habitat of Endangered Species and Plant Species.

Cornell Cooperative Extension - Suffolk County
246 Griffing Avenue
Riverhead, NY 11901
(516) 727 7850
Contact: William J. Sanok
Date: 1/12/89
Information Gathered: Farmland/Agricuture Land and Surface Water Bodies Information.

New York State Department of Environmental Conservation
Region 1
SUNY Campus - Building 40
Stony Brook, New York 11794
(516) 751 7900
Contact: Martin E. Shea
Date: 1/12/89
Information Gathered: Fresh Water Wetlands within a 1-mile radius.

New York State Department of Health
Nelson A. Rockefeller Empire State Plaza
Corning Tower Building
Albany, NY 12237
(518) 473 4637
Contact: James Covey, P.E.
Date: 9/15/88
Information Gathered: Community Water Supply Atlas.

New York State Department of Health
Room # 205
2 University Place
Albany, NY 12203
(518) 458 6310
Contact: Rick Teurs
Date: 1/10/89
Information Gathered: File search for the site.

Table 3-1 (Cont.)

INTERVIEWS

Contact: Mr. Stephen D. Pomaro
Address: 170 Town Line Road
Kings Park, NY 11754
(516) 266 1006
Date: 1/11/88
Information Gathered: Site History and Operation.

4. SITE ASSESSMENT

4.1 SITE HISTORY

S. P. Materials, Inc. (NYSDEC I.D. # 152093) is located at 170 Town Line Road in Kings Park, New York. The site consists of two parcels. One parcel, approximately 3.6 acres located south and west of Old Northport Road and east of Town Line Road is used for sand and gravel operation. A three year renewable mining permit was issued by the Town of Smithtown on May 16, 1983. Raw mine material was removed from the pit, processed, sold and delivered with S. P. Materials' own trucks. The pit is currently about 3 acres by approximately 50 feet deep.

A one year, renewable, construction and demolition debris landfill permit was issued on July 1, 1983 by New York State Department of Environmental Conservation (NYSDEC) and expired on July 1, 1984. During the first period, approximately 15 to 20 dump truck loads of construction debris (brick, cobble, block, concrete and wood) were dumped on the side of the pit and these debris were covered with a good quality clay earth for erosion and appearance purposes.

The other parcel, approximately 6 acres purchased in 1973 has various structures including a small office/workshop, a storage shed, a lagoon and various mining equipments.

There is a well onsite which is used about 30 days per year to supply water for washing gravel. The site is completely fenced

from both Town Line and Old Northport Roads with chain link fencing and has lockable gates.

During the site interview, it was discovered that waste oil from machinery and other sources in the site is collected and disposed of by General Waste Oil Co.

According to Mr. Stephen Pomaro, site owner, in the spring of 1984, a NYSDEC representative inspected the facility and noted a rusted drum on the site and placed S. P. Materials on NYSDEC's list of Inactive Hazardous Waste Sites.

During the YEC's site inspection, no suspicious hazardous waste disposal areas were detected.

4.2 SITE TOPOGRAPHY

The S.P. Materials is located approximately 2.5 miles inland of Long Island Sound at an elevation of approximately 120 feet above mean sea level (MSL) as shown on USGS 7.5-Minute Quadrangle (Ref.9). The site is located between Town Line Road and Old Northport Road and about 0.4 mile south of Long Island Railroad tracks. Drainage across the study area is generally toward the northern direction and, ultimately to the Long Island Sound.

4.2.1 Soils

The soil type at S.P. Materials site is classified as Gravel

Pits (Ref.5). Gravel Pits (G_p) are open excavations that have been made for the purpose of mining sand and gravel. These pits range in depth from 8 or 10 feet to more than 100 feet. The sides of the pits generally are left nearly vertical, and the bottoms are level (Ref.5).

4.2.2 Land Use

The site is within a mixed residential, commercial and industrial district. The total population within a 3-mile radius of the site is approximately 76,800 persons (Ref.11). The Smithtown Municipal Services Facility (MSF) Landfill is located approximately 600 ft to the southeast. The nearest residence is located on Old Northport Road, approximately 0.25 mile to the northeast.

4.2.3 Critical and Sensitive Habitats

There are no critical habitats or plant species of concern within a 1-mile radius of the site (Ref.10).

4.2.4 Surface Water

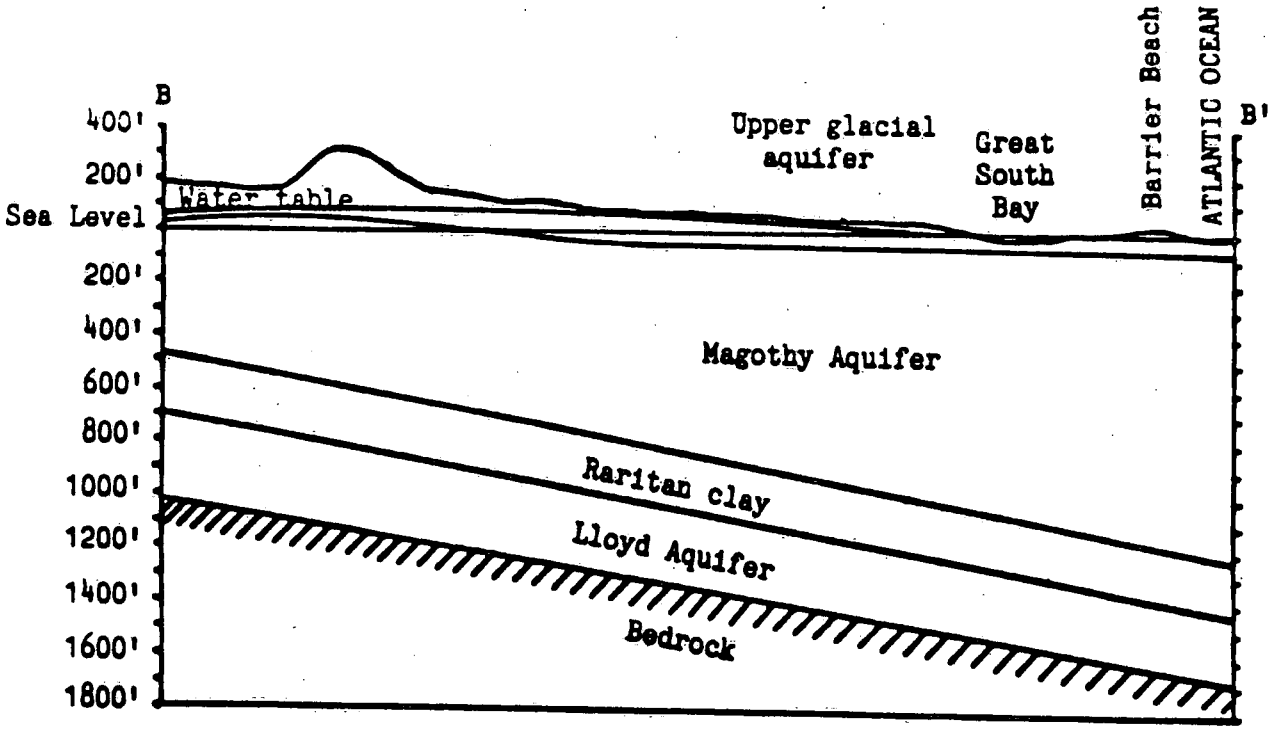
The nearest surface waterbody is a small tributary entering Willow Pond, which is part of the Nissequogue River Park, approximately 3 miles southeast of the site. There is no viable overland route from the site to this surface water because several roads and recharge basins intersect the pathway.

4.3 REGIONAL GEOLOGY

Geologically, Long Island is made up of layers of unconsolidated material underlain by bedrock. Figure 4-1 shows a representative geologic cross section on a north/south transect of the island. The bedrock slopes gently from northwest to southeast and the unconsolidated material varies in thickness from zero in the northwest to a maximum thickness of over 2000 feet in the southcentral part of the island.

Above the bedrock is Raritan Formation of Cretaceous age. This formation has two members. The lower, called the Lloyd Sand Member, is composed of coarse-grained sand, gravel, and some clay. The Lloyd Sand is one of the most important aquifers on Long Island largely because it yields adequate supplies of good quality water in areas, generally beneath the margins of Long Island, where supplies from overlying formations are inadequate or are contaminated. The upper member, is mostly clay and is called the Clay Member of the Raritan Formation.

Overlying the Raritan Formation is the Magothy Formation, also of Cretaceous age. The Magothy Formation in central Suffolk County is a thick body of continental deposits composed of lenses of sand, sandy clay, clay, and some gravel. It rests on the Raritan Formation and is in turn unconformably overlain by Upper Glacial Deposits. The Magothy is important as an alternate aquifer in the event that the water in the overlying Upper Glacial Deposits become contaminated. The Glacial Deposits in the



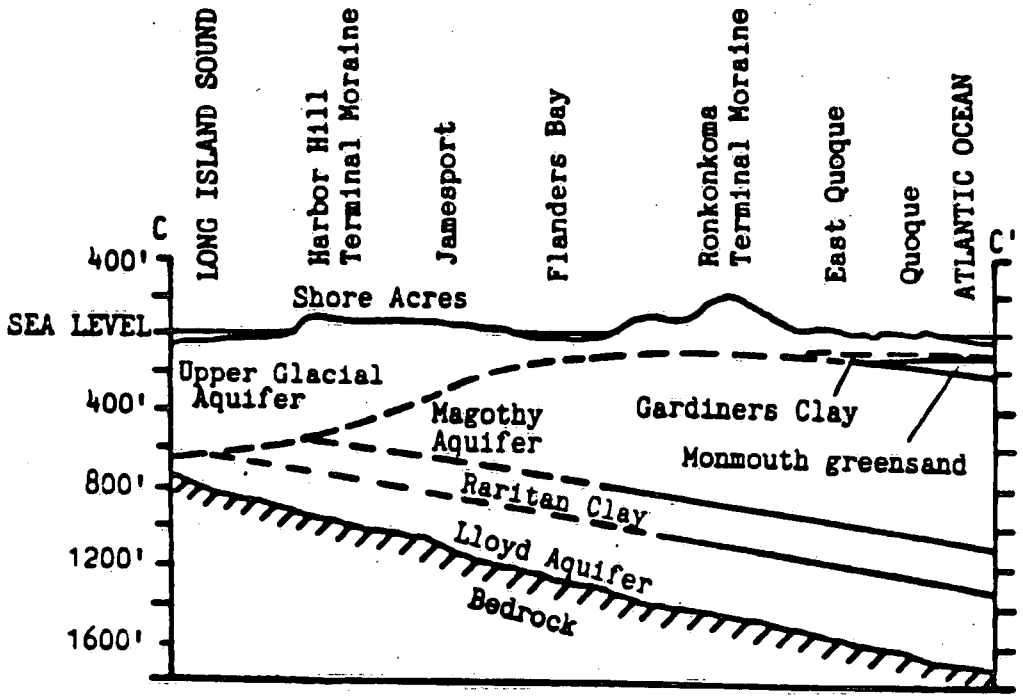


FIGURE 4-1

Representative Geologic Cross-Sections, Long Island, NY
(Reference: Long Island Groundwater Management Program, New York State Department of Environmental Conservation, 1986)

area consist primarily of glacial outwash, lacustrine and marine deposits (Appendix C).

4.4 SITE CONTAMINATION

No sampling programs have been previously conducted at this site, with the exception of an air quality survey conducted by YEC, Inc. using an HNu photoionizer during YEC's site inspection on January 11, 1989. No readings above background were noted. Currently, no analytical data are available for on-site groundwater, soils and local surface waters.

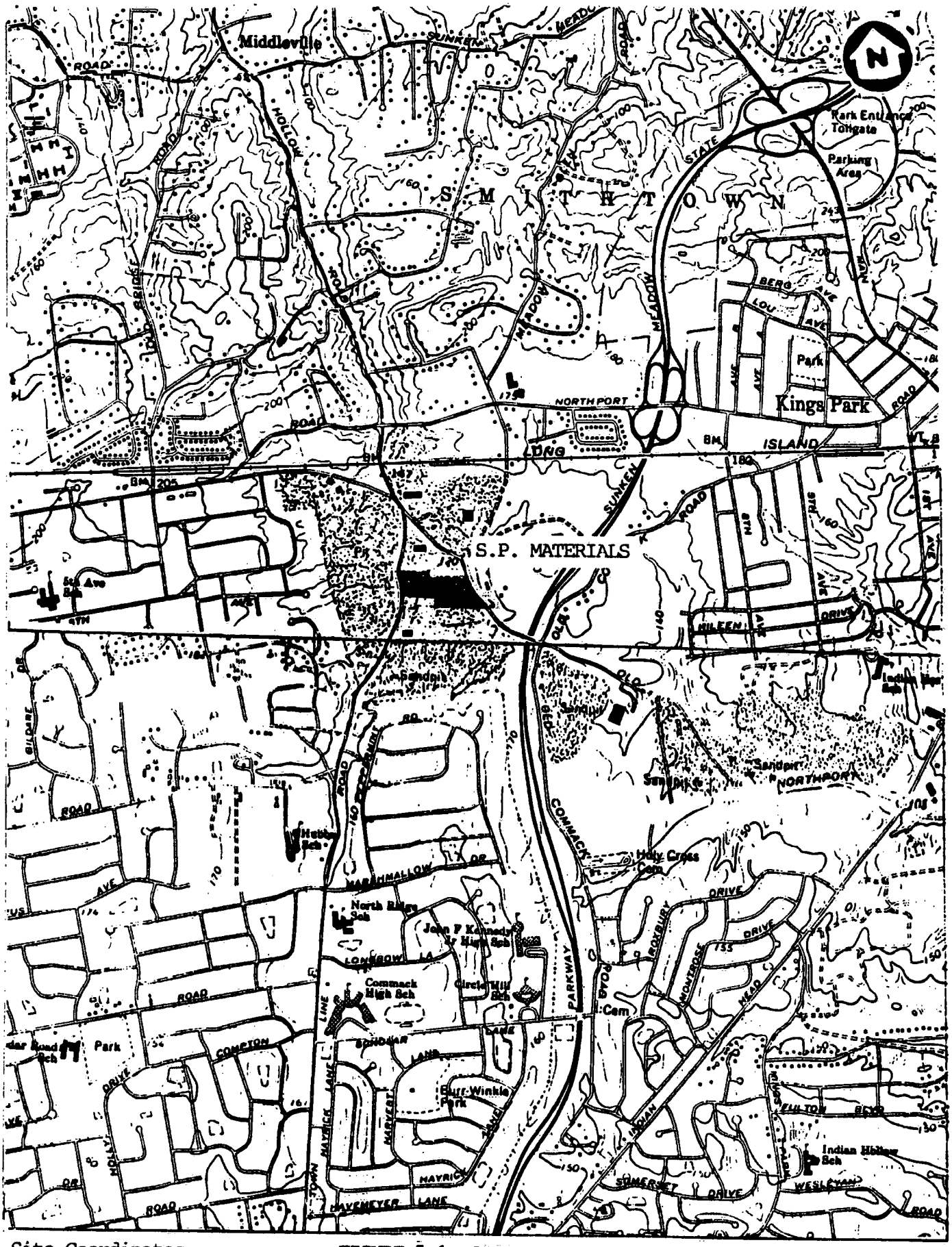
5. APPLICATION OF HAZARD RANKING SCORE

5.1 NARRATIVE SUMMARY

S.P. Materials, Inc. (NYSDEC I.D. # 152093) is approximately 9.6 acre in size located south and west of Old Northport Road and east of Town Line Road in the Hamlet of Kings Park, New York (Figure 5-1). The site, owned and operated by Mr. Stephen D. Pomaro began sand and gravel operation in May, 1983 with a three year renewable mining permit issued by the Town of Smithtown. Raw material was removed from the pit, processed, sold and delivered with S.P. Materials' own trucks.

S.P. Materials also had a one year renewable, construction and demolition permit issued by New York State Department of Environmental Conservation in July, 1983 and expired on July 1, 1984. Based upon an interview with the current owner, approximately 15 to 20 dump truck loads of construction debris were dumped. A NYSDEC representative visited the site in the spring of 1984, and noted a rusted drum on the site and placed S.P. Materials on NYSDEC's list of Inactive Hazardous Waste Sites. In May, 1988, three representatives of New York State Department of Health, Bureau of Environmental Exposure Inspection examined the site and reported everything to be in order (Stephen Pomaro).

The site is completely fenced from both Town Line and Old Northport Roads and has lockable gates. During the site inspection, no suspicious hazardous waste disposal areas were detected.



Site Coordinates:
Longitude: 73 17'00"
Latitude : 40 52'00"

FIGURE 5-1: SITE LOCATION MAP
S.P.Materials, Kings Park
New York

Source: USGS Quadrangle
Map, 1967
Scale: 1 inch = 2000 f

Northport and Greenlawn Quadrangles

FIGURE 1

HRS COVER SHEET

Facility Name: S.P. Materials

Location: 170 Town Line Road, Kings Park, New York 11754

EPA Region: II

Person(s) in Charge of Facility: Stephen D. Pomaro

Name of Reviewer: Ari Selvakumar **Date:** 2/24/89

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action; etc.)

S.P. Materials, Inc. is approximately a9.6 acre site located south and west of Old Northport Road and east of Town Line Road in the Hamlet of Kings Park, New York. The site began sand and gravel operation in May, 1983 with a three year renewable mining permit issued by the Town of Smithtown.

The site is completely fenced from both Town Line and Old Northport Roads and has lockable gates. During the site inspection, no suspicious hazardous waste disposal areas were detected.

No sampling programs have been previously conducted at this site with the exception of an air quality survey conducted using an HNu during the site inspection. No readings above background were noted.

Scores: S_M = NS (S_{gw} = NS S_{sw} = 0 S_a = 0)

S_{FE} = NS

S_{DC} = 0 NS = Not Scored

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Re (Sect
1 Observed Release	(0) 45	1	0	45	3.
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 (1) 2 3	2	2	6	
Net Precipitation	0 1 2 (3)	1	3	3	
Permeability of the Unsaturated Zone	0 1 2 (3)	1	3	3	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			9	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 18	1		18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
Total Targets Score			44	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5				57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = Not scored		

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4 If observed release is given a value of 0, proceed to line 2					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	(0) 1 2 3	2	0	6	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			3	15	
3 Containment	(0) 1 2 3	1	0	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1		18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				26	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	(0) 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			6	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				64.350	
7 Divide line 6 by 64.350 and multiply by 100	S_{sw} = 0				

SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35.100	
5 Divide line 4 by 35.100 and multiply by 100	S_a = 0				

AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	Not Scored	Not Scored
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		-
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		-
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		-

WORKSHEET FOR COMPUTING S_M

NOT SCORED

Fire and Explosion Work Sheet

NOT SCORED

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100			S_{FE} = Not Scored		

FIRE AND EXPLOSION WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Score	(Section)
Observed Incident	(0) 45	1	0	45	8.1
If line [1] is 45, proceed to line [4] If line [1] is 0, proceed to line [2]					
[2] Accessibility	(0) 1 2 3	1	0	3	8.2
[3] Containment	(0) 15	1	0	15	8.3
[4] Waste Characteristics Toxicity	0 1 2 3	5		15	8.4
[5] Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 (4) 5	4	16	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	

Total Targets Score	16	32
[6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5]	0	21,600
[7] Divide line [6] by 21,600 and multiply by 100	S_{DC} = 0	

DIRECT CONTACT WORK SHEET

DOCUMENTATION RECORDS FOR HAZARD RANKING SYSTEM

Instructions: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 80 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

Facility Name: S.P. Materials, Inc.

Location: 170 Town Line Road, Kings Park, New York 11754

Date Scored: 2/24/89

Person Scoring: Ari Selvakumar

Primary Source(s) of Information (e.g., EPA region, state, FIT, etc.):

Site Inspection
New York State Department of Environmental Conservation - Region 1 Files
USGS 7.5-Minute Quadrangle Map

Factors Not Scored Due to Insufficient Information:

Fire and explosion score was not completed because the site was not declared a fire/explosion threat by the Chief Fire Marshal.
Ref. No. 12, P.#2

Comments or Qualifications:

HRS Score for groundwater route was not computed because of lack of on-site groundwater analytical data.

GROUNDWATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (3 maximum):

No data available.

Rationale for attributing the contaminants to the facility:

N/A.
Assigned value = 0

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2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Upper Glacial and Magothy aquifers act as a single hydrological unit.
Ref.1, P.#2

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table(s)) of the aquifer of concern:

Approximately 67 feet.
Ref.2, P.#2

Depth from the ground surface to the lowest point of waste disposal/storage:

Approximately 50 feet.
Ref.3, P.#2
Assigned value = 3

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

44 inches.
Ref.4, P.#2

Mean annual lake or seasonal evaporation (list months for seasonal):

30 inches.
Ref.4, P.#3

Net precipitation (subtract the above figures):

14 inches.
Assigned value = 2

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand and Gravel.
Ref.5, P.#4

Permeability associated with soil type:

Greater than 10^{-3} cm/sec. Ref.4, P.#5
Assigned value = 3

Physical State

Physical state of substances at time of disposal (or at present time for gases):

Solid.
Ref.3, P.#4
Assigned value = 1

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3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

The landfill has no liner.
Ref.3

Method with highest score:

Assigned value = 3 as there is no liner.

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

None.

Compound with highest score:

N/A.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those containment score of 0. (Give a reasonable estimate even if quantity is maximum.):

N/A.

Basis of estimating and/or computing waste quantity:

N/A.

* * *

5. TARGETS

Groundwater Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:
Drinking and irrigation.
Ref.6, P.#3 and Ref.7, P.#2
Assigned value = 3

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Suffolk County Water Authority well field is within 1-mile of the site.
Ref.6, P.#3

Distance to above well or building:
Approximately 1 mile.
Ref.6, P.#3
Assigned value = 3

Population Served by Groundwater Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Suffolk County Water Authority, Greenlawn Water District, Kings Park Psychiatric Center and Northport vA Hospital wells are within 3-mile radius of the site.
Ref.6, P.#3

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

There are farmlands within 3-mile radius of the site which uses groundwater, but the acreages are not known.
Ref.7, P.#2

Total population served by groundwater within a 3-mile radius:

Suffolk County Water Authority	48,000	Ref.8, P.#1
Kings Park Psychiatric Center	3,100	Ref.6, P.#4
Northport VA Hospital	3,000	Ref.6, P.#4
Greenlawn Water District		

Total population is greater than 10,000
Assigned value = 5

Combined value = 35

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

No data available.

Rationale for attributing the contaminants to the facility:

N/A.

Assigned value = 0

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2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Approximately 1 percent.
Ref.3

Name/description of nearest downslope surface water:

Tributory to Willow Pond.
Ref.9, P.#1

Average slope of terrain between facility and above-cited surface water body in percent:

Approximately 1 percent.
Ref.9, P.#1
Assigned value = 0

Is the facility located either totally or partially in surface water?

No.
Ref.3

Is the facility completely surrounded by areas of higher elevation?

No.
Ref.3

1-Year 24-Hour Rainfall in Inches

2.5 inches.
Ref.4, P.#4 Assigned value = 2

Distance to Nearest Downslope Surface Water

Approximately 3 miles.
Ref.9 Assigned value = 0

Physical State of Waste

Solid.
Ref.3
Assigned value = 1

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3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:
There is no viable overland route from the site to this surface water because several roads intersect the pathway.
Ref.9, P.#1
Method with highest score:
Assigned value = 0

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

None.

Compound with highest score:

N/A.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0. (Give a reasonable estimate even if quantity is above maximum.):

N/A.

Basis of estimating and/or computing waste quantity:
N/A.

* * *

5. TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:
Recreational. Willow Pond is part of Nissequogue River State Park.
Ref.9, P.#1
Assigned value = 2

Is there tidal influence?

No.
Ref.9, P.#1

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:
None.
Ref.9, P.#1

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:
None.
Ref.9, P.#1

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:
None.
Ref.10, P.#2
Assigned value = 0

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

None.

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None. The major source of irrigation water in Suffolk County is groundwater from wells. Ref.7, P.#2

Total population served:
Zero.
Assigned value = 0

Name/description of nearest of above water bodies:

N/A.

Distance to above-cited intakes, measured in stream miles:

N/A.

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected:

No contaminants detected.
Ref.3

Date and location of detection of contaminants:

N/A.

Methods used to detect the contaminants:

HNU Photoionizer.
Ref.3

Rationale for attributing the contaminants to the site:

N/A.

* * *

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

N/A.
Assigned value = 0

Most incompatible pair of compounds:

N/A.

Toxicity

Most toxic compound:

N/A.
Assigned value = 0

Hazardous Waste Quantity

Total quantity of hazardous waste:

N/A.

Basis of estimating and/or computing waste quantity:

N/A.

* * *

3. TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi **0 to 1 mi** **0 to 1/2 mi** **0 to 1/4 mi**

8,921 Ref.11, P.#9
Assigned value = 21

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None.
Ref.9, P.#1

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None. Ref.9, P.#1
Assigned value = 0

Distance to critical habitat of an endangered species, if 1 mile or less:

None. Ref.10, P.#2
Assigned value = 0

Land Use

Distance to commercial/industrial area, if 1 mile or less:

N/A.
Ref.9, P.#1 Assigned value = 0

Distance to national or state park, forest, wildlife reserve, if 2 miles or less:

N/A.
Ref.9, P.#1
Assigned value = 0

Distance to residential area, if 2 miles or less:

Adjacent. Ref.9, P.#1
Assigned value = 3

Distance to agricultural land in production within past 5 years, if 1 mile or less:

1 mile. Ref.7, P.#2
Assigned value = 1

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

1 mile Ref.7, P.#2
Assigned value = 2

Is a historic or landmark site (National Register of Historic Places and National Natural Landmarks) within the view of the site?

N/A.
Assigned value = 0

FIRE AND EXPLOSION

1. **CONTAINMENT**

Not scored.
Ref.12, P.#2

Hazardous substances present:
N/A.

Type of containment, if applicable
N/A.

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2. **WASTE CHARACTERISTICS**

Direct Evidence

Type of instrument and measurements:

N/A.

Ignitability

Compound used:

N/A.

Reactivity

Most reactive compound:
N/A.

Incompatibility

Most incompatible pair of compounds:

N/A.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

N/A.

Basis of estimating and/or computing waste quantity:

N/A.

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3. TARGETS

Distance to Nearest Population

750 feet. Ref.9, P.#1
Assigned value = 1

Distance to Nearest Building

500 feet. Ref.9, P.#1
Assigned value = 1

Distance to a Sensitive Environment

Distance to wetlands:

None. Ref.9, P.#1
Assigned value = 0

Distance to critical habitat:

None. Ref.11, P.#1
Assigned value = 0

Land Use

Distance to commercial/industrial area, if 1 mile or less:

N/A.
Ref.9, P.#1

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

N/A. Ref.9, P.#1
Assigned value = 0

Distance to residential area, if 2 miles or less:

Adjacent. Ref.9, P.#1
Assigned value = 3

Distance to agricultural land in production within past 5 years, if 1 mile or less:

1 mile. Ref.7, P.#2
Assigned value = 1

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

1 mile. Ref.7, P.#2
Assigned value = 2

Is a historic or landmark site (National Register of Historic Places and National Natural Landmarks) within the view of the site?

N/A.
Assigned value = 0

Population Within 2-Mile Radius

33,026 Ref.11, P.#9
Assigned value = 5

Buildings Within 2-Mile Radius

Approximately 1000 Ref.3
Assigned value = 4

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No observed incident on record.
Ref.3

* * *

2. ACCESSIBILITY

Describe type of barrier(s):
Site is entirely fenced. Ref.3
Assigned value = 0

* * *

3. CONTAINMENT

Type of containment, if applicable:

Landfill is adequately covered. Ref.3
Assigned value = 0

* * *

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:
None.

Compound with highest score:

N/A.

* * *

5. TARGETS

Population Within One-mile Radius

8,921 Ref.11, P.#9
Assigned value = 4

Distance to Critical Habitat (of endangered species)

None. Ref.10, P.#1
Assigned value = 0

REFERENCES

If the entire reference is not available for public review in the EPA regional files on this site, indicate where the reference may be found:

Reference Number	Description of the References
1	Jensen, H.M. and Julian Soren, 1971, Hydrogeologic data from selected wells and test holes in Suffolk County, Long Island, New York. Document Location: USGS, Albany, New York.
2	Thomas P. Doriski, 1987, Potentiometric - Surface of the Water - Table, Magothy and Lloyd Aquifers on Long Island, New York in 1984. Document Location: USGS< Albany, New York.
3	Site Inspection by YEC, Inc., 1989. Document Location: YEC, Inc., Valley Cottage, New York.
4	Uncontrolled Hazardous Waste Site Ranking System; A Users Manual, 1984. Document Location: YEC, Inc., Valley Cottage, New York.
5	US Department of Agriculture Soil Conservation Service, Soil Survey of Suffolk County, New York, 1975. Document Location: Suffolk County Soil and Water Conservation District, Riverhead, New York.
6	New York State Department of Health, 1982, New York State Atlas of Community Water Systems Source. Document Location: New York State Department of Health, Albany, New York.
7	Sanok, J. William, 1989, Cooperative Extension Agent, Cornell Cooperative Extension, Riverhead, New York, Communication regarding farmland, agriculture land and surface water bodies. Document Location: YEC, Inc., Valley Cottage, New York.
8	E.J. Rosavitch, 1988, Suffolk County Water Authority, Long Island, New York, Communication regarding population served within 3-mile radius of the site. Document Location: YEC, Inc., Valley Cottage, New York.

Reference Number	Description of the References
9	USGS 7.5- minute Series (Topographic) Quadrangle, Greenlawn and Northport, New York, 1969. Document Location: YEC, Inc., Valley Cottage, New York.
10	Scheibel, S. Michael, 1989, New York State Department of Environmental Conservation, Region 1, New York, Communication regarding critical habitat of endangered species or plant species of concern in the vicinity of S.P. Materials, Inc. Document Location: YEC, Inc., Valley Cottage, New York.
11	Long Island Regional Planning Board, 1982, Population - 1980. Document Location: Long Island Regional Planning Board, Hauppauge, New York.
12	Valentine, John, 1989, Bureau Director, Code Enforcement Bureau, Smithtown, New York, Communication regarding whether the S.P. Materials, Inc. had been declared as a fire or explosion threat. Document Location: YEC, Inc., Valley Cottage.

REFERENCE NO. 1

LOAN COPY

Page 1

HYDROGEOLOGIC DATA FROM SELECTED WELLS AND TEST HOLES IN SUFFOLK COUNTY, LONG ISLAND, NEW YORK

By

H. M. Jensen and Julian Soren

LONG ISLAND WATER RESOURCES

LONG ISLAND WATER RESOURCES BULLETIN NUMBER 3

Prepared by the U. S. Department of Interior, Geological Survey, in cooperation with the New York State Department of Environmental Conservation, the Nassau County Department of Public Works, the Suffolk County Department of Environmental Control, and the Suffolk County Water Authority.

Published by

SUFFOLK COUNTY DEPARTMENT OF ENVIRONMENTAL CONTROL

1971

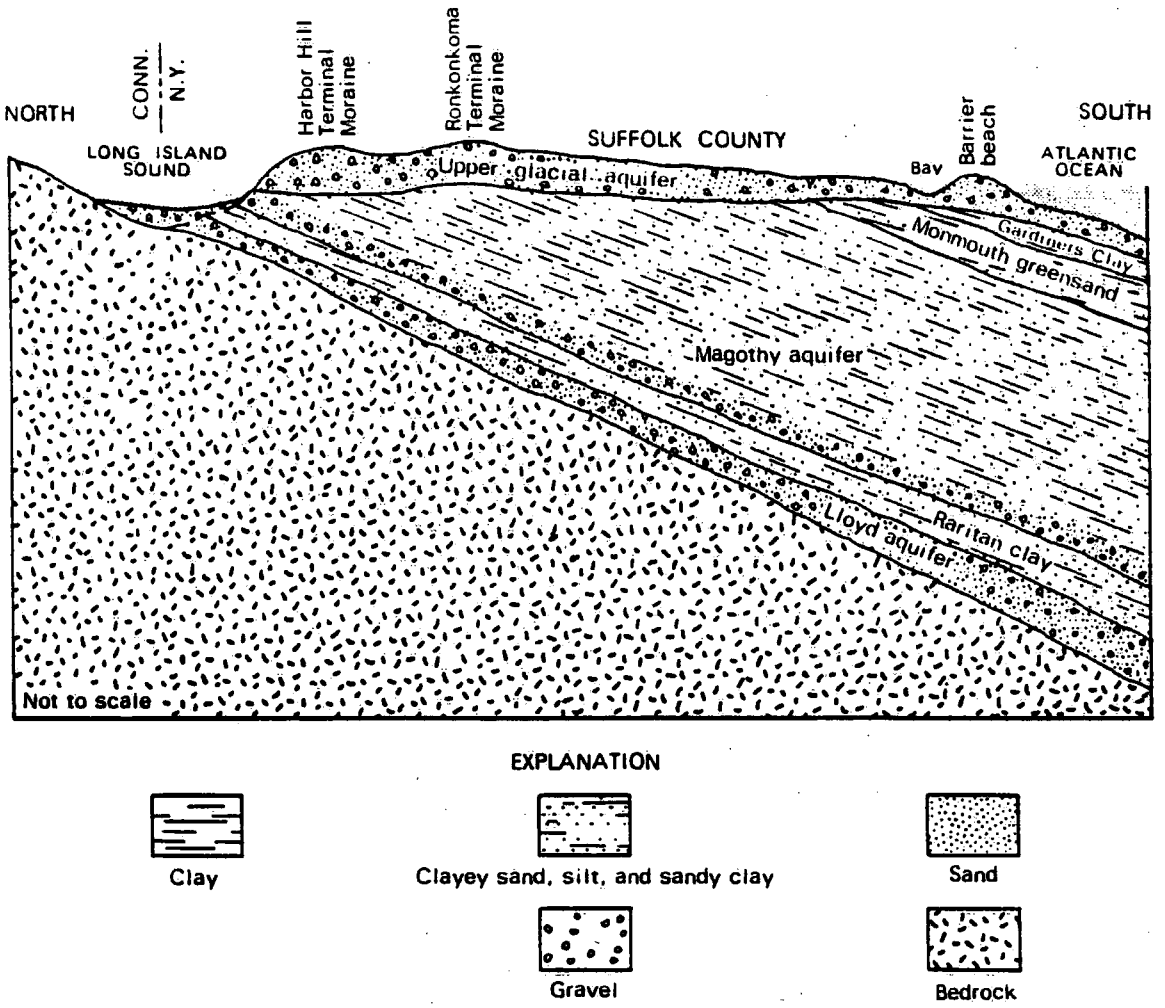


Figure 2.--Generalized section showing major hydrogeologic units in Suffolk County, N.Y.

Table 1.--Major hydrogeologic units in Suffolk County, N. Y.

Hydrogeologic unit 1/	Geologic name	Approximate thickness (feet)	Description and water-bearing character
Upper glacial aquifer	Holocene and upper Pleistocene deposits, and Mannetto Gravel	0-750	Mainly brown and gray sand and gravel of moderate to high hydraulic conductivity; also includes deposits of clayey glacial till and lacustrine clay of low hydraulic conductivity. A major aquifer.
Gardiners Clay	Gardiners Clay	0-75	Green and gray clay, silt, clayey and silty sand, and some interbedded clayey and silty gravel; of low hydraulic conductivity. Unit tends to confine water in underlying aquifer.
Jameco aquifer	Jameco Gravel	Not known	Not identified in Suffolk County.
Monmouth greensand 2/	Monmouth Group	0-200	Interbedded marine deposits of dark-gray, olive-green, dark-greenish-gray, and greenish-black glauconitic and lignitic clay, silt, and clayey and silty sand. Unit has low hydraulic conductivity and tends to confine water in underlying aquifer.
Magothy aquifer	Matawan Group-Magothy Formation, undifferentiated	0-1,100	Gray and white fine to coarse sand of moderate hydraulic conductivity. Generally contains sand and gravel beds of low to high hydraulic conductivity in basal 100 to 200 feet. Contains much interstitial clay and silt, and beds and lenses of clay, of low hydraulic conductivity. A major aquifer.
Raritan clay	Clay member of the Raritan Formation	0-200	Gray, black, and multicolored clay and some silt and fine sand. Unit has low hydraulic conductivity and tends to confine water in underlying aquifer.
Lloyd aquifer	Lloyd Sand Member of the Raritan Formation	0-500	White and gray fine-to-coarse sand and gravel of moderate hydraulic conductivity and some clayey beds of low hydraulic conductivity. Not highly developed as an aquifer.
Bedrock	Undifferentiated crystalline rocks	Not known	Mainly metamorphic rocks of low hydraulic conductivity; surface generally weathered; considered to be the bottom of the ground-water reservoir. Not a source of water in Suffolk County.

1/ Adapted largely from Cohen and other (1968, p. 18).

2/ Name adopted in this report.

Scale: 1 inch = 2 miles

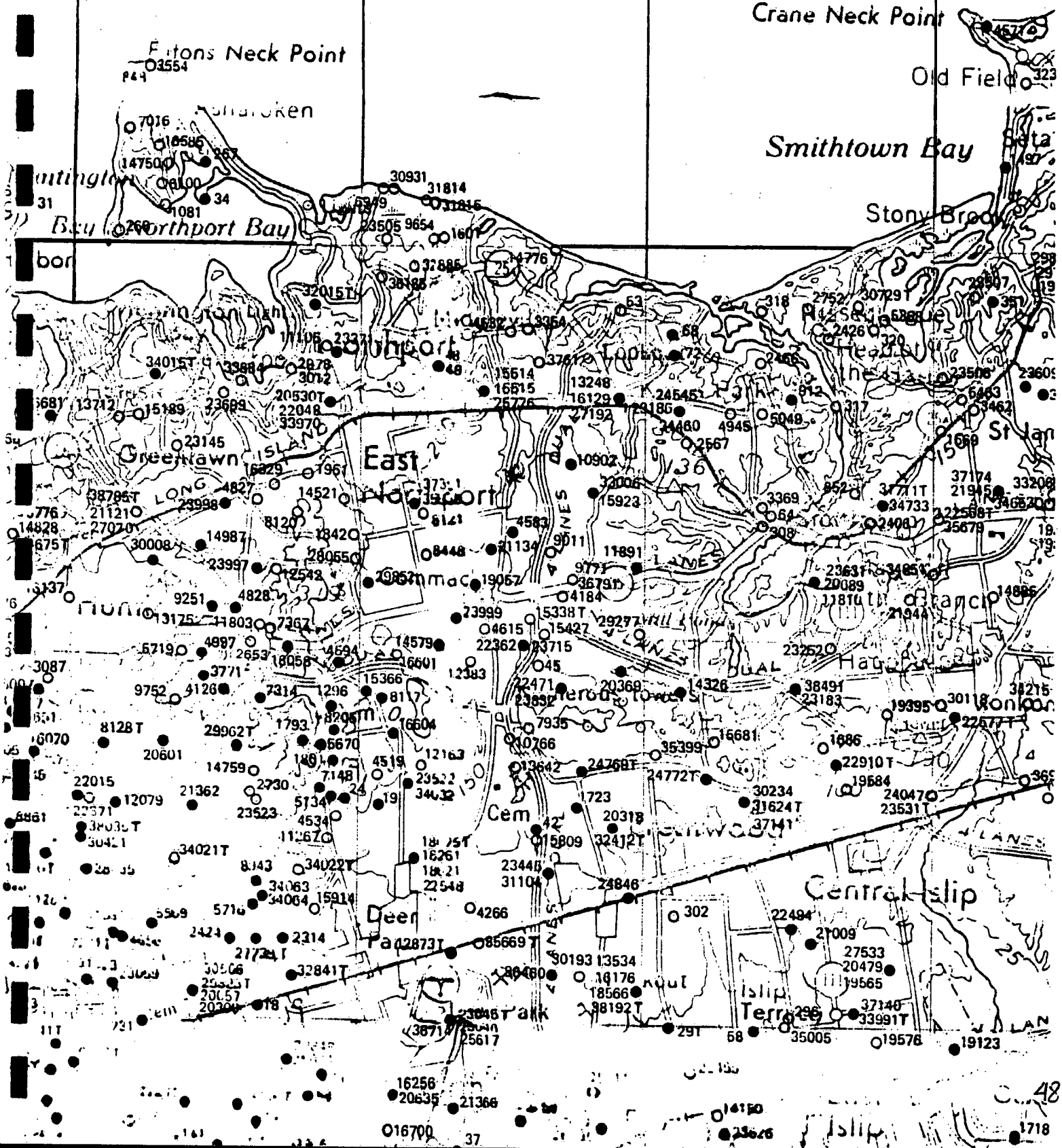


Table 2.--Hydrogeologic correlations and well-completion data from selected wells and test holes in Suffolk County, N.Y. (Continued)

WELL NUMBER	LOCATION OF WELL: MAP COORD	LOCATION OF WELL: LATITUDE AND LONGITUDE	WELL DEPTH (FT)	HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UPPER SURFACE IN FEET ABOVE OR BELOW (-) MSL: UPPER GLACIAL AQUIFER	GARDINERS CLAY	MONMOUTH GREENSAND	MAGOTHY AQUIFER	RARITAN CLAY	LLOYD AQUIFER	BEDROCK	WELL-COMPLETION DATA: HYDROGEOLOGIC UNIT DEVELOPED	SCREEN SETTING (FT ABOVE OR BELOW (-) MSL)	SPECIFIC CAPACITY (GPM/FT)
3599	G27	410412N0715130.1	69	40							UPGLAC	-23 TO -29	
3636	C15	404350N0725217.1	377	10	-105	-128	-268				MAGOTHY	-349 TO -364	
3697	H21	410722N0722107.1	79	36							UPGLAC	-27 TO -43	
3698	H21	410725N0722105.1	79	38							UPGLAC	-25 TO -41	23
3721	F17	405537N0724321.1	90	60							UPGLAC	-15 TO -30	28
3722	F17	405614N0724035.1	110	25							UPGLAC		
3761	E10	405328N0731706.1	150	160							UPGLAC		
3764	F18	405658N0723831.1	54	42							UPGLAC	8 TO -12	66
3765	F17	405634N0724015.1	54	30							UPGLAC	-4 TO -24	20
3767	F17	405718N0724112.1	74	65							UPGLAC	6 TO -9	28
3771	D 9	404927N0732241.1	195	240			93				MAGOTHY	48 TO 45	
3868	F12	405512N0730606.1	114	99			-44				UPGLAC	-15	
3875	F16	405554N0724550.1	115	90							UPGLAC	-5 TO -25	25
3941	E16	405431N0724549.1	85	60							UPGLAC		
3957	F16	405521N0724549.1	115	68							UPGLAC	-32 TO -47	36
3966	F19	405801N0723254.1	52	14							UPGLAC	-23 TO -38	
4048	F17	405743N0724342.1	172	105							UPGLAC	-47 TO -67	17
4080	E16	405418N0724510.1	70	50							UPGLAC	0 TO -20	34
4081	F19	405946N0723420.1	117	40							UPGLAC	-57 TO -77	26
4085	F18	405529N0723822.1	60	12							UPGLAC	-33 TO -48	80
4091	G20	410342N0722530.1	144	20							UPGLAC	-5 TO -25	37
4105	E12	405021N0730706.1	68	92							UPGLAC	24	
4126	D 9	404919N0732221.1	190	170			75				MAGOTHY	-16 TO -20	
4134	F17	405534N0724018.1	225	24			-196						
4152	F14	405752N0725657.1	147	115							UPGLAC		
4163	G20	410251N0722625.4	45	20							UPGLAC	-10 TO -25	24
4184	E10	405032N0731616.1	162	143							UPGLAC	7 TO -19	
4266	D10	404630N0731800.1	125	80							UPGLAC	-1 TO -21	
4466	E 8	405452N0732824.1	370	20				-210	-320		LLOYD		
4475	F18	405832N0723522.1	95	55							UPGLAC	-20 TO -40	46
4484	G21	410245N0722444.1	51	15							UPGLAC	-21 TO -36	24
4512	F18	405836N0723547.1	114	63							UPGLAC	-21 TO -48	35
4519	D10	404813N0731944.1	118	140							UPGLAC	25 TO 22	
4532	E10	405354N0731725.1	350	150							UPGLAC	-191 TO -200	
4533	F 8	405527N0732947.1	142	60							UPGLAC	-55 TO -63	
4534	D 9	404740N0732029.1	120	130							UPGLAC	15 TO 10	
4571	F12	405753N0730907.1	569	15			-260					-554	
4577	F17	405808N0724037.1	100	90							UPGLAC		
4580	G20	410109N0722902.1	55	25							UPGLAC	-15 TO -30	22
4583	E10	405120N0731721.1	550	165			-267				MAGOTHY	-315 TO -360	

Table 2.--Hydrogeologic correlations and well-completion data from selected wells and test holes in Suffolk County, N.Y. (Continued)

WELL NUMBER	LOCATION OF WELL: MAP COORD	LOCATION OF WELL: LATITUDE AND LONGITUDE	WELL DEPTH (FT)	HYDROGEOLOGIC UNIT PENETRATED AND ALTITUDE OF UPPER SURFACE IN FEET ABOVE OR BELOW (-) MSL: UPPER GLACIAL AQUIFER	GARDINERS CLAY	MONMOUTH GREENSAND	MAGOTHY AQUIFER	RARITAN CLAY	LLOYD AQUIFER	BEDROCK	WELL-COMPLETION DATA: HYDROGEOLOGIC UNIT DEVELOPED	SCREEN SETTING (FT ABOVE OR BELOW (-) MSL)	SPECIFIC CAPACITY (GPM/FT)
15212	C10	404136N0731737.1	290	7	-58		-73				MAGOTHY	-223 TO -262	24
15219	E17	405452N0724000.1	282	20							UPGLAC	-163 TO -255	47
15285	D13	404902N0730112.1	64	65							UPGLAC	11 TO 1	13
15338	E10	405015N0731701.1	170	150							UPGLAC		
15348	E18	405415N0723619.1	49	20							UPGLAC	-12 TO -27	23
15366	D10	404917N0731953.1	240	290			100				MAGOTHY		
15427	E10	405002N0731645.1	137	140							UPGLAC	8 TO 3	
15431	F 8	405525N0732610.1	95	85							UPGLAC		
15432	F 8	405520N0732705.1	120	60							UPGLAC		
15461	F 8	405551N0732714.1	108	80							UPGLAC	-23 TO -29	
15505	C 9	404232N0732041.1	80	26			-49				UPGLAC	-23 TO -51	83
15514	E10	405308N0731751.1	595	200			-180				MAGOTHY	-333 TO -393	85
15515	E10	405307N0731751.1	356	200							UPGLAC	-116 TO -156	16
15520	D15	404629N0725448.1	43	15							UPGLAC	-23 TO -28	12
15532	E12	405242N0730739.1	196	120							UPGLAC	-61 TO -76	
15539	D13	404553N0730035.1	315	20	-95	-122	-165				MAGOTHY	-279 TO -295	17
15554	F 8	405527N0732636.1	123	80							UPGLAC	-38 TO -43	
15651	E14	405415N0725901.1	106	90							UPGLAC	4 TO -16	
15681	D11	404841N0731350.1	119	115							UPGLAC	4 TO -4	
15775	C10	404304N0731635.1	291	25	-55		-98						
15776	E 8	405113N0732608.1	504	230							UPGLAC	-210 TO -270	214
15795	H21	410729N0722108.1	81	42							UPGLAC	-23 TO -38	9
15809	D10	404724N0731650.1	153	100							UPGLAC	-18 TO -50	65
15863	E 8	405115N0732659.1	222	220							UPGLAC	8 TO 0	
15901	C13	404104N0730022.3	408	10	-140		-150				MAGOTHY	-373 TO -398	
15902	G20	410009N0722708.1	63	52							UPGLAC	-3 TO -11	
15914	D 9	404628N0732047.1	124	85							UPGLAC	-28 TO -39	
15923	E10	405144N0731554.1	264	140			-83				UPGLAC	-8 TO -123	45
15949	E15	405230N0725251.1	224	80	-58						UPGLAC	-19 TO -39	15
15950	E15	405232N0725317.1	223	75	-68						UPGLAC	-23 TO -43	15
15951	E15	405233N0725323.1	218	70	-65						UPGLAC	-12 TO -32	37
15962	F12	405607N0730724.1	124	84							UPGLAC	-1 TO -39	71
15977	B 9	403937N0732346.1	162	4	-51		-128				MAGOTHY	-136 TO -158	
16070	D 8	404829N0732534.1	190	220			76				MAGOTHY		
16124	D13	404947N0730426.1	164	130							UPGLAC	-14 TO -34	66
16129	E10	405302N0731530.2	550	160			-227				MAGOTHY	-251 TO -387	72
16135	D12	404902N0730649.1	110	111							UPGLAC	11 TO 1	
16137	E 8	405027N0732503.1	604	160							UPGLAC	-380 TO -442	45
16176	D10	404528N0731505.2	117	62							UPGLAC	-19 TO -55	69
16256	C10	404402N0731930.2	650	41			-51				MAGOTHY	-503 TO -556	35

REFERENCE NO. 2

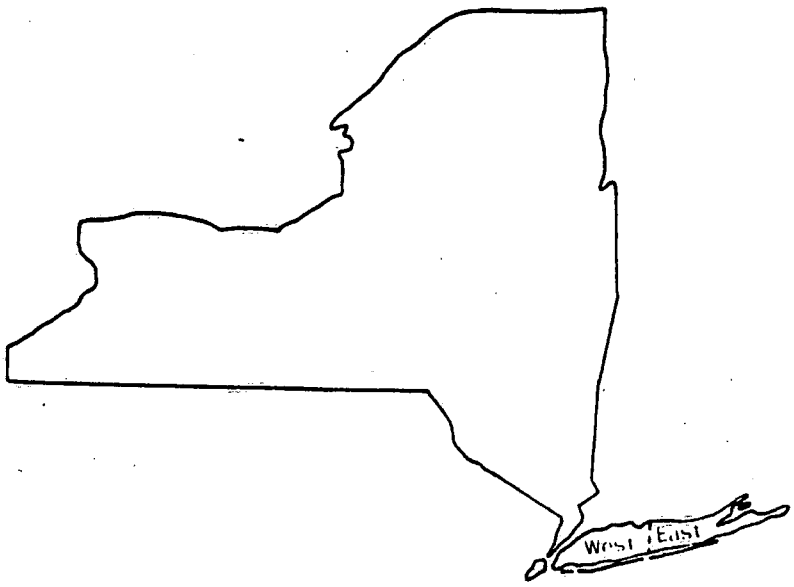
UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

POTENTIOMETRIC-SURFACE OF THE WATER-TABLE, MAGOTHY, AND LLOYD AQUIFERS ON LONG ISLAND, NEW YORK, IN 1984

By

Thomas P. Doriski



WATER-RESOURCES INVESTIGATIONS REPORT 86-4189

Plate 1. Water-table altitude

Plate 2. Water-table well numbers

Plate 3. Potentiometric surface of Magothy aquifer

Plate 4. Potentiometric surface of Lloyd aquifer

Prepared in cooperation with the

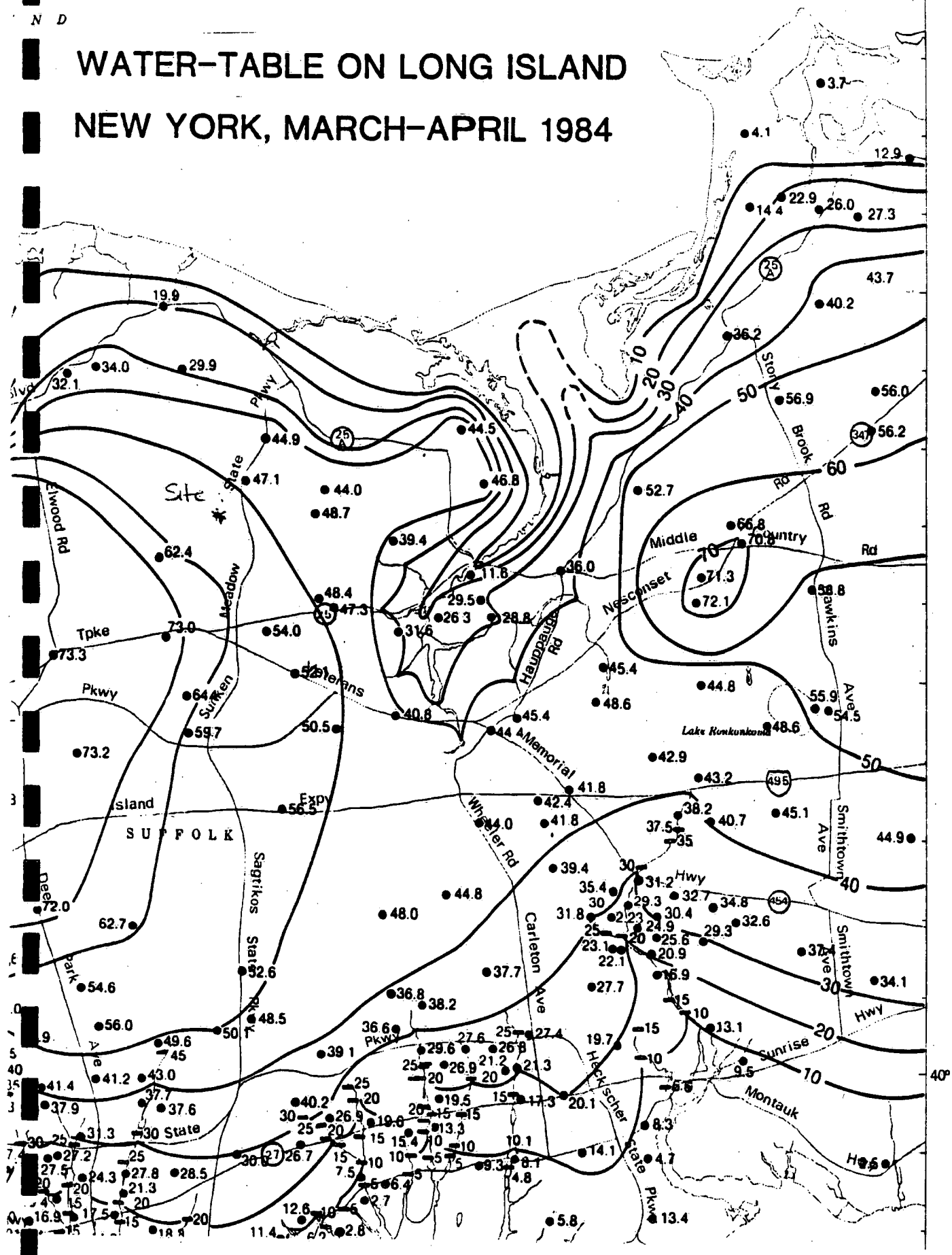
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
SUFFOLK COUNTY WATER AUTHORITY
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Syosset, New York

1987

page 2

WATER-TABLE ON LONG ISLAND NEW YORK, MARCH-APRIL 1984



water table elevation = 53 feet.

Scale: 1 inch = 2 miles.

Site elevation = 120 feet

∴ water table depth = 67 feet.

REFERENCE NO. 3

SITE INSPECTION REPORT

NYSDEC SITE NO.:	152093 , Reigon 1
SITE NAME:	S. P. Materials, Inc.
SITE LOCATION:	170 Town Line Road Kings Park, NY 11754
DATE OF INSPECTION:	Wednesday, January 11, 1989
WEATHER:	35F degrees and sunny
SITE STATUS:	Active sand and gravel mining/processing operation
YEARS OF OPERATION:	1983 to present
AGENCY PREFORMING INSPECTION:	YEC, Inc., NYSDEC's subcontractor
INSPECTED BY:	Y. S. Ed. Chen, Ph.D., P.E., Principal Gregory Fabijanic, Staff Engineer
SITE REPRESENTITIVE INTERVIEWED:	Stephen D. Pomaro, Owner/Operator S. P. Materials

The site inspection at the S. P. Materials, Inc. in Kings Park, Long Island included the following:

(1) An interview with the owner of the site;

(2) Ambient air monitoring onsite using an HNu photoionization detector;

(3) A visual inspection of the site to determine locations of structures, equipment, fences, and to search for suspicious drums, tanks or similar signs of hazardous waste released to the environment; and

(4) Photo documentation of the site.

At 8:30 am, Ed Chen and Gregory Fabijanic met with Stephen D. Pomaro, owner and operator of S. P. Materials, Inc. at S. P. Materials' field office, located in Kings Park, Long Island, New York. Mr. Pomaro was interviewed for information about the size and location of his properties, site history, the sand and gravel operation, and years of operation. At approximately 9:30 am, a complete walking tour of the facility was conducted, during which, photodocumentation and HNu readings were carried out.

The site history presented by Mr. Pomaro, and subsequently verified by YEC Inc.'s file searches, is as follows: In 1973, 6 acres were purchased from a sand company owned by Mike Nisti. In 1981 an additional 1.4 acre parcel was purchased, and shortly thereafter, a 2.2 acre parcel was purchased. These small pieces of land extend Mr. Pomaro's land from Town Line Road to Northport-Kings Park Road (Figure A).

On January 13, 1983, Mr. Pomaro applied for a mining permit; notice of complete application was given on April 6, 1983. A three year, renewable, permit was issued by the Town of Smithtown on May 16, 1983. Beginning at this time, raw mine material was removed from the pit, processed, sold, and delivered with S. P. Materials' own trucks.

The pit is currently about 3 acres by approximately 50 feet deep. Mr. Pomaro reports that mining will continue for as long as there is good material, but the pit will not be filled in

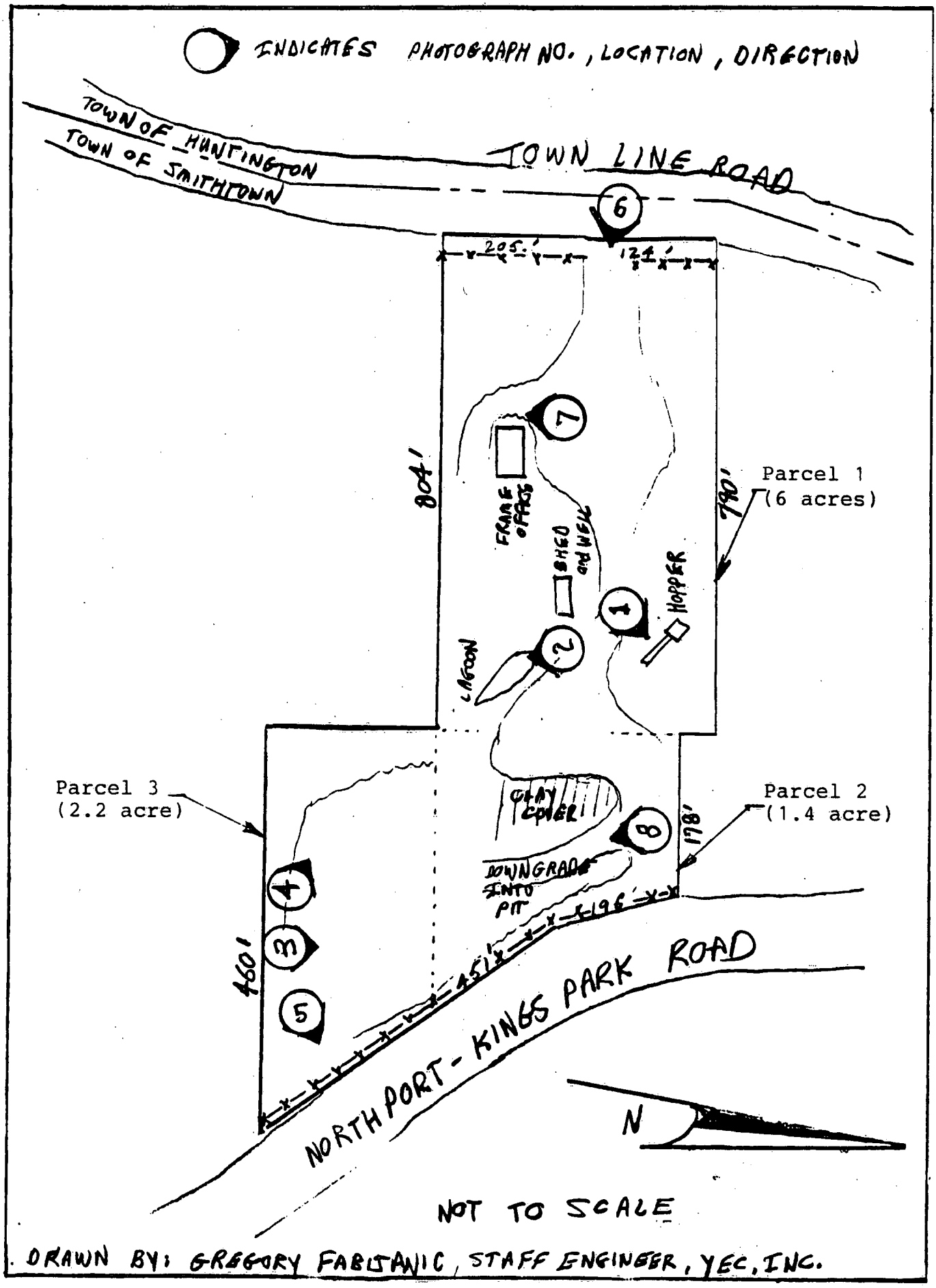

INDICATES PHOTOGRAPH NO., LOCATION, DIRECTION
TOWN OF HUNTINGTON
TOWN OF SMITHTOWN
TOWN LINE ROAD
205'
124'
804'
790'
Parcel 1
(6 acres)
FRAME OFFICE
SHED and WELL
HOPPER
LAGOON
CLAY PIER
Parcel 3
(2.2 acre)
Parcel 2
(1.4 acre)
178'
DOWNGRADE INTO PIT
196'
451'
460'
NORTHPORT - KINGS PARK ROAD
N
NOT TO SCALE
DRAWN BY: GREGORY FABIJANIC, STAFF ENGINEER, YEC, INC.

FIGURE A

until the site has been removed from the hazardous waste site list. He also reported that he intends to fill the site eventually with an "earth-like" material.

A one year, renewable, construction and demolition debris landfill permit, for the two small parcels of land near Northport-Kings Park Road, was issued on July 1, 1983, and expired July 1, 1984. During this time, approximately 15 to 20 dump truck loads of construction debris (specifically; brick, cobble, block, concrete, and wood) were dumped on the side of the pit, in one area (which is noted on the attached sketch). These debris were covered with a good quality clay earth for erosion and appearance purposes.

According to Mr. Pomaro, in the spring of 1984, a NYSDEC representitive inspected the facility and noted a rusted drum on the site, and placed S. P. Materials on NYSDEC's list of inactive hazardous waste sites. Mr. Pomaro also indicated that he found the drum empty at his front gate one morning, as garbage is frequently discarded this way in the area. Disposal of the drum consisted of crushing it, and placing it in a dumpster.

In May or June of 1988, three (3) representitives of NYSDOH, Bureau of Environmental Exposure Inspection examined the site and reported everything to be in order.

The site has various structures on it including: a small office/workshop, a storage shed, a well, a lagoon (about 50 feet

by 10 feet, and currently dry), the pit which was previously described, and various pieces of mining equipment. All of the points of interest on the site are labeled on the attached sketch, and are pictured in appendix A. The site is fenced off from both Town Line and Northport-Kings Park Roads with chain link fencing, and has a lockable gate. The well is used about 30 days per year to supply water for washing gravel.

During this interview we discovered that waste oil from machinery and other sources on the site, is collected and disposed of by General Waste Oil Co., and accurate records of this exist. This oil is collected in a returnable 55 gallon drum, which is pictured in appendix A. The drum was empty at the time of the inspection.

During the site inspection, no suspicious hazardous waste disposal areas were detected. Photodocumentation of key features on the site are presented in appendix A. Air monitoring was conducted throughout the site, upwind and downwind of the areas of concern using an HNu Photoionization Detector. No readings above the background level were observed. The detector was calibrated in the field before the investigation to minimize the effects of methane gases which are a byproduct of decomposition of trash from a town operated landfill within 200 yards west of the site.

REFERENCE NO. 4

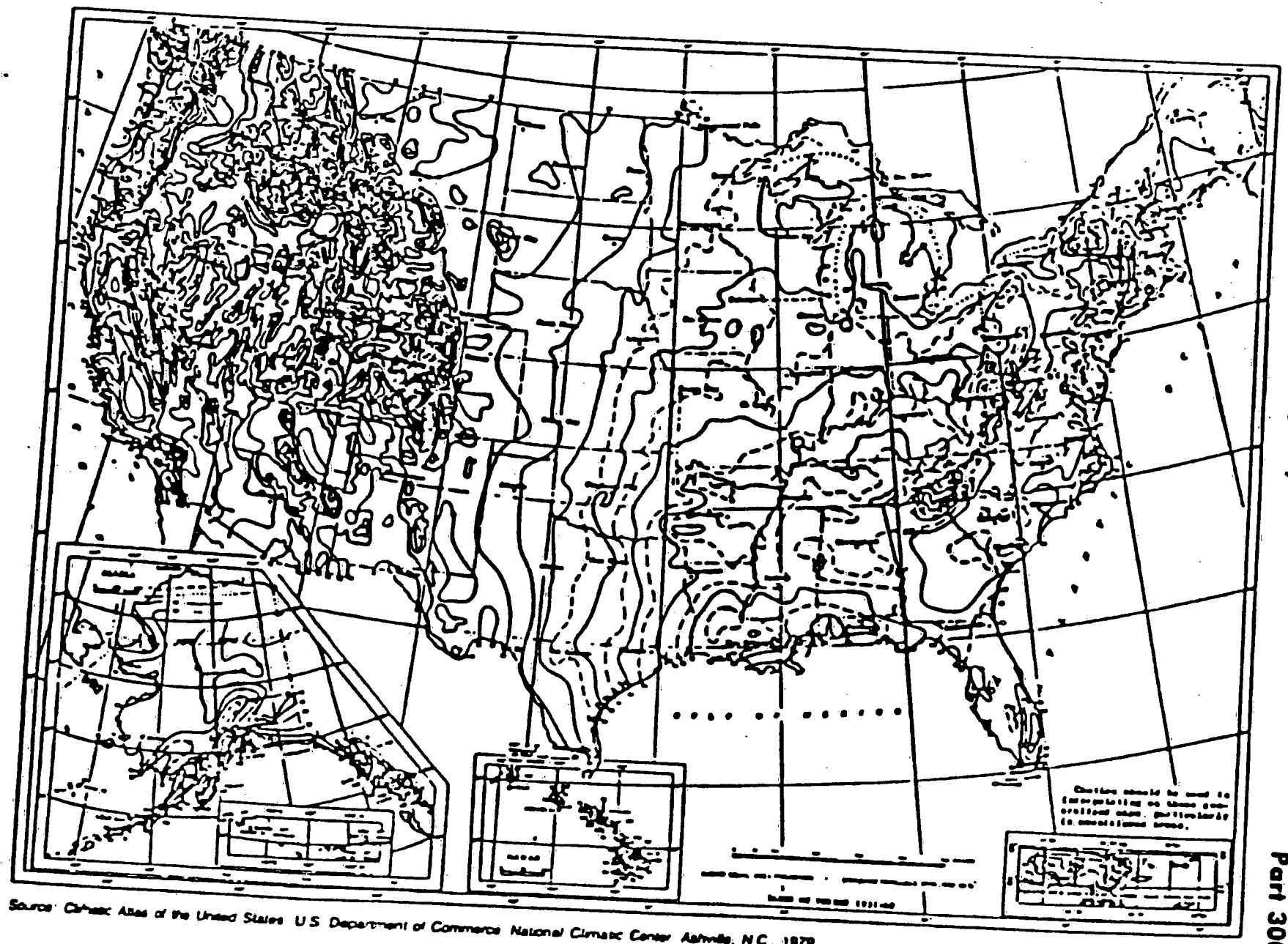
Uncontrolled Hazardous Waste Site Ranking System

A Users Manual
(HW-10)

Originally Published in
the July 16, 1982, *Federal Register*

United States
Environmental Protection
Agency

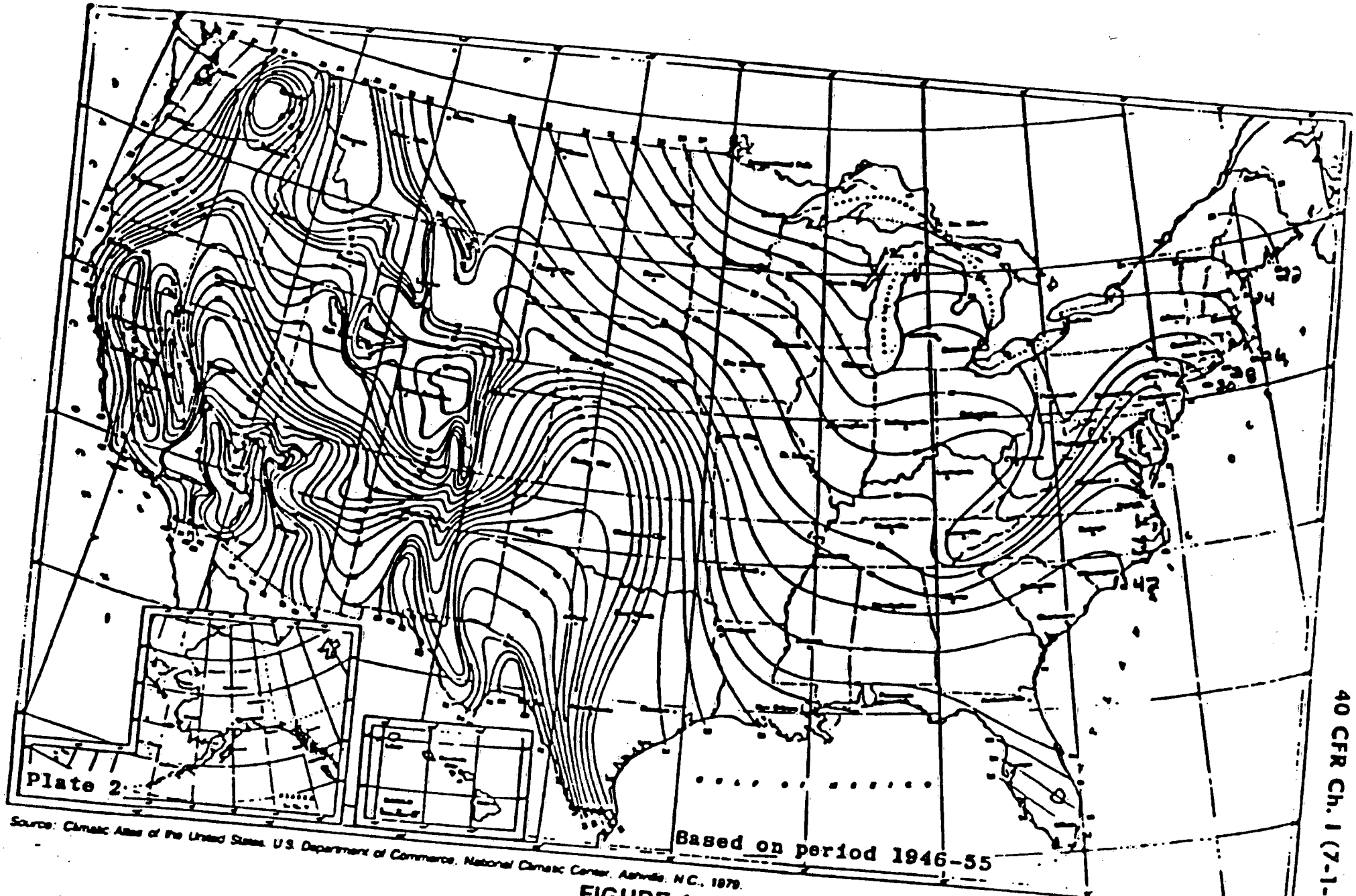
1984



Source: Climatic Atlas of the United States U.S. Department of Commerce National Climatic Center Asheville, N.C. 1979

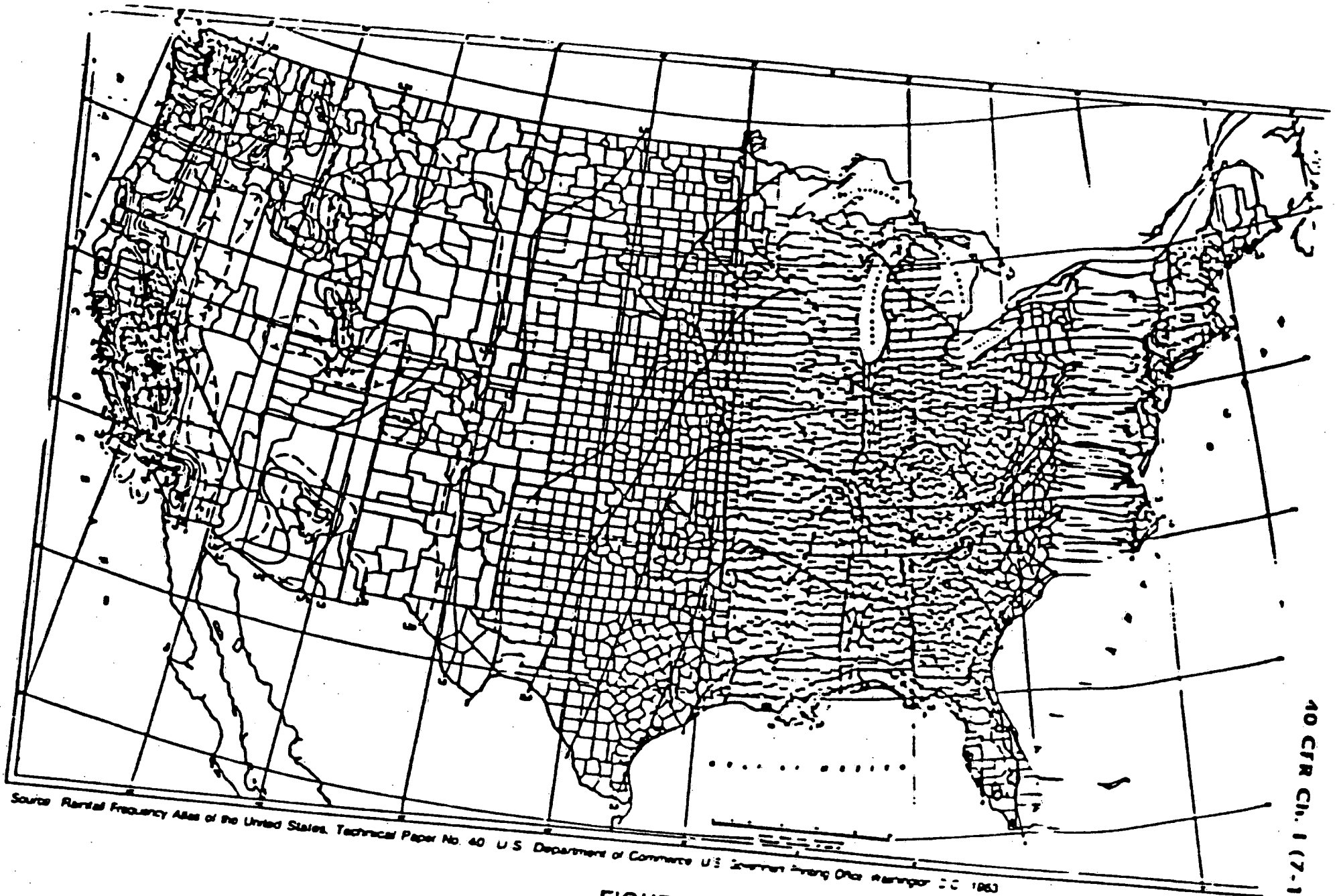
FIGURE 5
NORMAL ANNUAL TOTAL PRECIPITATION
(INCHES)

Page 2



Source: Climatic Atlas of the United States. U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

FIGURE 4
MEAN ANNUAL LAKE EVAPORATION
(IN INCHES)



Source: Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1963

FIGURE 8
1-YEAR 24-HOUR RAINFALL
(INCHES)

TABLE 2

PERMEABILITY OF GEOLOGIC MATERIALS*

Type of Material	Approximate Range of Hydraulic Conductivity	Assigned Value
Clay, compact till, shale; unfractured metamorphic and igneous rocks	$<10^{-7}$ cm/sec	0
Silt, loess, silty clays, silty loams, clay loams; less permeable limestone, dolomites, and sandstone; moderately permeable till	$10^{-5} - 10^{-7}$ cm/sec	1
Fine sand and silty sand; sandy loams; loamy sands; moderately permeable limestone, dolomites, and sandstone (no karst); moderately fractured igneous and metamorphic rocks, some coarse till	$10^{-3} - 10^{-5}$ cm/sec	2
Gravel, sand; highly fractured igneous and metamorphic rocks; permeable basalt and lavas; karst limestone and dolomite	$>10^{-3}$ cm/sec	3

*Derived from:

Davis, S. N., Porosity and Permeability of Natural Materials in Flow-Through Porous Media, R.J.M. DeWest ed., Academic Press, New York, 1969

Freeze, R.A. and J.A. Cherry, Groundwater, Prentice-Hall, Inc., New York, 1979

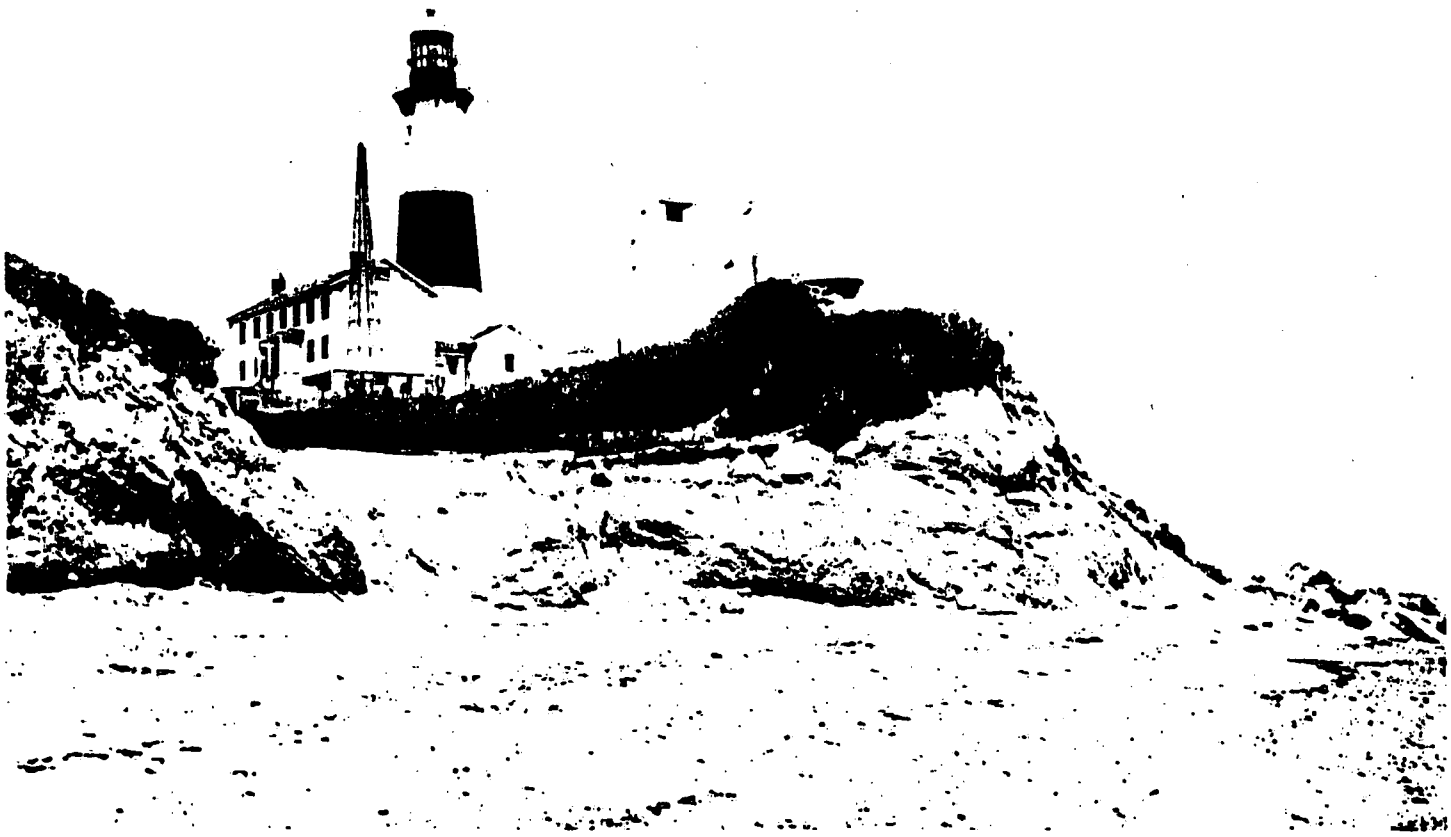
recycled paper

ecology and environment

REFERENCE NO. 5

SOIL SURVEY OF

Suffolk County, New York



SUFFOLK COUNTY SOIL & WATER
CONSERVATION DISTRICT
Peconic Plaza
134 Old Country Road, Route 58
Riverhead, N.Y. 11901
Phone: 516-727-2315

United States Department of Agriculture
Soil Conservation Service
in cooperation with
Cornell Agricultural Experiment Station

page 2

2 200 000 FEET
KINGS PARK
LONG ISLAND
5th Ave School
S M I T H T O W N
T O N
CEM

SOIL LEGEND

The first capital letter is the initial one of the soil name. A second capital letter, A, B, C, D, or E, shows the slope. Most symbols without a slope letter are those of nearly level soils but some are for land types that have a considerable range of slope. A final number, 3, in the symbol shows that the soil is eroded.

SYMBOL	NAME
Ar	Arsion sand
Bc	Beaches
Bd	Berryland mucky sand
BgA	Bridgehampton silt loam, 0 to 2 percent slopes
BgB	Bridgehampton silt loam, 2 to 6 percent slopes
BhB	Bridgehampton silt loam, till substratum, 2 to 6 percent slopes
BhC	Bridgehampton silt loam, till substratum, 6 to 12 percent slopes
Bm	Bridgehampton silt loam, graded
Ca	Canadice silt loam
CpA	Carver and Plymouth sands, 0 to 3 percent slopes
CpC	Carver and Plymouth sands, 3 to 15 percent slopes
CpE	Carver and Plymouth sands, 15 to 35 percent slopes
CuB	Cut and fill land, gently sloping
CuC	Cut and fill land, sloping
CuE	Cut and fill land, steep
De	Deerfield sand
Du	Dune land
Es	Escarpments
Fd	Fill land, dredged material
Fs	Fill land, sandy
Gp	Gravel pits
HaA	Haven loam, 0 to 2 percent slopes
HaB	Haven loam, 2 to 6 percent slopes
HaC	Haven loam, 6 to 12 percent slopes
He	Haven loam, thick surface layer
Ma	Made land
MfA	Montauk fine sandy loam, 0 to 3 percent slopes
MfB	Montauk fine sandy loam, 3 to 8 percent slopes
MfC	Montauk fine sandy loam, 8 to 15 percent slopes
MkA	Montauk silt loam, 0 to 3 percent slopes
MkB	Montauk silt loam, 3 to 8 percent slopes
MkC	Montauk silt loam, 8 to 15 percent slopes
MlB	Montauk soils, graded, 0 to 8 percent slopes
MlC	Montauk soils, graded, 8 to 15 percent slopes
MnA	Montauk loamy sand, sandy variant, 0 to 3 percent slopes
MnB	Montauk loamy sand, sandy variant, 3 to 8 percent slopes
MnC	Montauk loamy sand, sandy variant, 8 to 15 percent slopes
MnE	Montauk loamy sand, sandy variant, 15 to 35 percent slopes
Mu	Muck
PlA	Plymouth loamy sand, 0 to 3 percent slopes
PlB	Plymouth loamy sand, 3 to 8 percent slopes
PlC	Plymouth loamy sand, 8 to 15 percent slopes
PmB3	Plymouth gravelly loamy sand, 3 to 8 percent slopes, eroded
PmC3	Plymouth gravelly loamy sand, 8 to 15 percent slopes, eroded
PsA	Plymouth loamy sand, silty substratum, 0 to 3 percent slopes
PsB	Plymouth loamy sand, silty substratum, 3 to 8 percent slopes
Ra	Raynham loam
Rc	Recharge basin
RdA	Riverhead sandy loam, 0 to 3 percent slopes
RdB	Riverhead sandy loam, 3 to 8 percent slopes
RdC	Riverhead sandy loam, 8 to 15 percent slopes
ReB	Riverhead very stony sandy loam, 3 to 8 percent slopes
ReC	Riverhead very stony sandy loam, 8 to 15 percent slopes
RhB	Riverhead and Haven soils, graded, 0 to 8 percent slopes
RhC	Riverhead and Haven soils, graded, 8 to 15 percent slopes
RpE	Riverhead and Plymouth very bouldery soils, 15 to 35 percent slopes
ScB	Scio silt loam, till substratum, 2 to 6 percent slopes
SdA	Scio silt loam, sandy substratum, 0 to 2 percent slopes
SdB	Scio silt loam, sandy substratum, 2 to 6 percent slopes
Su	Sudbury sandy loam
Tm	Tidal marsh
Ur	Urban land
Wa	Wallington silt loam, till substratum
Wd	Walpole sandy loam
We	Wareham loamy sand
Wh	Whitman sandy loam

WORKS

Highways and roads

Divided .....

Good motor .....

Poor motor .....

Trail .....

Highway markers

National Interstate

U. S. .....

State or county ..

Railroads

Single track .....

Multiple track ....

Abandoned .....

Bridges and crossings

Road .....

Trail .....

Railroad .....

Ferry .....

Ford .....

Grade .....

R. R. over .....

R. R. under .....

Buildings .....

School .....

Church .....

Mine and quarry .....

Gravel pit .....

Power line .....

Pipeline .....

Cemetery .....

Dams .....

Levee .....

Recharge basin .....

Well, oil or gas .....

Forest fire or lookout s

Windmill .....

Located object .....

...ers in such areas are thicker than those in the profile ...ribed.

Fill land, sandy is mostly along the waterfront and is ...d as building sites. It is not suited to most other uses. ...ite investigation is needed to determine the suitabil... of individual areas for building sites. Because of ...ughtiness on thicker fills and low fertility of most fill ...terial, limitations are severe on this land type for ...ablishing and maintaining lawns and landscaping. ...ound water pollution is a hazard where thinner fills ...ovide little or no filter material between the bottoms ...f cesspools and the water table. Capability unit not ...signed; woodland suitability group not assigned.

Gravel Pits

Gravel pits (Gp) are open excavations that have been ...ade for the purpose of mining sand and gravel. These ...ts range in depth from 8 or 10 feet to more than 100 ...et. The sides of the pits generally are left nearly verti...al, and the bottoms are level.

Abandoned pits are not suited to farming. Most of ...ese areas are in a cover of native vegetation. Houses ...ave been built in some of the larger pits. Capability ...nit not assigned; woodland suitability group not ...signed.

Haven Series

The Haven series consists of deep, well-drained, me...um-textured soils that formed in a loamy or silty mantle ...ver stratified coarse sand and gravel. These soils are ...resent throughout the county, but most areas are on ...utwash plains between the two terminal moraines. ...opes range from 0 to 12 percent, but they generally are ... to 6 percent. Native vegetation consists of black oak, ...ite oak, red oak, scrub oaks, and pitch pine.

In a representative profile a thin layer of leaf litter ...d decomposed organic matter is on the surface in ...ded areas. Below this is the surface layer of dark ...ayish-brown loam about 3 inches thick. In cultivated ...as the surface layer is mixed with the material for...rly in the upper part of the subsoil, and a plow layer ...f brown or dark-brown loam, about 10 inches thick, is ...resent. The subsoil is dark-brown to strong-brown, fria...e loam to a depth of about 19 inches. The lower part, ... a depth of 28 inches, is yellowish-brown, friable grav...y loam. The substratum, to a depth of 55 inches, is ...owish-brown to brownish-yellow loose sand and ...vel.

Haven soils have high to moderate available moisture ...acity. Reaction is strongly acid to very strongly acid ...roughout. Natural fertility is low. The response of ...ps to lime and fertilizer is good. Internal drainage is ...d. Permeability is moderate in the surface layer and ...soil and rapid or very rapid in the substratum. The ... zone is 25 to 35 inches thick.

Representative profile of Haven loam, 0 to 2 percent ...es, in a wooded area, on Gerrard Road, 1½ miles ...th of Sunrise Highway in Brookhaven:

O1—3½ to 1½ inches, loose pine needles, leaves, and twigs.

O2—1½ inches to 0, black (5YR 2/1) humified organic material.

A1—0 to 3 inches, dark grayish-brown (10YR 4/2) loam; weak, fine and medium, granular structure; friable; many fine and coarse roots; many pores; very strongly acid; abrupt, smooth boundary.

B21—3 to 10 inches, brown to dark-brown (7.5YR 4/4) loam; weak, fine and medium, subangular blocky structure; friable; common roots; many pores; a few root channels filled with dark grayish-brown loam; very strongly acid; clear, wavy boundary.

B22—10 to 19 inches, strong-brown (7.5YR 5/6) loam; weak, fine and medium, subangular blocky structure; friable; common roots; many pores; 5 percent gravel ¼ to ½ inch in diameter; very strongly acid; gradual, wavy boundary.

B23—19 to 28 inches, yellowish-brown (10YR 5/6) gravelly loam; weak, medium and fine, subangular blocky structure; friable; a few fine roots; 20 percent fine gravel; very strongly acid; abrupt, wavy boundary.

IIC—28 to 55 inches, yellowish-brown (10YR 5/4) to brownish-yellow (10YR 6/6) gravelly sand; single grain; loose; 30 percent gravel ¼ to 1 inch diameter; very strongly acid.

Depth to strongly contrasting sand and gravel ranges from 18 to 36 inches, depending on the thickness of the solum. The content of gravel ranges from 2 to 15 percent in all horizons above any B23 or IIB3 horizons that are present. Reaction is strongly acid or very strongly acid throughout.

In the Ap horizon color ranges from very dark grayish brown (10YR 3/2) to brown or dark brown (10YR 4/3). In the A1 horizon color ranges from dark grayish brown (10YR 4/2) to black (10YR 2/1). The Ap horizon has weak or moderate granular structure. It commonly has a firm, platy plowpan in the lower part. If a plowpan is present in the Ap horizon, the material above the plowpan is friable or very friable. The Ap horizon is 8 to 12 inches thick. In places accumulated A horizons range from 12 to 30 inches in thickness.

In the B21 and B22 horizons color ranges from brown or dark brown (7.5YR 4/4) to light olive brown (2.5Y 5/6). The texture of these horizons ranges from very fine sandy loam to silt loam. It is massive or structure is weak, subangular blocky. Consistence is very friable or friable. Where a B23 horizon is present, it has the same range of characteristics as the B21 and B22 horizons, except that the content of gravel ranges from 15 to 35 percent.

In the strongly contrasting IIC horizon, color ranges from yellowish brown (10YR 5/4) to olive yellow (2.5Y 6/6). This horizon is coarse or medium sand, and typically is stratified. The content of gravel is 10 to 50 percent.

In places is a transitional B3 or IIB3 horizon that ranges from sandy loam to gravelly sand in texture. It is 2 to 5 inches thick. The content of coarse fragments in this horizon ranges from 1 to 20 percent.

Haven soils are near Riverhead, Scio, Bridgehampton, and Montauk soils. Haven soils are similar to Riverhead soils, but they have less sand in the B2 horizon. They are similar to Scio soils, but lack the colors that indicate wetness in those soils. They are similar to Bridgehampton soils, but have a thinner solum, are less silty, and lack the bisequum color profile of the Bridgehampton soils. They are similar to Montauk soils, but lack the fragipan and the till substratum typical of those soils.

Haven loam, 0 to 2 percent slopes (HaA).—This soil has the profile described as representative of the series. It is mostly nearly level and generally is on outwash plains. Some areas of this soil are on moraines and generally are on the top of low-lying hills. Some of these areas are slightly undulating. Most areas of this soil are large, but on moraines the areas are smaller and are irregular in shape.

Included with this soil in mapping are small areas of Scio soils and some crescent-shaped, gravelly areas. Also included are soils that have a moderately coarse textured surface layer and a medium-textured subsoil. In many areas of this soil that are mapped in association with

REFERENCE NO. 6

STATE OF NEW YORK
DEPARTMENT OF HEALTH
Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH
Linda A. Randolph M.D. M.P.H.
Director
William F. Leavy
Executive Deputy Director

September 15, 1988

Ms. Ari Selvakumar
Staff Engineer
YEC, Inc.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, NY 10989

Dear Ms. Selvakumar:

As we discussed on September 15, 1988, we no longer have copies of the "Atlas". However, I am enclosing a copy of the Suffolk County portion of the Atlas.

If you have any questions, give me a call at (518) 458-6731.

Sincerely,

James R. Covey

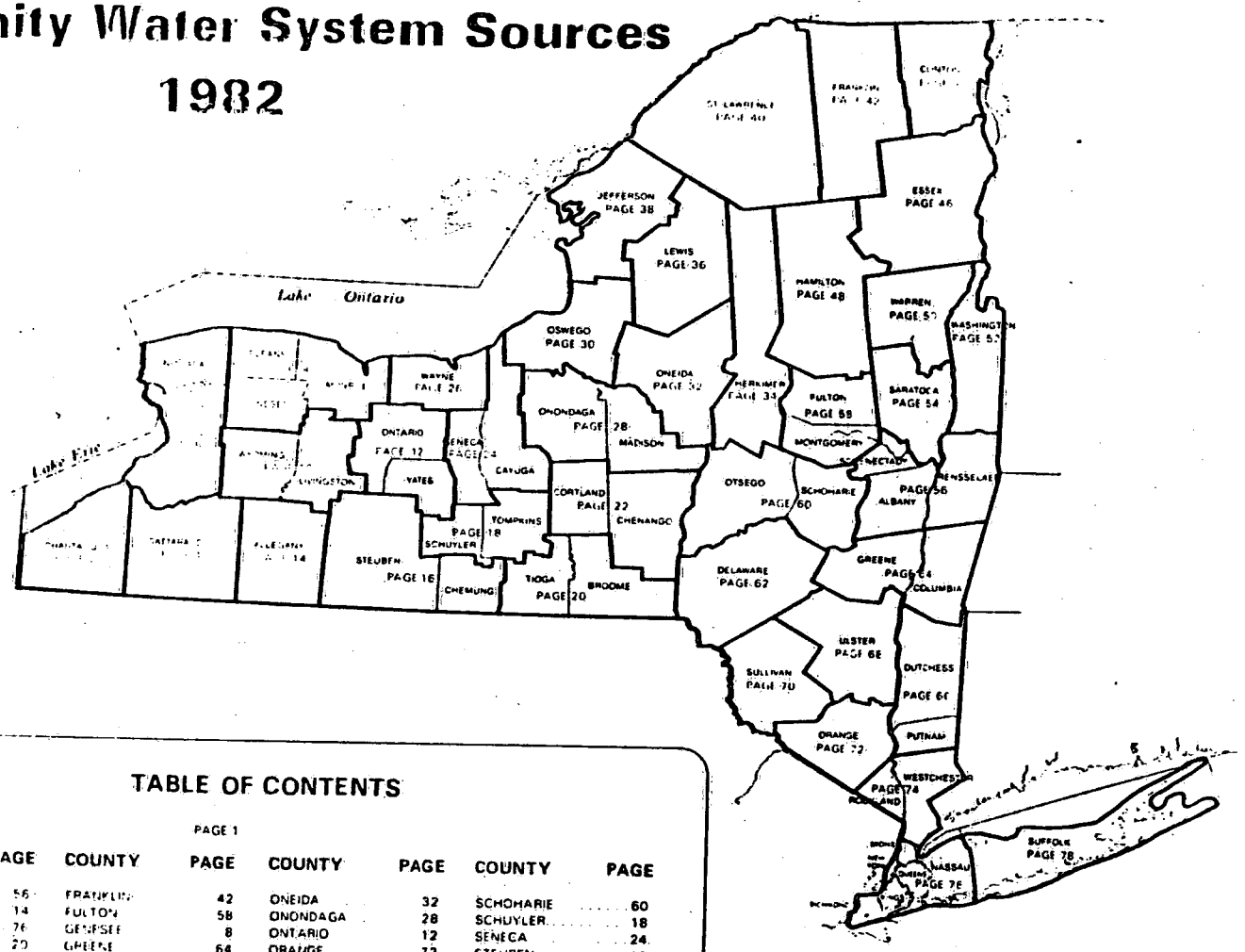
James R. Covey, P.E.
Associate Sanitary Engineer
Bureau of Public Water Supply Protection

Enclosure

cc: Mr. Burke

New York State Atlas of Community Water System Sources 1982

NEW YORK STATE
DEPARTMENT OF HEALTH



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CLINTON	44	LIVINGSTON	10	RENSSELAER	56	WARREN	50
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LEGEND

BOUNDARIES AND PLACES

Information
State
County
Town
Indian Reservation
City — Village
Unincorporated Place — Federal Reservation
Built-up Area (Over 25,000 population including any contiguous city or village)

CLASSIFICATION OF POPULATED PLACES

100,000 or more
50,000 to 100,000
12,500 to 50,000
2,500 to 12,500
250 to 2,500
250 or less

TRANSPORTATION

Highways
- Divided Highways
  - Full Control of Access
  - Partial or No Control of Access
- Undivided Highway
- Interchange
- Touring Route (State, U.S., Interstate) or State Parkway
- Touring Route Markers
  - State, U.S., Interstate

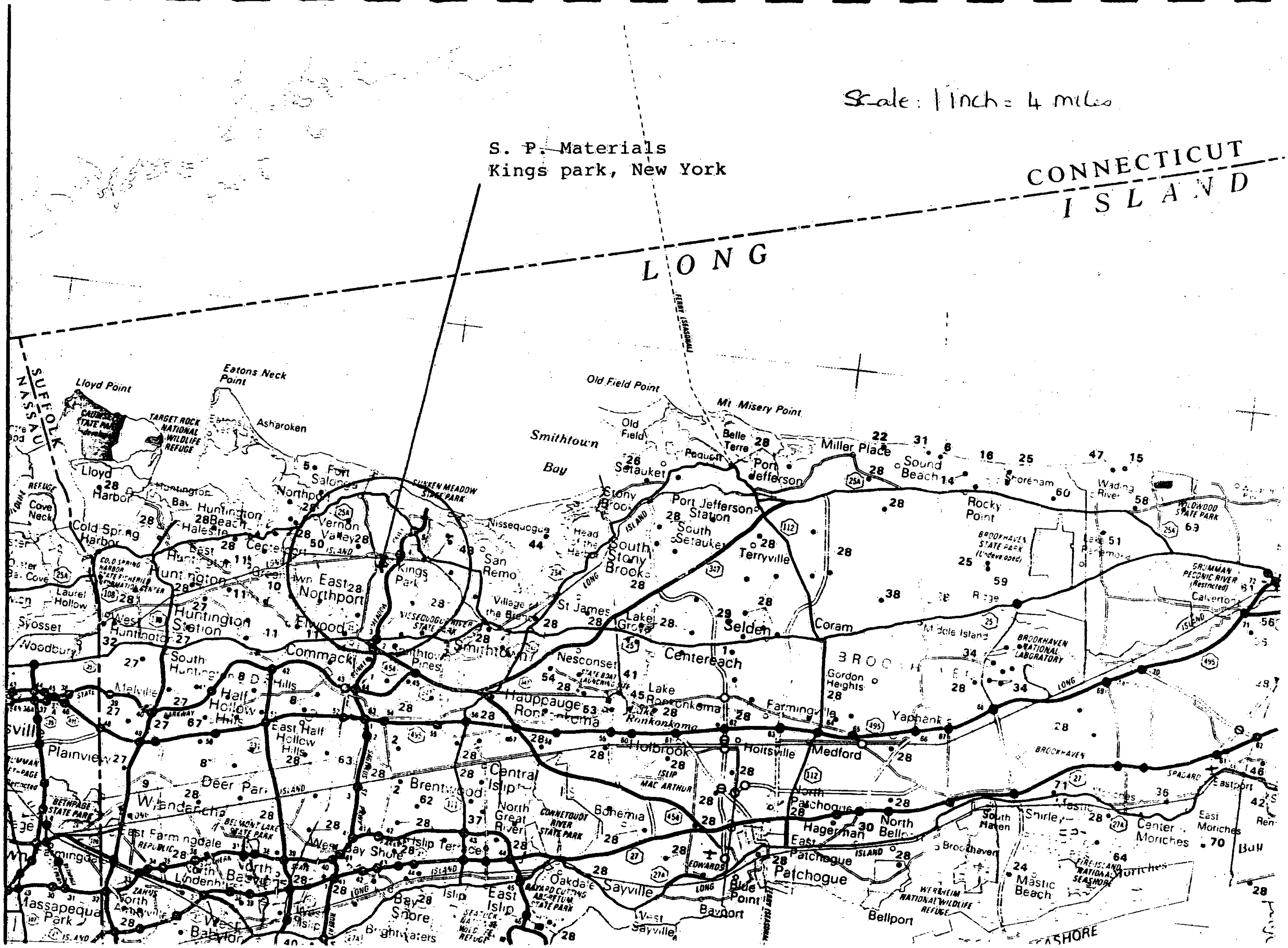
Railroads
- Operating Line — Service Discontinued
- Operator
- Owner (If Other than Operator)
- Company Having Trackage Rights

Airports (Open to the Public, Military)
- Runway under 4000' — Runway over 4000'

Rest Areas
- Food, Gas, Rest Rooms — Rest Rooms
- Gas, Rest Rooms — Parking Only

RECREATION FACILITIES

State or National Recreation Area
State Campground
State Boat Launching Site
State Canal Park
State Fish Hatchery
Other State Recreation Site


Scale: 1 inch = 4 miles
S. P. Materials
Kings park, New York
CONNECTICUT
LONG ISLAND
SUFFOLK
NASSAU
Lloyd Point
Eatons Neck Point
Old Field Point
Mt Misery Point
Smithtown Bay
Asharoken
Lloyd Harbor
Cold Spring Harbor
Huntington
Huntington Station
Northport
East Northport
Fort Salonga
Vernon Valley
Kings Park
San Remo
Nissequogue
Head of the Harbor
Stony Brook
South Setauket
Port Jefferson
Port Jefferson Station
Belle Terre
Miller Place
Sound Beach
Shoreham
Wading River
Rocky Point
Terryville
Selden
Coram
Centereach
Middle Island
St James
Lake Grove
Smithtown
Nesconset
Commack
Elwood
Melville
Half Hollow Hills
Hauppauge
Lake Ronkonkoma
Holbrook
Holtsville
Medford
Farmingville
Yaphank
Plainview
Deer Park
Brentwood
Central Islip
Bohemia
North Patchogue
East Patchogue
Patchogue
Sayville
Oakdale
Bayport
Blue Point
Bellport
Islip
East Islip
Bay Shore
West Islip
Brightwaters
West Babylon
Lindenhurst
North Babylon
Wyandanch
Massapequa Park
Shirley
Mastic
Mastic Beach
Center Moriches
East Moriches
Eastport
Calverton
Riverhead
Sunken Meadow State Park
Nissequogue River State Park
Caumsett State Park
Target Rock National Wildlife Refuge
Brookhaven National Laboratory
Brookhaven State Park
Wildwood State Park
Connetquot River State Park
Belmont Lake State Park
Bethpage State Park
Bayard Cutting Arboretum State Park
Wertheim National Wildlife Refuge
Fire Island National Seashore

SUFFOLK COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
1	Bevon Water Corporation.	1150.	Wells
2	Brentwood Water District.	25812.	Wells
3	Bridgehampton Water Company.	1916.	Wells
4	Captain Kidd Water Company.	580.	Wells
5	Crab Meadow Beach.	50.	Wells
6	Culross Corporation (Culross Beach).	104.	Wells
7	Dering Harbor Village.	130.	Wells
8	Dix Hills Water District.	30000.	Wells
9	East Farmingdale Water District.	7850.	Wells
10	Fishers Island Water Works Corporation.	250.	Barlow, Middle Farms and Treasure Ponds, Wells
11	Greenlawn Water District.	40000.	Wells
12	Greenport Village.	6851.	Wells
13	Hampton Bays Water District.	9500.	Wells
14	Hawthorne - Maple Civic Association.	50.	Wells
15	Herod Point Association.	80.	Wells
16	North Shores Water Company.	5000.	Wells
17	Ocean Beach Village.	155.	Wells
18	Reeves Beach Water Company.	650.	Wells
19	Riverhead Water District.	9300.	Wells
20	Roanoke Water Corporation.	201.	Wells
21	Saltaire Village.	35.	Wells
22	Scott's Beach Water Company.	342.	Wells
23	Shelter Island Heights Association.	498.	Wells
24	Shirley Water Works.	3400.	Wells
25	Shorewood Water Corporation.	10000.	Wells
26	Soundview Association.	236.	Wells
27	South Huntington Water District.	51260.	Wells
28	Suffolk County Water Authority.	900000.	Wells
29	Sunhill Water Corporation.	3959.	Wells
30	Swan Lake Water Corporation.	1485.	Wells
31	Terrace-on-the-Sound.	400.	Wells
32	Woodbury Triangle Corporation.	800.	Wells
Non-Municipal Community			
33	Aquebogue Mobile Home Court.	120.	Wells
34	Brookhaven National Labs.	3373.	Wells
35	Calverton Hills Owners Association.	897.	Wells
36	Cedar Lodge Nursing Home.	100.	Wells
37	Central Islip Psychiatric Center.	4525.	Wells
38	Crest Hall Health Related Facility.	120.	Wells
39	East Quogue Mobile Estates.	160.	Wells
40	Good Samaritan Hospital.	NA.	Wells
41	Greis Mobile Park.	70.	Wells
42	Hampton Gateway Apartments.	304.	Wells
43	Kings Park Psychiatric Center.	3100.	Wells
44	Knox School.	NA.	Wells
45	Lake Hurst Lodge Adult Home.	57.	Wells
46	Leier's Mobile Park.	350.	Wells
47	Little Flower Children's Services.	150.	Wells
48	Montauk Air force Station.	10.	Wells
49	Napeague Trailer Park.	78.	Wells
50	Northport VA Hospital.	3000.	Wells
51	Oak Park Trailer Park.	50.	Wells
52	Oakland Ridge Mobile Park.	74.	Wells
53	Park Lake Rest Home.	46.	Wells
54	Peacock Alley.	35.	Wells
55	Peconic River Trailer Park.	90.	Wells
56	Peconic View Adult Mobile Home Park.	70.	Wells
57	Pinecrest Garden Apartments.	392.	Wells
58	Ramblewood Mobile Homes.	210.	Wells
59	Ridge Rest Home.	58.	Wells
60	Rocky Point Family Housing.	55.	Wells
61	Rollin Mobile Homes.	220.	Wells
62	St Joseph Convent - Long Island University.	1177.	Wells
63	Sam A Lewison Start Center.	40.	Wells
64	South Bay Adult Home.	40.	Wells
65	Southampton College.	1000.	Wells
66	Speonk Mobile Home Park.	50.	Wells
67	Suffolk Developmental Center.	3500.	Wells
68	Three Mile Harbor Trailer Park.	40.	Wells
69	Thurm's Mobile Estates.	450.	Wells
70	USCG Station - Moriches.	23.	Wells
71	Wes Dubicki Apartments.	NA.	Wells

REFERENCE NO. 7

YEC, INC.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, NY 10989
(914) 268-3203

January 12, 1989

Mr. William J. Sanok
Cooperative Extention Agent
Agricultural Program Leader
Cornell Cooperative Extention
246 Griffing Avenue
Riverhead, NY 11901

Dear Mr. Sanok:

YEC, Inc. is under contract to New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Remediation Division to conduct Phase I Investigation on "S.P. Materials" located in 170 Townline Road, Kings Park, New York (see attached map for site location). I need your assistance in providing the information on the following:

1. Whether there are any farmland and/or agriculture land within 3-mile radius of the site?

2. If there is farmland, what is grown in that?

3. Whether the groundwater is used for irrigation?

4. Whether there are any surface water bodies within 3-mile radius of the site?

5. How far is the nearest surface water?

6. Whether the surface water is used as a source of drinking water?

I would appreciate, if you could send the above information at your earliest convenience.

Thanking you.

Sincerely yours

ASelvakumar

Ms. Ari Selvakumar
Staff Engineer

Cornell Cooperative Extension

Suffolk County

Education Center
246 Griffing Avenue
Riverhead, NY 11901-3086

516-727-7850
FAX 516-727-7130

February 22, 1989

Ms. Ari Selvakumar
Staff Engineer
Yec, Inc.
Forest View Professional Bldg.
10 Pine Crest Road
Valley Cottage, NY 10989

Dear Ms. Selvakumar:

This letter is in response to your request for information on S.P. Materials, 170 Townline Rd., Kings Park, New York.

1. There is an apple orchard about one mile to the northwest of the site. There is some more farmland about three miles to the direct southwest.
2. The major crop in the orchard is apples. To the southwest, the major crops include nursery stock and sod.
3. For all of these areas of production, the groundwater is the source of irrigation water.
4. I do not know of any bodies of surface water near this site. The only regular bodies of surface water are near Long Island Sound. The whole area of Sunken Meadow State Park is directly north of this site.

In addition to your letter of January 12, I was given a copy of a similar letter to Mr. Dan Fricke of our office, dated February 2 from Marie McDonnell. Mr. Fricke passed this letter on to me for a response. I would suggest that any request for information on the use of groundwater for drinking purposes be addressed to the Suffolk County Water Authority, Sunrise Highway, Oakdale, NY 11769.

Sincerely yours,

William J. Sanok
COOPERATIVE EXTENSION AGENT
Agricultural Program Leader

WJS:kr

Helping You Put Knowledge to Work

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associations, county governing bodies, and U.S. Department of Agriculture, cooperating.

REFERENCE NO. 8

SCWA

SUFFOLK COUNTY WATER AUTHORITY

Leon J. Campo, *Chairman*
Melvin M. Fritz, M.D., *Member*
Matthew B. Kondenar, *Secretary*
James T.B. Tripp, *Member*
Michael E. White, *Member*

Administrative offices: Oakdale, Long Island, N.Y. 11769
Area 516-589-5200

November 1, 1988

Ms. Ari Selvakumar
Staff Engineer
YEC, Inc.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, New York 10989

Re: Your letters of September 20, October 6, and October 19, 1988.

Dear Ms. Selvakumar:

Please be advised that the Suffolk County Water Authority has twenty three active wells falling within the three mile radius around the Indian Head Road (Smithtown) landfill.

The distribution system of the Suffolk County Water Authority portion of the area in this three mile radius is completely integrated and therefore it cannot be determined as to exactly how many customers are served by these wells. Furthermore, some of the area is served by Smithtown Water District. However, it is estimated that approximately 48,000 people are served by the Authority at this time.

Information regarding contamination of Authority wells must be requested from the laboratory located at this address. Address your correspondence to Mr. Patrick J. Dugan, Chief Chemist. You will have to be more specific about what you mean by contamination.

The Authority keeps no file data on private wells. Therefore, their location and status is unknown.

The Authority has sixteen active wells within a three mile radius around the County Fire Training Area in Westhampton. It is estimated that approximately 6,000 people are served by these wells.

The Authority has three well fields within a three mile radius around the New York Pyrotechnic Products Company. It is estimated that approximately 19,000 people are served by the wells at these sites.

It should be noted that all Suffolk County Water Authority water is groundwater, supplied from wells.

If we can be of any further help, please advise.

Very truly yours,

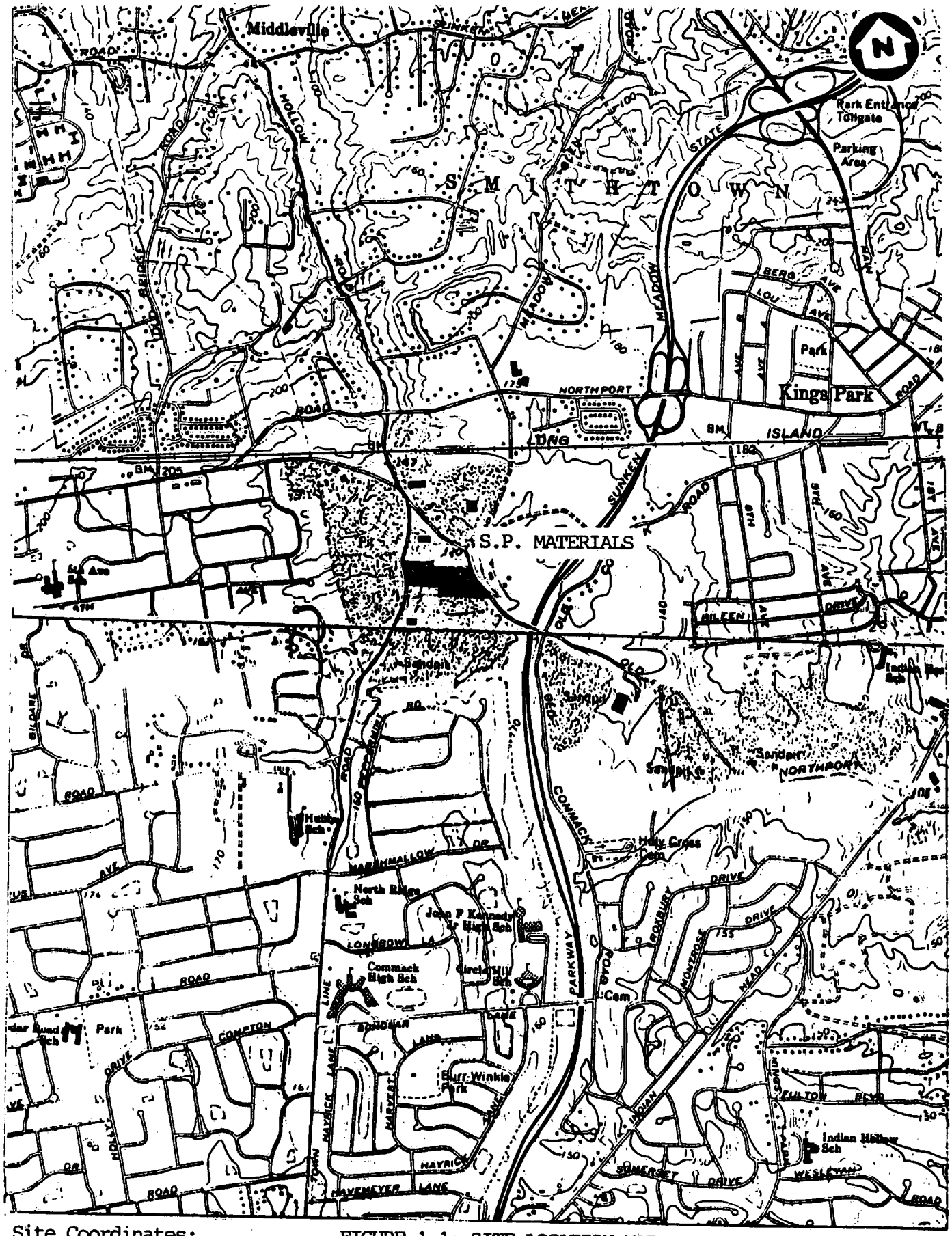
E.J. Rosavitch

E.J. Rosavitch, P.E.
Acting Chief Engineer

EJR:wlb

cc: P.J. Dugan
S.R. Dassler

REFERENCE NO. 9



Site Coordinates:
Longitude: 73 17'00"
Latitude : 40 52'00"

Northport and Greenlawn Quadrangles

FIGURE 1-1: SITE LOCATION MAP
S.P.Materials, Kings Park
New York

Source: USGS Quadrangle
Map, 1967
Scale: 1 inch = 2000 f

New York State Department of Environmental Conservation
Building 40—SUNY, Stony Brook, New York 11794
(516) 751-7900 (ext. 248)

FEB 6 - 1989
N.Y.S.D.E.C.
BUREAU OF FISHERIES

January 27, 1989

Thomas C. Jorling
Commissioner

YEC, Inc.
10 Pine Crest Road
Valley Cottage, New York 10989

Attn: Ms. Selvakumar:

Dear Ms. Selvakumar:

We have reviewed the Significant Habitat Program and the Natural Heritage Program files with respect to your request of 1/12/89 regarding"S.P. Materials" at 170 Townline Road, Kings Park,N.Y..
We did not identify any potential impacts on endangered, threatened, or special concern wildlife species, rare plant, animal or natural community occurrences, or other significant habitats.

The absence of data does not necessarily mean that rare or endangered elements, natural communities or other significant habitats do not exist on or adjacent to the proposed site, but rather that our files currently do not contain any information which indicates the presence of these. Our files are continually growing as new habitats and occurrences of rare species and communities are discovered. In most cases, site-specific or comprehensive surveys for plant and animal occurrences have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of species, habitats or communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

If this proposed project is still active one year from now we recommend that you contact us again so that we can update this response.

If we can be of further assistance please do not hesitate to contact me at the above address and telephone number.

Sincerely,

Michael S. Scheibel
Senior Wildlife Biologist

MSS/sjmr

REFERENCE NO. 11

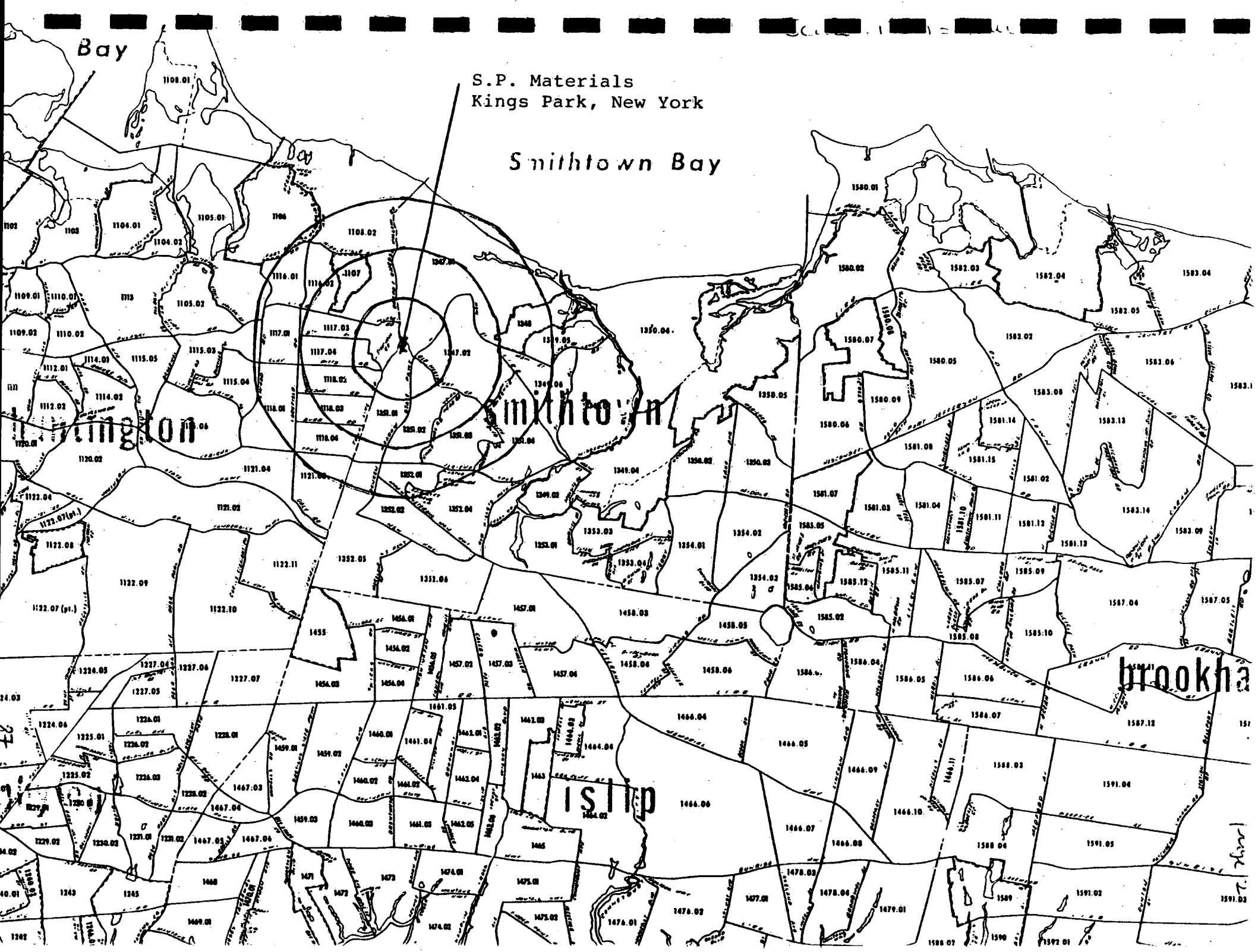
page 1

1988 POPULATION SURVEY

Current Population Estimates For Nassau and Suffolk Counties

Long Island Lighting Company

86


S.P. Materials
Kings Park, New York
Smithtown Bay
Bay
Smithtown
islip
brookha

SUFFOLK COUNTY

SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	110101	3405	3261	144	968	3.4	1037
103	110102	5336	5326	10	1708	3.1	1744
103	1102	5500	5489	11	2052	2.7	2108
103	1103	5726	5660	66	1898	3.0	1949
103	110401	3117	3117		924	3.4	960
103	110402	3326	3298	28	1160	2.8	1221
103	110501	3250	3209	41	1039	3.1	1067
103	110502	2752	2752		944	2.9	958
103	1106	7651	7601	50	2698	2.8	2770
103	1107	650	25	625	10	2.5	13
103	110801	2267	2244	23	688	3.3	801
103	110802	5760	5760		1742	3.3	1838
103	110901	2875	2840	35	1169	2.4	1202
103	110902	3937	3906	31	1294	3.0	1336
103	111001	1900	1818	82	664	2.7	690
103	111002	3518	3517	1	1234	2.9	1282
103	1111	6468	6463	5	2162	3.0	2244
103	111201	3089	3075	14	1081	2.8	1106
103	111202	4683	4675	8	1531	3.1	1564
103	1113	4392	4322	70	1356	3.2	1379
103	111401	1565	1565		460	3.4	472
103	111402	5509	5481	28	1641	3.3	1659
103	111503	4700	4700		1443	3.3	1468
103	111504	1505	1505		427	3.5	436
103	111505	6417	6115	302	1709	3.6	1755
103	111506	2800	2729	71	805	3.4	820
103	111601	4381	4381		1358	3.2	1386
103	111602	3392	3392		1062	3.2	1092
103	111701	5385	5361	24	1671	3.2	1702
103	111703	3354	3342	12	920	3.6	931
103	111704	3675	3611	64	1029	3.5	1042
103	111801	6136	6136		1638	3.7	1656
103	111802	3556	3543	13	915	3.9	924
103	111803	3192	3192		834	3.8	839
103	111804	2505	2505		683	3.7	691
103	1119	6071	6071		1872	3.2	1901
103	112001	4937	4937		1611	3.1	1650
103	112002	5309	5147	162	1598	3.2	1622
103	112102	4300	4300		1156	3.7	1160
103	112103	4434	4434		1179	3.8	1195
103	112104	3194	3188	6	909	3.5	918
103	112204	4608	4608		1326	3.5	1335
103	112205					.0	
103	112206	3346	3304	42	1003	3.3	1015
103	112207	4793	4764	29	1261	3.8	1280
103	112208	2241	39	2202	12	3.3	20
103	112209	8671	8498	173	2242	3.8	2270
103	112210	7010	6971	39	1773	3.9	1783
103	112211	4924	4924		1283	3.8	1294
103	1223	4380	3291	1089	1083	3.0	1105
103	122403	2408	2408		666	3.6	697
103	122404	3610	3610		1027	3.5	1055

page 3

SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	122405	3369	3363	6	859	3.9	889
103	122406	3706	3695	11	909	4.1	1005
103	122501	3269	3265	4	830	3.9	954
103	122502	4380	4380		1087	4.0	1137
103	122601	6547	6528	19	1888	3.5	1915
103	122602	5511	5511		1445	3.8	1454
103	122603	6320	6320		1893	3.3	1914
103	122704	2248	2248		574	3.9	592
103	122705	3502	3502		992	3.5	1011
103	122706	4604	4604		1490	3.1	1516
103	122707	3327	3327		927	3.6	939
103	122801	5118	5117	1	1471	3.5	1517
103	122802	4264	4264		1236	3.4	1255
103	122901	5799	5799		1757	3.3	1801
103	122902	4099	4091	8	1315	3.1	1347
103	123001	6081	6081		1705	3.6	1742
103	123002	4892	4892		1344	3.6	1385
103	123101	3823	3823		1116	3.4	1129
103	123102	4612	4612		1445	3.2	1469
103	123201	1142	1142		347	3.3	355
103	123202	5586	5330	256	1343	4.0	1396
103	123301	6043	5987	56	2033	2.9	2090
103	123302	1554	1554		438	3.5	470
103	123401	3875	3875		1143	3.4	1155
103	123402	7636	7636		2284	3.3	2339
103	1235	5092	4373	719	1650	2.7	1707
103	1236	3984	3984		1494	2.7	1538
103	123701	4617	4617		1373	3.4	1416
103	123702	7277	7266	11	2193	3.3	2251
103	123801	4214	4214		1527	2.8	1571
103	123802	4024	4024		1241	3.2	1280
103	1239	5151	5151		1568	3.3	1600
103	124001	4802	4802		1440	3.3	1465
103	124002	3519	3519		1030	3.4	1053
103	124101	4331	4250	81	1328	3.2	1356
103	124102	3316	3316		1198	2.8	1259
103	1242	5800	5785	15	1845	3.1	1932
103	1243	6273	6061	212	1962	3.1	2007
103	124401	3285	3285		1229	2.7	1269
103	124402	3705	3705		1138	3.3	1424
103	1245	4965	4911	54	1712	2.9	1755
103	124601	3030	3030		964	3.1	995
103	124602	4393	4223	170	1558	2.7	1637
103	134701	6701	6448	253	1924	3.4	1996
103	134702	5232	5232		1602	3.3	1633
103	1348	2681	138	2543	45	3.1	62
103	134902	4718	4377	341	1211	3.6	1229
103	134903	1455	1455		385	3.8	393
103	134904	6064	6042	22	1851	3.3	1901
103	134905	4198	4198		1113	3.8	1159
103	134906	5999	5970	29	1762	3.4	1774
103	135002	5591	5591		1578	3.5	1617

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SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	135003	3794	3794		1199	3.2	1236
103	135004	2485	2472	13	737	3.4	784
103	135005	2737	2262	475	853	2.7	973
103	135101	4628	4628		1224	3.8	1229
103	135102	4534	4522	12	1244	3.6	1250
103	135103	4510	4510		1120	4.0	1128
103	135104	4504	4504		1202	3.7	1219
103	135201	2480	2480		694	3.6	697
103	135202	4831	4831		1233	3.9	1241
103	135204	4748	4748		1249	3.8	1263
103	135205	6251	6251		1739	3.6	1748
103	135206	2046	2046		616	3.3	625
103	135301	3792	3753	39	1048	3.6	1068
103	135303	4405	4387	18	1307	3.4	1328
103	135304	3234	3234		819	3.9	828
103	135401	4721	4721		1338	3.5	1385
103	135402	5985	5985		1639	3.7	1695
103	135403	4339	4289	50	1254	3.4	1320
103	1455	3865	118	3747	41	2.9	44
103	145601	4913	4913		1239	4.0	1255
103	145602	5048	5048		1254	4.0	1279
103	145603	4473	4473		1065	4.2	1129
103	145604	3116	3111	5	844	3.7	899
103	145605	2673	2539	134	693	3.7	706
103	145701	5539	5535	4	1654	3.3	1722
103	145702	4276	4276		1158	3.7	1217
103	145703	4273	4273		1275	3.4	1314
103	145704	6050	6050		1982	3.1	2100
103	145803	4657	4632	25	1335	3.5	1353
103	145804	2362	2362		718	3.3	748
103	145805	5480	5423	57	1827	3.0	1932
103	145806	8173	8173		2234	3.7	2292
103	145901	3037	3037		814	3.7	862
103	145902	5857	5844	13	1568	3.7	1618
103	145903	5507	5507		1619	3.4	1649
103	146001	3030	3020	10	805	3.8	842
103	146002	4142	4138	4	1047	4.0	1085
103	146003	4719	4718	1	1507	3.1	1582
103	146102	2145	2145		539	4.0	547
103	146103	5410	5326	84	1364	3.9	1390
103	146104	3243	2941	302	724	4.1	739
103	146105	4922	4869	53	1340	3.6	1370
103	146201	3876	3876		924	4.2	951
103	146202	3192	3192		782	4.1	860
103	146203	3857	3827	30	1053	3.6	1164
103	146204	4751	4751		1144	4.2	1180
103	146205	2340	2340		622	3.8	642
103	146206	2088	2088		588	3.6	611
103	1463	2194	45	2149	15	3.0	19
103	1464[illegible]	3395	3394	1	886	3.8	937
103	146402	3952	3952		1054	3.7	1071
103	146403	4069	4069		1005	4.0	1119

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SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	1465	5588	5588		1573	3.6	1632
103	146604	4820	4820		1488	3.2	1518
103	146605	1219	1209	10	370	3.3	390
103	146606	7687	7525	162	2109	3.6	2154
103	146607	1621	1612	9	785	2.1	802
103	146608	1996	1996		528	3.8	539
103	146609	8686	8646	40	2248	3.8	2313
103	146610	8801	8801		2713	3.2	2764
103	146611	2442	2442		671	3.6	706
103	146703	4203	4197	6	1135	3.7	1166
103	146704	2222	2222		619	3.6	629
103	146705	4164	4154	10	1086	3.8	1106
103	146706	2864	2864		833	3.4	850
103	1468	6022	6022		1688	3.6	1720
103	146901	5865	5865		1735	3.4	1760
103	146902	4488	4164	324	1234	3.4	1281
103	147001	3908	3908		1104	3.5	1131
103	147002	5544	5519	25	1726	3.2	3846
103	1471	3286	3279	7	1114	2.9	1138
103	1472	5192	4987	205	1962	2.5	2062
103	1473	5585	5403	182	2175	2.5	2306
103	147399	7	7			.0	
103	147401	5293	5276	17	1942	2.7	1982
103	147402	3717	3706	11	1253	3.0	1299
103	147501	6809	6783	26	2118	3.2	2204
103	147502	4626	4468	158	1255	3.6	1272
103	147503	4048	4048		1155	3.5	1191
103	147601	2814	2754	60	861	3.2	897
103	147602	5276	5276		1623	3.3	1676
103	147701	3376	3376		1112	3.0	1132
103	147702	4809	4690	119	1431	3.3	1464
103	147802	4460	4249	211	1472	2.9	1524
103	147803	2030	2007	23	653	3.1	672
103	147804	5523	5523		1529	3.6	1555
103	147901	4840	4813	27	1519	3.2	1553
103	147902	4442	4414	28	1343	3.3	1370
103	158001	3939	3939		1267	3.1	1368
103	158002	6102	6098	4	2062	3.0	2251
103	158005	5993	5993		1683	3.6	1732
103	158006	6682	6682		1952	3.4	1999
103	158007	6238	143	6095	46	3.1	71
103	158008	774	774		207	3.7	210
103	158009	2597	2597		734	3.5	744
103	158102	3577	3577		1069	3.3	1122
103	158103	3306	3306		999	3.3	1041
103	158104	5952	5952		1557	3.8	1590
103	158107	2972	2972		912	3.3	937
103	158108	2232	2232		589	3.8	604
103	158110	2091	2091		527	4.0	545
103	158111	5402	5402		1356	4.0	1387
103	158112	4019	4019		1049	3.8	1091
103	158113	1356	1356		499	2.7	531

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SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	158114	3224	3224		801	4.0	810
103	158115	7558	7479	79	1801	4.2	1831
103	158202	7378	7327	51	2201	3.3	2260
103	158203	1661	1661		504	3.3	517
103	158204	7557	7092	465	2477	2.9	2617
103	158205	1277	1259	18	345	3.6	384
103	158299					.0	
103	158304	5534	5498	36	1659	3.3	1812
103	158305	8071	8053	18	2648	3.0	3315
103	158306	4107	4095	12	1160	3.5	1229
103	158308	6407	6407		1660	3.9	1730
103	158309	3154	3154		1019	3.1	1085
103	158310	2208	1932	276	633	3.1	675
103	158311	3550	3536	14	1055	3.4	1099
103	158312	346	346		101	3.4	109
103	158313	7121	6821	300	2173	3.1	2308
103	158314	8378	8378		2464	3.4	2636
103	158401	6666	6666		2528	2.6	3617
103	158402	4372	4372		1199	3.6	1250
103	158403	1597	1597		553	2.9	618
103	158404	6639	6583	56	2842	2.3	3187
103	158502	2978	2932	46	1111	2.6	1169
103	158505	4424	4421	3	1315	3.4	1351
103	158506	2296	2296		735	3.1	804
103	158507	3418	3418		907	3.8	952
103	158508	5649	5649		1413	4.0	1447
103	158509	4261	4261		1354	3.1	1508
103	158510	5020	5020		1507	3.3	1688
103	158511	5579	5579		1539	3.6	1609
103	158512	3205	3205		855	3.7	887
103	158601	8122	7850	272	2348	3.3	2443
103	158604	4899	4899		1285	3.8	1325
103	158605	4695	4695		1186	4.0	1214
103	158606	4429	4429		1316	3.4	1388
103	158607	2554	2554		830	3.1	891
103	158704	4743	4743		1716	2.8	1855
103	158705	1590	1585	5	455	3.5	567
103	158707	1315	1130	185	400	2.8	455
103	158708	1898	1898		691	2.7	782
103	158709	1048	1048		350	3.0	452
103	158710	2543	2522	21	858	2.9	968
103	158711	3827	3827		1287	3.0	1433
103	158712	6729	6722	7	1740	3.9	1827
103	158802	4096	4048	48	1345	3.0	1409
103	158803	2124	2124		574	3.7	588
103	158804	7126	7079	47	2309	3.1	2475
103	1589	6577	6524	53	2596	2.5	2738
103	1590	4714	4584	130	1833	2.5	1992
103	159102	5548	5223	325	2032	2.6	2154
103	159103	5003	5003		1233	4.1	1395
103	159104	9862	9858	4	2579	3.8	2657
103	159105	5448	5448		1772	3.1	1824

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SELECTED CHARACTERISTICS OF CENSUS TRACTS IN NEW YORK
PREPARED BY THE NEW YORK STATE DATA CENTER FROM THE
1980 CENSUS OF POPULATION SPECIAL TRACT FILE

COUNTY	TRACT	TOTAL POPUL	POPUL IN HOUSEHOLDS	GROUP QUARTERS	OCCUPIED UNITS	AVERAGE HH SIZE	TOTAL UNITS
103	159106	2259	2184	75	621	3.5	675
103	159201	2475	2449	26	848	2.9	893
103	159203	4668	4668		1584	2.9	1717
103	159204	3669	3512	157	1091	3.2	1164
103	1593	2809	2809		1009	2.8	1081
103	159403	7895	7895		2158	3.7	2370
103	159404	4260	4226	34	1214	3.5	1344
103	159405	6548	6526	22	2282	2.9	2488
103	159406	2146	2035	111	630	3.2	674
103	159502	8401	8401		2781	3.0	5750
103	159504	6356	6356		1799	3.5	2071
103	159505	5246	5246		1549	3.4	1774
103	159506	4931	4931		1337	3.7	1488
103	159601	4472	4419	53	1543	2.9	1692
103	159602	3123	3115	8	1018	3.1	1093
103	169701	4405	4306	99	1480	2.9	2081
103	169702	4952	4711	241	2063	2.3	2368
103	1698	4841	4689	152	1814	2.6	1988
103	1699	6045	5935	110	2135	2.8	2721
103	170001	4885	4885		1780	2.7	2485
103	170002	3844	3844		1487	2.6	2165
103	1701	2273	2099	174	812	2.6	937
103	170201	4770	4755	15	1957	2.4	2871
103	170202	3400	3370	30	1425	2.4	2672
103	1803	2071	2053	18	887	2.3	1818
103	190401	5400	5051	349	1890	2.7	2443
103	190402	1467	1448	19	489	3.0	616
103	190403	1660	1660		686	2.4	1044
103	190501	4066	4062	4	1595	2.5	2761
103	190502	2238	2238		929	2.4	2421
103	190601	4634	4634		1911	2.4	3246
103	190602	5596	5576	20	2134	2.6	3588
103	190701	6096	5516	580	2180	2.5	4253
103	190703	5081	5081		2157	2.4	3672
103	190704	2908	2855	53	1158	2.5	1880
103	1908	4000	3903	97	1618	2.4	2542
103	2009	5661	5628	33	2386	2.4	4529
103	201001	3201	3201		1266	2.5	2529
103	201002	5158	5041	117	2108	2.4	5913
103	201099	9	9			.0	
103	9901	1284231	1253867	30364	85719	91.3	31722

S.P. Materials (Population Estimates)

Within 1-mile radius

Tract #	Area Covered	Total population	Population
1351.01	0.40	4628	1851
1351.02	0.30	4534	1360
1347.02	0.2	5232	1046
1347.01	0.1	6701	670
1108.02	0.15	5760	865
1117.03	0.5	3357	1677
1117.04	0.25	3675	919
1118.02	0.15	3556	533

8921

Within 2-mile radius

1351.01	0.8	4628	3702
1351.02	0.85	4534	3854
1351.03	0.3	4510	1353
1347.02	0.95	5232	4970
1347.01	0.5	6701	3350
1108.02	0.3	5760	1728
1107	0.75	650	488
1116.02	0.35	3392	1187
1117.03	0.9	3357	3019
1117.04	0.95	3675	3491
1118.02	0.90	3556	3200
1118.03	0.7	3192	2234
1118.04	0.1	2505	250

33026

within 3-mile radius

1357.01	1	4628	4628
1357.02	1	4534	4534
1351.03	1	4510	4510
1357.04	0.5	4504	2252
1352.01	1	2480	2480
1352.02	0.15	4831	725
1352.04	0.15	4748	712
1352.05	0.2	6257	1250
1349.06	0.5	5997	3000
1349.05	0.4	4198	1679
1348	0.6	2681	1609
1347.02	1	5232	5232
1347.01	0.9	6701	6031
1108.02	0.5	5760	2880
1107	1	650	650
1116.02	1	3392	3392
1116.01	0.9	4381	3943
1117.01	1	5385	5385
1117.03	1	3354	3354
1117.04	1	3675	3675
1118.01	0.7	6136	4295.2
1118.02	1	3557	3557
1118.03	1	3192	3192
1118.04	1	2505	2505
1121.03	0.3	4434	1330

76799

REFERENCE NO. 12

YEC, INC.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, NY 10989
(914) 268-3203

January 5, 1989

Mr. John Valentine
Bureau Director
Code Enforcement Bureau
65 Maple Avenue
Smithtown, NY 11787

Dear Mr. Valentine:

YEC, Inc. is under contract to New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Remediation Division to conduct Phase I Investigation on S.P. Materials located in 170 Town Line Road, Kings park, New York. I would like to know whether this site is declared as threat of fire and/or explosion by you.

I would appreciate if you could send the above information at your earliest convenience.

Thanking you.

Sincerely yours

ASelvakumar

Ari Selvakumar, Ph.D.
Staff Engineer

TOWN OF SMITHTOWN

(516) 360-7553

CODE ENFORCEMENT BUREAU
JOHN VALENTINE
DIRECTOR

65 MAPLE AVENUE
SMITHTOWN, NEW YORK 11787

SUPERVISOR
PATRICK R. VECCHIO

TOWN COUNCIL
EUGENE A. CANNATARO
BRADLEY L. HARRIS
MICHAEL T. SULLIVAN
MICHAEL J. FITZPATRICK

January 20, 1989

YEC, Incorporated
Forest View Professional Building
10 Pin e Crest Road
Valley Cottage, New York 10989

Attention: Ari Selvakumar, Ph.D.
Staff Engineer

Reference: 170 Town Line Road
Kings Park, New York 11754

Dear Mr. Selvakumar:

In reference to S.P. materials located at the above-referenced location, at this time this piece of land does not have any potential for an explosive or fire hazard situation, as per an inspection made by the Fire Marshal's office.

Very truly yours,

John Valentine-Director
Code Enforcement Bureau

JV:bl

V89-0030

REFERENCE NO. 10

YEC, INC.
Forest View Professional Building
10 Pine Crest Road
Valley Cottage, NY 10989
(914) 268-3203

January 12, 1989

Mr. Michael S. Scheibel
Senior Wildlife Biologist
New York State Department of Environmental
Conservation - Region 1
SUNY Campus - Building 40
Stony Brook, NY 11794

Dear Mr. Scheibel:

YEC, Inc. is under contract to New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Remediation Division to conduct Phase I Investigation on "S.P. Materials" located in 170 Townline Road, Kings Park, New York (see attached map for site location). I need your assistance in providing information on endangered or threatened species of concern within 1-mile radius of the site.

I would appreciate, if you could send the above information at your earliest convenience.

Thanking you.

Sincerely yours

Selvakumar

Ms. Ari Selvakumar
Staff Engineer

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE: NY
02 SITE NUMBER: 152093

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
S.P. Materials, Inc.	170 Town Line Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Kings Park	NY	11754	Suffolk	103	02

09 COORDINATES: LATITUDE 40 52 00.0 | LONGITUDE 73 17 00.0

10 TYPE OF OWNERSHIP (Check one): ☒ A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 1, 11, 89 (MONTH DAY YEAR)

02 SITE STATUS: ☒ ACTIVE ☐ INACTIVE

03 YEARS OF OPERATION: 1983 (BEGINNING YEAR) | present (ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ☐ B. EPA CONTRACTOR ____ ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ ☐ E. STATE ☒ F. STATE CONTRACTOR YEC, Inc. (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Y.S. Ed. Chen, Ph.D., P.E.	Principal	YEC, Inc.	(914 268 3203
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Gregory Fabijanic	Staff Engineer	YEC, Inc.	(914 268 3203
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
			( )
Stephen D. Pomaro	Owner	75 Long Fellow Drive	(516 266 1006
		Kings Park, NY 11754.	( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9.00 AM	35 degree F and Sunny

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Ari Selvakumar	YEC, Inc.	(914 268 3203

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Gregory Fabijanic Ari Selvakumar		YEC, Inc.	914 268 3203	1, 11, 89 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A SOLID
- ☐ B POWDER, FINES
- ☐ C SLUDGE
- ☐ D OTHER _____ (Specify)
- ☐ E SLURRY
- ☐ F LIQUID
- ☐ G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A TOXIC
- ☐ B CORROSIVE
- ☐ C RADIOACTIVE
- ☐ D PERSISTENT
- ☐ E SOLUBLE
- ☐ F INFECTIOUS
- ☐ G FLAMMABLE
- ☐ H IGNITABLE
- ☐ I HIGHLY VOLATILE
- ☐ J EXPLOSIVE
- ☐ K REACTIVE
- ☐ L INCOMPATIBLE
- ☐ M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			No waste observed during site inspection.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently used CAS Numbers) None known.

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers) Not applicable.

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Chief Fire Marshal didn't declare the site as a fire or explosion threat. Therefore, there is no known potential for fire/explosive conditions.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None Reported.

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

None reported.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None reported.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: N
02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include species of concern)
None reported.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
None reported.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
No other known hazards.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS
No wastes observed during the site inspection.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
NYSDEC Region 1 files, Site Inspection, Interview with Owner

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	152093

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☒ G. STATE (Specify)	10-83-0134	7/1/83	7/1/84	Construction & Demolition
☒ H. LOCAL (Specify)	1023-30-0059	5/16/83	5/16/86	Mining Permit.
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	20 truck loads	
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER Sand mine (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER _____ (Specify)

05 OTHER

☒ A. BUILDINGS ON SITE

2

06 AREA OF SITE

Approximately 10 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☒ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

The site is entirely fenced.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NYSDEC Region 1 files, Site Inspection, Interview with Owner

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	152093

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 1 (mi)
B. 0.6 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING
☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER _____

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.6 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
67 (ft)	NE	10 (ft)	Unknown (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

Within 3 mile radius, the aquifer of concern has been developed by Suffolk County Water Authority well fields, Greenlawn well fields, Kings Park Psychiatric Center wells and Northport VA Hospital well. There are number of private wells too.

10 RECHARGE AREA

☒ YES ☐ NO

COMMENTS

11 DISCHARGE AREA

☐ YES ☐ NO

COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Willow Pond	☐	3 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 8,921 (NO. OF PERSONS)	B. 33,026 (NO. OF PERSONS)	C. 76,799 (NO. OF PERSONS)

02 DISTANCE TO NEAREST POPULATION

0.15 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

1000

04 DISTANCE TO NEAREST OFF-SITE BUILDING

0.1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located in a medium density residential development. Smithtown Municipal Services Facility (MSF) Landfill is located approximately 600 ft southeast of the site.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	152093

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-4} - 10^{-6}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
unknown (ft)	unknown (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
21 (in)	2.5 (in)	1 %	NNE	1 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. _____ (mi)	B. 0.15 (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is located approximately 2.5 miles inland of Long Island Sound at an elevation of approximately 120 feet above mean sea level (MSL). Drainage across the study area is generally toward the north northeast direction, and ultimately to Long Island Sound.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling records, reports)

USGS 7.5-minute Quadrangle maps, EA Science and Technology Report, Site Inspection

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	152093

II. SAMPLES TAKEN None

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Ambient Air Monitoring	Air monitoring was conducted during the site inspection using an HNu photoionization unit around the perimeter of the site. No readings above background were noted.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF YEC, Inc. (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS YEC, Inc. (USGS 7.5-minute Quadrangle map; Site plan)

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

YEC, Inc. field notes and photographs.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection by YEC, Inc.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	152093

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable)		
01 NAME: Stephen D. Pomaro	02 D+B NUMBER		08 NAME: S.P. Materials, Inc.	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 75 Long Fellow Road	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.): 170 Town Line Road	11 SIC CODE	
05 CITY: Kings Park	06 STATE: NY	07 ZIP CODE: 11754	12 CITY: Kings Park	13 STATE: NY	14 ZIP CODE: 11754
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER		08 NAME	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (If applicable; list most recent first)		
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER		01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with Owner.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	152093

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME: Stephen D. Pomaro	02 D+B NUMBER:	10 NAME:	11 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 75 Long Fellow Road	04 SIC CODE:	12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
05 CITY: Kings Park	06 STATE: NY / 07 ZIP CODE: 11754	14 CITY:	15 STATE: / 16 ZIP CODE:
08 YEARS OF OPERATION: 5 years	09 NAME OF OWNER: Stephen D. Pomaro		

OPERATOR'S PARENT COMPANY (If applicable)

III. PREVIOUS OPERATOR(S) (List in chronological order; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME:	02 D+B NUMBER:	10 NAME:	11 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:	12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
05 CITY:	06 STATE: / 07 ZIP CODE:	14 CITY:	15 STATE: / 16 ZIP CODE:
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:		
01 NAME:	02 D+B NUMBER:	10 NAME:	11 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:	12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
05 CITY:	06 STATE: / 07 ZIP CODE:	14 CITY:	15 STATE: / 16 ZIP CODE:
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:		
01 NAME:	02 D+B NUMBER:	10 NAME:	11 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:	12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
05 CITY:	06 STATE: / 07 ZIP CODE:	14 CITY:	15 STATE: / 16 ZIP CODE:
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:		

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with Owner.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

6 ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

There is no analytical data available for on-site groundwater and soil. To provide this analytical information, it is recommended that a water sample be collected from the on-site well (if downgradient and screened in the upper water table) and that a one-day soil boring or test pit program be conducted to take soil samples along the edge of the C & D dump area. It is not recommended that excavations or borings be drilled through the clay cover in order to maintain its integrity. Based on the outcome of this sampling the Phase II investigation should be planned taking these results into consideration. A groundwater monitoring program should be implemented prior to any consideration to list or delist the site is made.

APPENDIX A PHOTOGRAPHIC RECORD

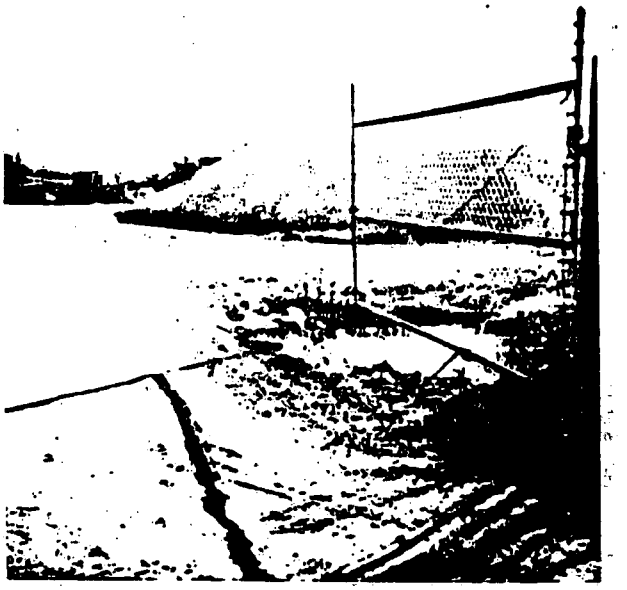
1. January 11, 1989
processing apparatus for
mined material.

2. January 11, 1989
Dry lagoon approx. 10feet by
50 feet.

3. January 11, 1989
Main pit mine approx. 3 acres
by 50 feet deep, looking north

4. January 11, 1989
Main pit mine looking west.

5. January 11, 1989
Fence and lockable gate near Northport-Kings Park Road.



6. January 11, 1989
Gate at main entrance on Town Line Road.

7. January 11, 1989
Returnable oil drum for collection of waste oil (empty).

8. January 11, 1989
Main pit looking south.

APPENDIX B UPDATED NYSDEC INACTIVE HAZARDOUS WASTE

DISPOSAL SITE REGISTRY FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE

INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

Priority Code: _____ **Site Code:** NYSDEC I.D. # 152093

Name of Site: S.P. Materials, Inc. **Region:** 1

Street Address: 170 Town Line Road

Town/City: Kings Park, New York 11754 **County:** Suffolk

Name of Current Owner of Site: Stephen D. Pomaro

Address of Current Owner of Site: 75 Long Fellow Drive, Kings Park, NY 11754

Type of Site: [ ] Open Dump [ ] Structure [ ] Lagoon
[X] Landfill [ ] Treatment Pond

Estimated Size: 10 acre(s)

Site Description:

S.P. Materials is approximately a 10-acre site located south and west of Old Northport Road and east of Town Line Road in the Hamlet of Kings Park, New York. The site began sand and gravel operation in May, 1983 with a three year renewable mining permit issued by the Town of Smithtown.

The site is completely fenced from both Town Line and Old Northport Roads and has lockable gates. During the site inspection, no suspicious hazardous waste disposal areas were detected.

Hazardous Waste Disposed: [ ] Confirmed [ ] Suspected

Type and Quantity of Hazardous Wastes Disposed:

Type	Quantity (Pounds, Drums, Tons, Gallons)
None	

Time Period Site was Used for Hazardous Waste Disposal:

_____, 19 83 To _____, 19____

Owner(s) During Period of Use: Stephen D. Pomaro

Site Operator During Period of Use: Stephen D. Pomaro

Address of Site Operator: 75 Long Fellow Drive, Kings Park, NY 11754

Analytical Data Available: [ ] Air [ ] Surface Water [ ] Groundwater
[ ] Soil [ ] Sediment [X] None

Contravention of Standards: [ ] Groundwater [ ] Drinking Water
[ ] Surface Water [ ] Air

Soil Type: Sand and gravel

Depth to Groundwater Table: Approximately 100 feet

Legal Action: Type: _____ [ ] State [ ] Federal

Status: [ ] In Progress [ ] Completed

Remedial Action: [ ] Proposed [ ] Under Design
[ ] In Progress [ ] Completed

Nature of Action: _____

Assessment of Environmental Problems:

Unknown

Assessment of Health Problems:

Unknown

Person(s) Completing This Form:

For NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Name: Ari Selvakumar

Title: Staff Engineer, YEC, Inc.

Name: _____

Title: _____

Date: _____

NEW YORK STATE DEPARTMENT OF HEALTH

Name: _____

Title: _____

Name: _____

Title: _____

Date: _____

APPENDIX C PHOTOCOPIED REFERENCES

PERMIT

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

EXPIRATION DATE 7-01-84

PERMIT NO 10-83-0134

☐ CONSTRUCTION ☒ INITIAL ISSUE ☐ REISSUANCE
☒ OPERATION ☐ RENEWAL ☐ MODIFICATION

MIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
aterials Inc.	170 Townline Road Kings Park, NY 11754	(516) 266-1000

N OF PROJECT	County	Environmental Conservation Regional Office
Smithtown	Suffolk	Region I Stony Brook, New York 11794

ION OF PROJECT	ON-SITE SUPERVISOR
Construction & Demolition Debris Disposal Site	Stephen D. Pomaro

GENERAL CONDITIONS

he permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and hall also notify said office promptly in writing of the completion f the work.

2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who ay order the work suspended if the public interest so requires.

s a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, nd by whomever suffered, arising out of the project described herein nd has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.

4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.

5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.

6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

SEE ATTACHED

S DATE	ISSUING OFFICER	SIGNATURE
/1/83	Daniel J. Larkin Regional Permit Administrator	X

PERMITTEE COPY

NOTICE OF PERMIT

for:

- [ ] CONSTRUCTION
- [x] INITIAL ISSUE
- [ ] REISSUANCE
- [x] OPERATION
- [ ] RENEWAL
- [ ] MODIFICATION

has been issued to: S.P. Materials Inc.

address: 170 Townline Road, Kings Park, New York 11754

for a project described as: Construction & Demolition Debris Disposal Site

under the Environmental Conservation Law,
Article 27, Title 7, Part 360 [Solid Waste Management Facilities]

NOTE:
- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

Issuing Officer DANIEL J. LARKIN, REGIONAL PERMIT ADMINISTRATOR

NYSDEC, Building 40, SUNY, Stony Brook, NY 11794
Address

Permit No.	Issue Date	Expiration Date
10-83-0134 52-D-15	7/1/83	7/1/84

New York State
Department of Environmental Conservation
47-12-2 (1/82)

124

S. P. Materials, Inc.
170 Townline Road
Kings Park, New York 11754

County of Suffolk

Town of Smithtown

MINING PERMIT ATTACHMENT

The following conditions are attached and part of Mining Permit Number 02834 issued to S.P. Materials, Town of Smithtown, Suffolk County. Permit issuance date 5/16/83. Expiration Date 5/16/86.

1. The permittee shall conduct all mining and reclamation operations in compliance with the approved mined land-use plan, Title 27 of Article 23 of the Environmental Conservation Law, and Subchapter D of Title 6 of the New York State Code Rules and Regulations (6NYCRR, Subchapter D, Parts 420-426).

2. The permittee shall indemnify and hold harmless the State of New York for all accounts, damages, costs and judgments of every name and description arising from its mining operations and reclamation of lands performed pursuant to this permit.

3. Other site-specific conditions described as follows:

   Mining will be permitted only on that site of 3.5 acres located south and west of Old Northport Road and east of Townline Road, Town of Smithtown.

4. This approval does not relieve the recipient of the need to obtain approvals which may be required by other State, Federal or local agencies.

S.P. Materials, Inc. is located at 170 Townline Road in Kings Park. This site is the base of our sand and gravel business. Here minerals from various sources are trucked in, processed, stockpiled and distributed. Adjacent to the site is a recently purchased 3.5 acre site that is proposed for mining.

The mine site is located south and west of Old Northport Road and east of Townline Road. The property is presently zoned light industrial and it is our future plan to grade the site to the elevation of Townline Road and to build on the site. There is a methane problem in the area and our plans of construction will be delayed until that situation is corrected.

The present plan is to mine starting at the northern end of the site and to progress in a southerly direction effecting approximately one acre at a time. The depth will be between 30 and 40 feet below Townline Road. As mining progresses, the northern portion will be backfilled with spoil (fine mineral and oversize mineral) generated from the processing site and from Rock Point Mining. It is also possible to add broken concrete, brick, stone and cobble with the spoil.

Our hope is to utilize the property and the resource while the problem of methane still exists. The mining operation will also help generate some monetary value back from the land and provide a deposit site for spoil.

The mining activity will not generate any additional use of equipment due to the fact that sand and gravel if not obtained from the mine site, would have to be trucked in from alternative sources and moved and loaded on the site by use of payloader and existing conveyors.

During times of extremely dry weather, water can be used to prevent any dust from leaving the site. At present there is a berm along Old Northport Road to screen the view of the operation.

The reclamation of the site is simply to backfill the pit with spoil and clean fill and then to grade it to the same elevation of Townline Road (±2 feet). Then, as mentioned before, our future land-use objective is to be able to build on the site.

New York State Department of Environmental Conservation
Division of Solid/Hazardous Waste
Building 40, SUNY
Stony Brook, New York 11794
(516) 751-2617

Henry G. Williams
Commissioner

November 27, 1984

S.P. Materials
170 Town Line Road
Kings Park, New York 11754

Dear Sir:

The New York State Department of Environmental Conservation (NYSDEC), as required by Chapter 857 of the Laws of 1982 (commonly known as the "New York State Superfund Law") has undertaken a program to conduct preliminary evaluations of suspected inactive hazardous waste disposal sites throughout the State.

Our present records indicate that you are the owner and/or operator of the following site:

S.P. Materials

170 Town Line Road
Kings Park, New York 11754

In accordance with the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. Section 9601 et.seq., the Department of Environmental Conservation has determined that you may be liable for the present and future costs of response, removal and remediation and for damages to the natural resources of the State of New York at and around the referenced site.

In view of the foregoing, this letter constitutes a claim by the State of New York pursuant to 42 U.S.C. Section 9612(a) for all costs, damages and claims recoverable now and in the future under federal and state law, including CERCLA. Unless, in a timely fashion, all investigative, removal and remedial work necessary at the site and its environs is performed and unless the State is reimbursed for all damages to its natural resources and for all past, present and future response, removal and remediation costs, this claim will not have been satisfied. In such event, the State of New York may hold you liable subject to New York's claims under federal and state law through legal action.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

MAY 1 0 1988

CERTIFIED MAIL
RETURN RECIEPT REQUESTED

S.P. Materials
170 Town Line Rd.
Kings Park, NY 11754

Dear Sir or Madam:

Re: Preliminary Field Investigations at Inactive Hazardous Waste Disposal Sites - New York State Superfund Chapter 857, Laws of 1982

The New York State Department of Environmental Conservation (NYSDEC), as required by Chapter 857 of the Laws of 1982 (commonly known as the "New York State Superfund Law"), is conducting preliminary field investigations of inactive hazardous waste disposal sites throughout the State.

Our present records show that you are the owner and/or operator of the following site:

Site Name: S.P Materials, ID No. 152093
Site Address: 170 Town Line Road Kings Park, NY

This site will be included in the sixth group of sites to be investigated.

The first phase of our program (Phase I) is to collect all available information and prepare a work plan to collect the the additional data needed to rank the site using the United States Environmental Protection Agency's Hazard Ranking System for inactive hazardous waste sites. This work will be performed by our consultants. We request that you compile, in accordance with the Environmental Conservation Law (ECL) Section 27-1307 (copy enclosed), all currently available information which would be helpful in the first phase of the work. This information includes the following:

a. all generators of wastes deposited at the site; No
b. types and quantities of such wastes; no
c. period of time site was operated; 1983-1984
d. description of site operational practices;
e. description of any known health or environmental problems at the site and; No
f. any other information which may assist NYSDEC or its consultant

At this time, we request that you compile and submit, in accordance with the Environmental Conservation Law (ECL), Section 27-1307, the following information regarding the site. This information will be utilized in conducting a preliminary evaluation of the hazard associated with the site. This information shall include the following:

a. all generators of wastes deposited at the site;

b. types and quantities of such wastes;

c. period of time site was operated;

d. description of site operational practices;

e. description of testing, monitoring or remedial action undertaken or planned;

f. description of any known health or environmental problems at the site;

g. any other information which may assist the NYSDEC in evaluating the public health or environmental significance of the site.

Also, please be advised that, pursuant to Section 27-1317 of the ECL, the manner in which the above referenced site is used may not be substantially changed without notifying this Department, in writing, at least sixty (60) days prior to the proposed change. A substantial change of use includes, but is not limited to, the erection of a building or other structure on the site, the paving of the site for use as a roadway or parking lot, and the creation of a park or other public private recreational facility on the site.

If you have any questions in connection with this matter, please contact this office at (516) 751-2617.

Sincerely,

Philip Barbato

Philip Barbato, P.E.
Regional Solid Waste Engineer

PB:dm
cc: C. Goddard

evaluate the public health or environmental significance of this site.

In the event that you cannot fully comply with this request for information, you should be prepared to describe your efforts to comply. The NYSDEC or its consultant will be contacting you in the immediate future to mutually agree upon a time and place to collect this information and obtain copies of any documents from which this information was derived, as authorized by ECL Section 27-1309 (copy enclosed).

If you have any questions in connections with this matter, please telephone Mr. Marsden Chen, of my staff, at (518) 457-0639.

Sincerely,

Frank T. Ricotta

Frank T. Ricotta
Director
Bureau of Hazardous Site Control
Division of Hazardous Waste
Remediation

Enclosures

REFERENCE NO. 5

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	Date: 7/10/95
From: Jin Ho Jang	Project #: 8003-352
Subject: Groundwater Apportionment	Site Name: SP Materials, Inc.

Suffolk County Water Authority - The Suffolk County Water Authority (SCWA) operates 404 wells which feed a blended system. The SCWA supplies 308,352 connections. The average population per household in Suffolk County is 3.04 persons per household. Therefore a total population of (308,352 X 3.04 =) 937,390 is supplied by the SCWA. Since none of the wells contribute greater than 40% of the total system flow, the population is apportioned equally to each well. Therefore, each well serves (937,390/404 =) 2,320 people. Forty-four of these 404 SCWA wells are located within a four mile radius of the site. The population apportioned to each well is as follows (by town) :

SMITHTOWN:

WELL	POPULATION	RING DISTANCE
Carlson Ave Well #5	2,320	1 - 2 miles
Well #6	2,320	1 - 2 miles
Well #7	2,320	1 - 2 miles
Lawrence Ave Well #1	2,320	2 - 3 miles
Well #2	2,320	2 - 3 miles
Well #3	2,230	2 - 3 miles
Well #4	2,230	2 - 3 miles
St. Johnland Rd Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Kings Park Rd Well #1	2,320	1 - 2 miles
Well #2	2,320	1 - 2 miles
Well #3	2,320	1 - 2 miles
Ruth Blvd Well #1	2,320	1 - 2 miles
Cornell Dr Well #2	2,320	2 - 3 miles
Blue Spruce Well #2A	2,320	2 - 3 miles
Well #2B	2,320	2 - 3 miles
Walter Ct Well #2	2,320	2 - 3 miles
Schuyler Dr Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Autumn Dr Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Wicks Rd Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Well #3	2,320	3 - 4 miles

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	Date: 7/10/95
From: Jin Ho Jang	Project #: 8003-352
Subject: Groundwater Apportionment (Cont.)	Site Name: SP Materials, Inc.

HUNTINGTON:

WELL	POPULATION	RING DISTANCE
Douglas Av Well #1	2,320	3 - 4 miles
Middleville Rd Well #1	2,320	1 - 2 miles
Well #2	2,320	1 - 2 miles
Resevoir Av Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Church St Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Washington St Well #2	2,320	3 - 4 miles
Well #3	2,320	3 - 4 miles
Gun Club Rd Well #1	2,320	1/2 - 1 mile
Well #3	2,320	1/2 - 1 mile
Laurel Hill Rd Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles
Well #3	2,320	3 - 4 miles
Belle Rose Av Well #1	2,320	2 - 3 miles
Larkfield Rd. Well #1	2,320	2 - 3 miles
Well #2	2,320	2 - 3 miles
Well #3	2,320	2 - 3 miles
Waterside Rd. Well #1	2,320	3 - 4 miles
Well #2	2,320	3 - 4 miles

SCWA TOTAL POPULATION: 102,080

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	Date: 7/10/95
From: Jin Ho Jang	Project #: 8003-352
Subject: Groundwater Apportionment	Site Name: SP Materials, Inc.

Kings Park Psychiatric Center (KPPC) - The KPPC operates six wells (Well #1, #2, #4, #5, #7, and #8) which feed a blended system. The KPPC serves an approximate population 3,500 patients and staff members. Well #1 pumps at 350 gallons per minute (gpm), Well #2 pumps at 360 gpm, Well #4 pumps at 390 gpm, Well #5 pumps at 350 gpm, Well #7 pumps at 175 gpm, and Well #8 pumps at 460 gpm. None of the six well pump greater than 40% of the entire system. Therefore, the population apportionment for each well will be divided evenly (3,500 / 6) = 583 persons.

WELL	% PUMPAGE	POPULATION	RING DISTANCE
KPPC Well # 1	16.8	583	2 - 3 miles
Well # 2	17.3	583	2 - 3 miles
Well # 4	18.6	583	2 - 3 miles
Well # 5	16.8	583	2 - 3 miles
Well # 7	8.4	583	2 - 3 miles
Well # 8	22.1	583	2 - 3 miles

Northport VA Hospital (NVAH) - The NVAH operate four wells (Well #1, #3, #4, and #5) which also feeds into a blended system. The total NVAH population is 2,551 persons. This number is comprised of 1,993 employees and 558 patients. Well #1 taps the Lloyd aquifer. Well #3,#4, and #5 tap the Magothy Aquifer. The pump rates for Well #1 is 117 gpm, Well #3 is 220 gpm, Well #4 is 250 gpm, and Well #5 is 500 gpm. Since Well #5 pumps at greater than 40% of the total capacity, the population will be apportioned according to pumpage rates for each of the wells. The population apportionment can be seen below:

WELL	% PUMPAGE	POPULATION	RING DISTANCE
NVAH Well # 1	10.8	276	1 - 2 miles (Lloyd Aquifer)
Well # 3	20.2	515	1 - 2 miles
Well # 4	23.0	587	1 - 2 miles
Well # 5	46.0	1,173	1 - 2 miles

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	Date: 7/11/95
From: Jin Ho Jang	Project #: 8003-352
Subject: Groundwater Apportionment (Cont.)	Site Name: SP Materials, Inc.

Greenlawn Water District - Greenlawn Water District operates a blended system of 15 wells. Altogether, these wells serve 11,000 connections. Since the average population per household in Suffolk County is 3.04 people, these wells serve a total population of 11,000 x 3.04 = 33,440 people. As none of the wells provides greater than 40% of the total water to the system, the population is apportioned equally to each well. Therefore, each well serves 33,440/15 = 2,229 people. Six of Greenlawn Water Districts (GWD) 15 wells are within a four mile radius of the SP Materials site. These include the following wells: GWD Well # 4; GWD Well # 5; GWD Well # 7; GWD Well # 8; GWD Well # 12; GWD Well # 14. All the wells draw from the Upper Glacial/Magothy Aquifer

WELL	POPULATION	RING DISTANCE
GWD Well # 4	2,229	3 - 4 miles
GWD Well # 5	2,229	3 - 4 miles
GWD Well # 7	2,229	2 - 3 miles
GWD Well # 8	2,229	1 - 2 miles
GWD Well # 12	2,229	2 - 3 miles
GWD Well # 14	2,229	3 - 4 miles

GWD TOTAL POPULATION: 13,374

The total number of people drinking from groundwater within four miles of the SP materials Site is:

SCWA	102,080
GWD	13,374
NVAH	2,551
KPPC	3,500
TOTAL	121,505

THE POPULATION APPORTIONMENT WITHIN A FOUR MILE RADIUS OF THE SITE IS AS FOLLOWS:

Upper Glacial/Magothy Aquifer

RING	POPULATION
0 - 1/4 mile	0
1/4 - 1/2 mile	0
1/2 - 1 mile	4,640
1 - 2 miles	25,384
2 - 3 miles	35,798
3 - 4 miles	55,407
TOTAL	121,229

Lloyd Aquifer

RING	POPULATION
0 - 1/4 mile	0
1/4 - ½ mile	0
½ - 1 mile	0
1 - 2 miles	276
2 - 3 miles	0
3 - 4 miles	0
	276

TOTAL POPULATION 121,229 + 276 = 121,505

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: July 17, 1995 Time: 3:30 AM [] PM [x]

Incoming Call

From: Lenny Hanson (516) 261-2925
Telephone No.

Affiliation: Northport VA Hospital

Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

Mr. Hanson returned my phone call inquiring about the water distribution system for the Northport VA Hospital (NVAH). Mr. Hanson stated that four of the five wells are currently in operation. Well #1 pumps at 117 gallons per minute (gpm), Well #2 is not operating, Well #3 pumps 220 gpm, Well #4 pumps at 250 gpm, and Well #5 pumps at 500 gpm. The operating wells are all interconnected. Well #1 and Well #2 tap the Lloyd Aquifer, and the other wells tap the Magothy Aquifer. The NVAH serves a population of 558 patients and 1,993 employees for a total population of 2,551 persons.

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: July 17, 1995 Time: 11:35 AM [x] PM []

Outgoing Call

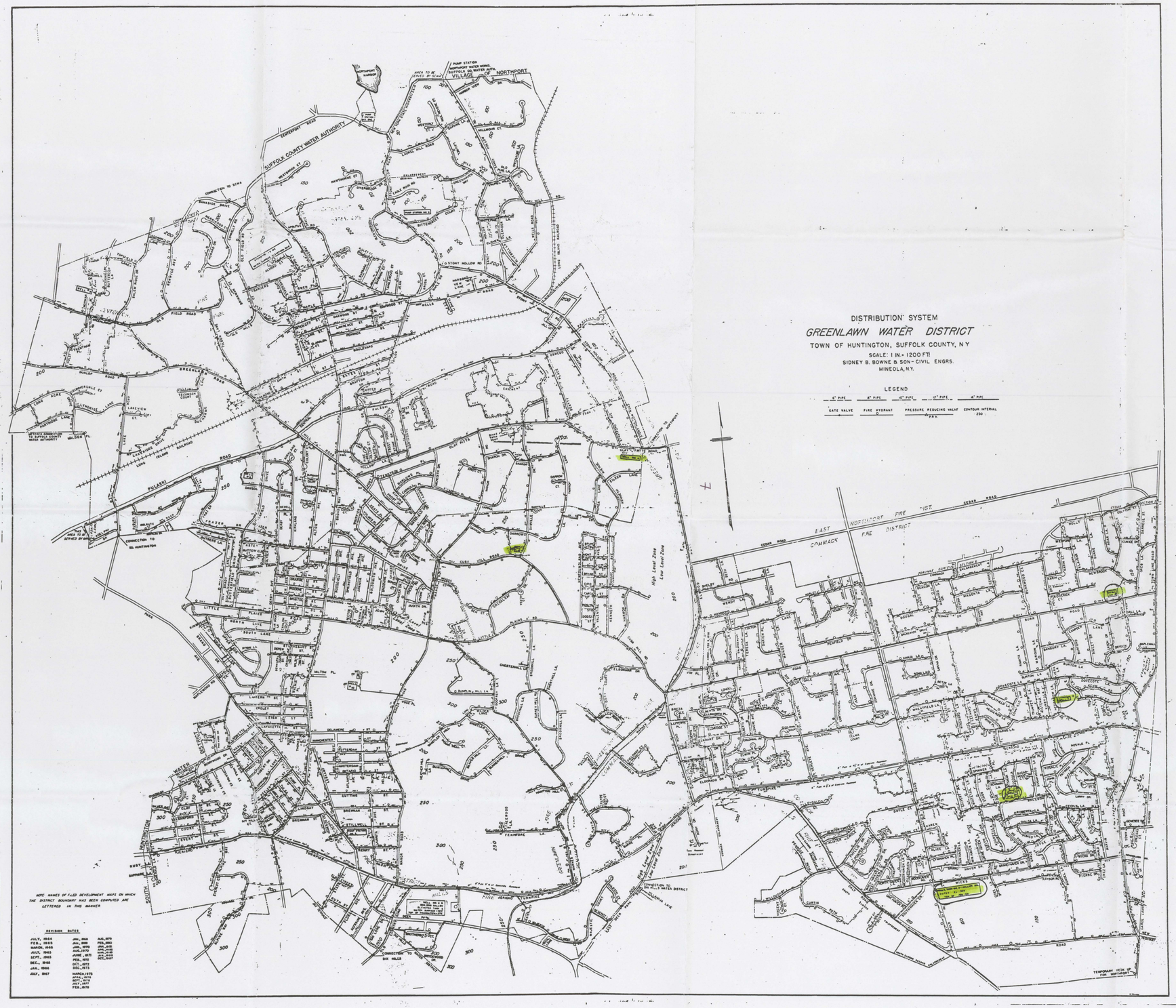
To: Bob Ryan (516) 544-2657
Telephone No.

Affiliation: Kings Park Psychiatric Hospital Plant Engineer

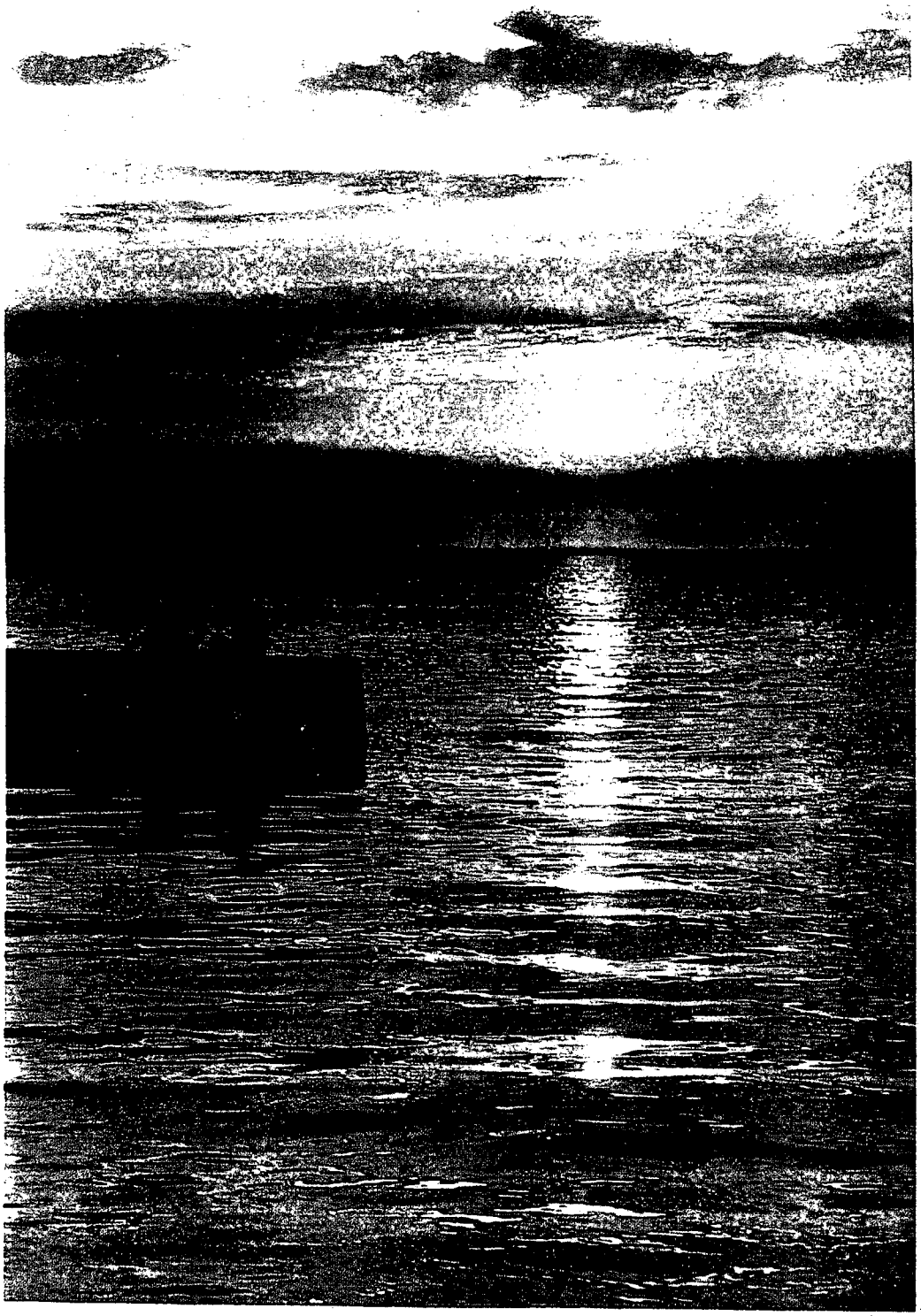
Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

I contacted Mr. Ryan to obtain water information for the Kings Park Psychiatric Hospital (KPPH). Mr. Ryan stated that the KPPH operates six wells (Well #1, #2, #4, #5, #7, #8). Well #1 pumps at 350 gallons per minute (gpm), #2 at 360 gpm, #4 at 390 gpm, #5 at 350 gpm, #7 at 175 gpm, and #8 at 460 gpm. Mr. Ryan was not sure how deep the wells were, but believed that they average between 300 - 500 feet. Mr. Ryan stated that the wells are interconnected and service only the hospital itself. The number of patients and employees served by these wells is approximately 3,500 persons.


DISTRIBUTION SYSTEM
GREENLAWN WATER DISTRICT
TOWN OF HUNTINGTON, SUFFOLK COUNTY, N.Y.
SCALE: 1 IN. = 1200 FT.
SIDNEY B. BOWNE & SON - CIVIL ENGRS.
MINEOLA, N.Y.
LEGEND
6" PIPE
8" PIPE
10" PIPE
12" PIPE
16" PIPE
GATE VALVE
FIRE HYDRANT
PRESSURE REDUCING VALVE
P.R.V.
CONTOUR INTERVAL
250
SUFFOLK COUNTY WATER AUTHORITY
VILLAGE OF NORTHPORT
EAST NORTHPORT FIRE DIST.
COMMACK FIRE DISTRICT
High Level Zone
Low Level Zone
CEDAR ROAD
PULASKI ROAD
GREENLAWN ROAD
SOUTH WATER
NOTE: NAMES OF FILED DEVELOPMENT MAPS ON WHICH THE DISTRICT BOUNDARY HAS BEEN COMPUTED ARE LETTERED IN THIS MANNER
REVISION DATES
JULY, 1964
FEB., 1965
MARCH, 1965
JULY, 1965
SEPT., 1965
DEC., 1966
JAN., 1966
JULY, 1967
JAN., 1968
JAN., 1969
JAN., 1970
AUG., 1970
JUNE, 1971
FEB., 1972
OCT., 1972
DEC., 1973
MARCH, 1975
APRIL, 1976
SEPT., 1976
JULY, 1977
FEB., 1978
AUG., 1979
FEB., 1980
JAN., 1981
APR., 1982
MAR., 1983
JUL., 1983
OCT., 1987

Suffolk County Water Authority



1993 Annual Report

8

	For Fiscal Year Ended May 31 1993	1984	10-Year Growth	Percent Increase
Customers	308,352	250,544	57,808	23%
Population Served	1,112,832	826,000	286,832	35%
Miles of Main	4,564	3,645	919	25%
Fire Hydrants	28,181	23,474	4,707	20%
Water Pumped (billion gallons)	46.5	42.2	4.3	10%
Employees	586	440	146	33%
Gross Revenues	$ 72,577,000	$ 43,479,000	$ 29,098,000	67%
Operating and Maintenance Expense, Except Depreciation	46,330,000	23,967,000	22,363,000	93%
Water Plant at Cost	593,436,000	289,210,000	304,226,000	105%
Bonded Indebtedness	274,325,000	131,009,000	143,316,000	109%
Total Earnings in the Business at the Close of Period	$133,349,000	$79,977,000	$53,372,000	67%

Water Quality Improvements

The Authority is about to launch two pilot programs, both firsts for the Authority, which deal with the inorganic compound, nitrate, which we are finding in higher amounts generally on Long Island, and iron, a natural constituent of the water in some parts of the County. There are currently several well sites where the level of nitrates is slowly increasing, although none of these wells exceed New York State's stringent water standard for this inorganic compound. Nitrates in water is usually associated with fertilizers and some organic wastes.

In anticipation of potentially exceeding the standard in the near future requiring shut-down of wells important to the system and the trend we are seeing for higher nitrates generally on Long Island, the Authority will construct a "pilot" denitrification plant in Fort Salonga within the year. The site selected, the Middleville Road Pump Station, is an important well field where the well capacity is needed and the levels of nitrates are approaching the limit. We will be utilizing a proven technology recommended by the Suffolk County Department of Health Services. This plant will serve as a model for any future plants that may be needed. The equipment will be below grade and as unobtrusive as possible to the host community, resembling the small pump station buildings currently at our sites.

Iron in water, often referred to as rusty or brown water, continues to be the subject of complaint from our customers in some areas of the County where iron is a natural component of the water. While iron in drinking water has not been deemed a health hazard by the regulators, it presents other problems and inconveniences to the water consumer. It is unappealing aesthetically and stains clothing and plumbing fixtures. The Authority has employed a number of strategies to mitigate the problem from the use of sequestering agents (to hold the iron in solution) to a systematic flushing program, which has been somewhat successful in some areas.

Heretofore, the technology to remove iron in drinking water, which required large tracts of land, was relatively new, unproven and extremely cost prohibitive. However, more recently, the technology and the costs associated with it have improved significantly. Therefore in 1994, the Authority will construct its first iron removal plant at the Harvest Lane Pump Station in West Islip. The location of this site is ideal because it is somewhat set apart from neighboring SCWA wells making monitoring of the reduction in iron easier to determine.

Based on the experimental results of this plant and the construction costs incurred, the Authority will evaluate this project and will make a decision on proceeding with similar projects where iron is a source of inconvenience to our customers.

Legislative Watch

Like many businesses today, we realize that it is important to keep abreast of governmental legislative agendas that pertain to one's industry. In fact, it would be a serious omission of responsibility to one's customers to do otherwise. The SCWA, of course, is supportive of legislation and programs that effectively and necessarily ensure the best quality water for all public consumers. We have demonstrated that support on a continual basis.

RUN DATE: 11/10/93 @ 18:32 SCWA Production Control Department

BUS DATE: 11/10/93 D.E.C. PRODUCTION REPORT PRODCTN PAGE 1

PERIOD: 10/93 ZONE: 12 CENTRAL ISLAND INT

PUMP STATION	PUMPAGE (THOUSANDS)	AVERAGE FLOW (GPM)	WELL NO	OPERATING HOURS	AQUIFER	NYS WELL NUMBER
ASTOR AV	2,996	509	1	O/S	M	S-021945
			2	O/S	M	S-037174
			3	98	M	S-048014
BEECHNUT AV	2,233	600	1	62	G	S-023440
CAPITOL CT	21,483	927	1	277	M	S-020369
			2	109	M	S-058709
CARLETON AV	6,960	1,414	1	82	M	S-067197
COMMERCIAL BL	2,906	988	1	17	G	S-030234
			2	17	M	S-031624
			3	15	M	S-037141
CORNELL DR	1,416	715	2	33	M	S-063966
DOLORES PL	55,180	1,192	1	26	M	S-054308
			2	745	M	S-065766
EASTON ST	42,141	1,160	1	O/S	G	S-040982
			2	605	M	S-043641
			3	O/S	M	S-051609
EASTWOOD BL	4,468	1,145	1	1	G	S-022547
			2	41	M	S-035494
			3	23	M	S-070488
FAIRMOUNT AV INT	29,767	939	2	528	G	S-063254
FALCON DR	20,691	999	1	177	M	S-014326
			2A	O/S	G	S-044774
			2B	168		S-000000
HALLOCK AV	10,676	1,337	1	133	M	S-072245
HORSEBLOCK RD INT	7,440	1,393	3	89	G	S-043117
HURTIN BL	25,840	1,329	1	167	M	S-032287
			2	O/S	M	S-034733
			3	157	G	S-047673

RUN DATE: 11/10/93 @ 18:32 SCWA Production Control Department

BUS DATE: 11/10/93 D.E.C. PRODUCTION REPORT PRODCTN PAGE

PERIOD: 10/93 ZONE: 11 KINGS PARK HIGH

PUMP STATION	PUMPAGE (THOUSANDS)	AVERAGE FLOW (GPM)	WELL NO	OPERATING HOURS	AQUIFER	NYS WELL NUMBER
BLUE SPRUCE LA	28,768	1,097	2A	262	M	S-036791
			2B	175		S-000000
CARLSON AV	19,154	*1,100	5	130	M	S-016129
			6	75	M	S-027192
			7	85	M	S-064062
KINGS PARK RD	49,639	1,101	1	284	G	S-015923
			2	463	M	S-033006
			3	4	M	S-053361
LAWRENCE RD	34,930	1,008	1	137	M	S-023186
			2	129	M	S-024545
			3	219	M	S-034440
			4	92	M	S-046758
SCHUYLER DR	4,485	755	1	26	G	S-022362
			2	73	G	S-023715
ST.JOHNSLAND RD	6,018	1,126	1	33	G	S-040711
			2	56	G	S-040710
WALTER CT	5,469	1,098	2	83	M	S-053360
WICKS RD	28,830	1,130	1	171	M	S-022471
			2	108	M	S-023832
			3	146	M	S-036976

ZONE: 11 STATIONS LISTED: 8 177,293

PEAK DAY FOR ZONE 7,986,000 GALLONS ON 10/06/93

RUN DATE: 11/10/93 @ 18:32 SCWA Production Control Department

BUS DATE: 11/10/93 D.E.C. PRODUCTION REPORT PRODCTN PAGE 1

PERIOD: 10/93 ZONE: 10 NORTHPORT VERY HIGH

PUMP STATION	PUMPAGE (THOUSANDS)	AVERAGE FLOW (GPM)	WELL NO	OPERATING HOURS	AQUIFER	NYS WELL NUMBER
BELLROSE AV	4,046	853	1	79	G	S-061937
CHURCH ST (NPT)	9,535	1,038	1	68	G	S-023371
			2	85	G	S-030762
GUN CLUB RD	40,566	1,233	1	282	M	S-015514
			2	O/S	M	S-015515
			3	266	M	S-025774
LAUREL HIEL RD	35,175	1,035	1	194	G	S-020530
			2	215	G	S-022048
			3	157	G	S-033970
RESERVOIR AV BTR #2	0		2	0		S-000000
RESERVOIR AV BTR #3	0		3	0		S-000000
RESERVOIR AV VERY HI	2,750	727	2	63	G	S-039536
RUTH DR	6,100	1,224	1	83	G	S-072271
SOUTH SPUR DR	3,930	935	1	3	M	S-035939
			2	O/S	M	S-037351
			3	67	M	S-053747

ZONE: 10 STATIONS LISTED: 9 102,102

PEAK DAY FOR ZONE 5,127,000 GALLONS ON 10/07/93

12

RUN DATE: 11/10/93 @ 18:32 SCWA Production Control Department

BUS DATE: 11/10/93 D.E.C. PRODUCTION REPORT PRODCTN PAGE 1

PERIOD: 10/93 ZONE: 9 NORTHPORT INT

PUMP STATION	PUMPAGE (THOUSANDS)	AVERAGE FLOW (GPM)	WELL NO	OPERATING HOURS	AQUIFER	NYS WELL NUMBER
DOUGLAS AV	2,008	836	1	40	M	S-033820
MIDDLEVILLE RD	4,454	1,237	1	31	G	S-054162
			2	29	G	S-088463
RESERVOIR AV BTR #1	0		1	0		S-000000
WATERSIDE RD	47,057	1,465	1	0/6	G	S-036185
			2	535	G	S-056133

ZONE: 9 STATIONS LISTED: 4 53,519

PEAK DAY FOR ZONE 2,894,000 GALLONS ON 10/08/93

13

RUN DATE: 11/10/93 @ 18:32 SCWA Production Control Department

BUS DATE: 11/10/93 D.E.C. PRODUCTION REPORT PRODCTN PAGE

PERIOD: 10/93 ZONE: 8 NORTHPORT LOW

PUMP STATION	PUMPAGE (THOUSANDS)	AVERAGE FLOW (GPM)	WELL NO	OPERATING HOURS	AQUIFER	NYS WELL NUMBER
RESERVOIR AV LO	190	1,583	1	2	G	S-011105
WASHINGTON ST	16,280	663	1	O/S	M	S-002978
			2	210	G	S-045610
			3	199	G	S-072326

ZONE: 8 STATIONS LISTED: 2 16,470

PEAK DAY FOR ZONE 1,037,000 GALLONS ON 10/07/93

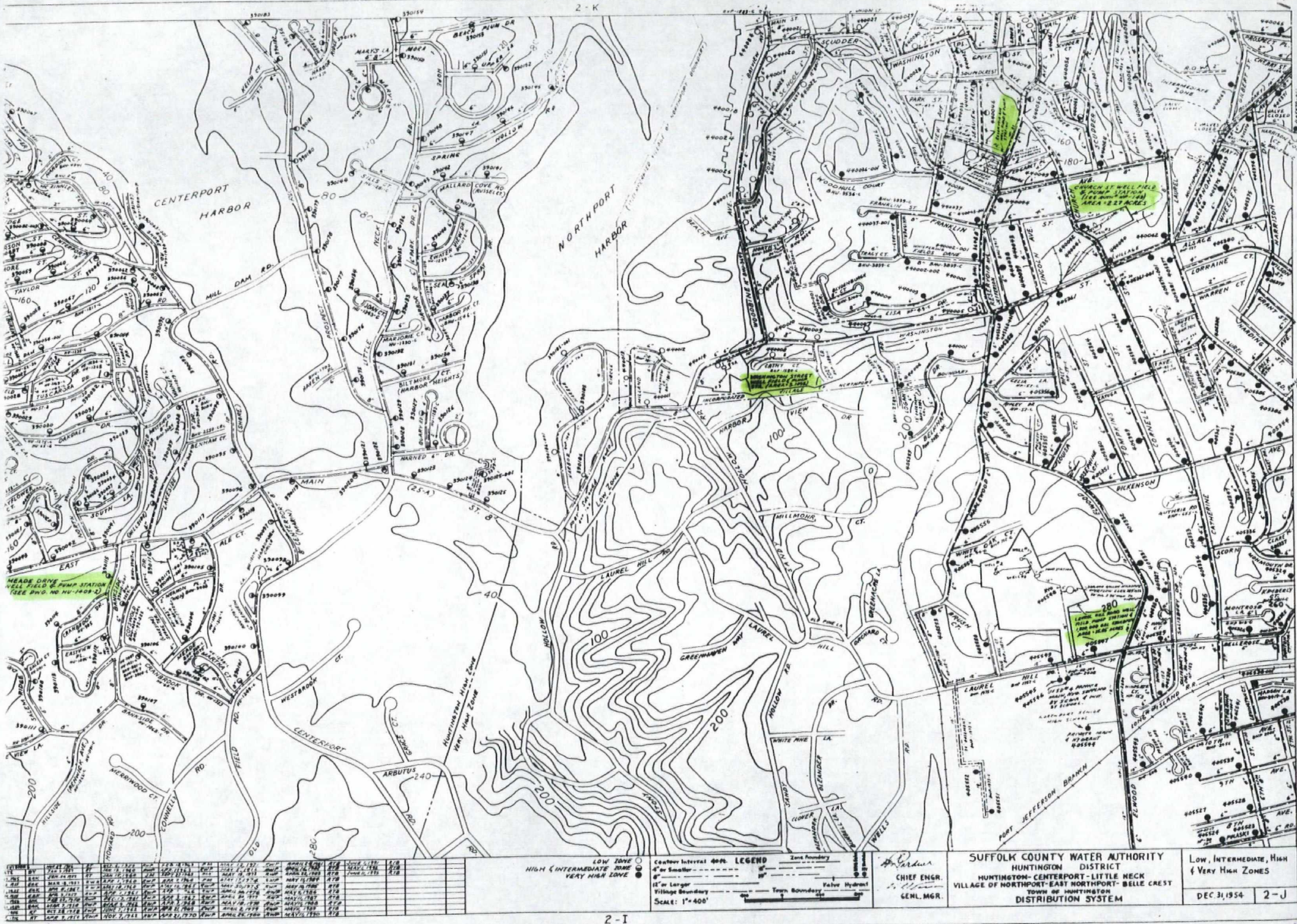
NORTHPORT DISTRICT
SHEET #7

WELL FIELD NAME	# OF WELLS	WELL #	DEPTH	ACTUAL CAPACITY
Bellrose Ave.	1	1	594'	1100 gpm
Gun Club Rd.	3	1	598'	1200 gpm
		2	356'	800 gpm
		3	586'	1299 gpm
Lark Field Rd.	3	1	532'	1200 gpm
		2	608'	1200 gpm
		3	453'	1200 gpm
Ruth Blvd.	1	1	684'	1300 gpm
Blue Spruce Lane	1 inactive 1 active	1	674'	1200 gpm
Walter Ct.	1 inactive/retired 1 active	2	671	1400 gpm
Schuyler Dr.		1	313	1000 gpm
		2	313'	1000 gpm

15

SMITHTOWN DISTRICT
SHEET #8

WELL FIELD NAME	# OF WELLS	WELL #	DEPTH	ACTUAL CAPACITY
Autumn Dr. (Capital (+)	2			
		1	310'	1300 gpm
		2	423'	1300 gpm
New York Ave.	2 inactive 3 active			
		3	164'	350 gpm
		4	600'	1100 gpm
		5	585'	1200 gpm
Falcon Dr.	2			
		1	225'	1400 gpm
		2	293'	2400 gpm
Wheeler Rd.	4			
		1	128'	750 gpm
		2	131'	850 gpm
		3	340'	1000 gpm
		4	382'	1200 gpm


2-K
CENTERPORT HARBOR
NORTHPORT HARBOR
MEADE DRIVE WELL FIELD & PUMP STATION (SEE DWG. NO. HU-1409-2)
CHURCH ST WELL FIELD & PUMP STATION
AREA = 2.27 ACRES
MAIN ST.
(25-A)
MILL DAM RD.
LAUREL HILL RD.
CENTERPORT RD.
HUNTINGTON HIGH ZONE
VERY HIGH ZONE
PORT JEFFERSON BRANCH
LOW ZONE
HIGH & INTERMEDIATE ZONE
VERY HIGH ZONE
LEGEND
Contour Interval 40 ft.
Zone Boundary
4" or Smaller
12" or Larger
Village Boundary
Town Boundary
Valve
Hydrant
SCALE: 1" = 400'
CHIEF ENGR.
GENL. MGR.
SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
HUNTINGTON - CENTERPORT - LITTLE NECK
VILLAGE OF NORTHPORT - EAST NORTHPORT - BELLE CREST
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM
LOW, INTERMEDIATE, HIGH & VERY HIGH ZONES
DEC. 31, 1954
2-J
2-I
3-J
TRIM

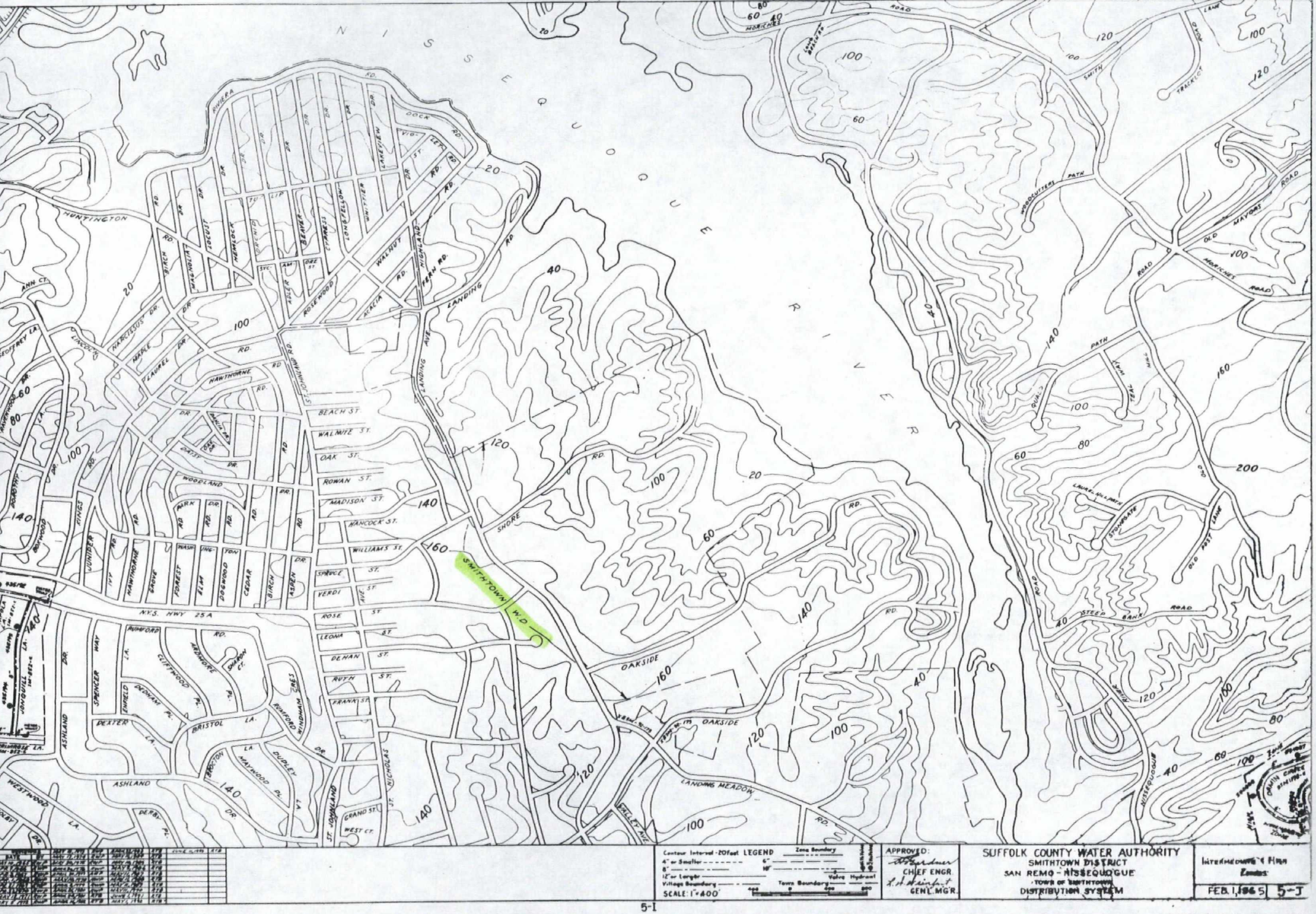
3-K
MIDDLEVILLE ROAD WELL FIELD
PUMP STATION & STANDPIPE
2.290 MILLION GALLONS
OVERFLOW ELEV. = 280.00 M.S.L.
AREA = 3.462 ACRES
GUN CLUB RD. PUMP STATION
WELLS & ELEV. TANK
MIDDLEVILLE
NORTHPORT VERY HIGH ZONE
INTERMEDIATE ZONE
FORT SALONGA RD.
HIGHWOOD DR.
SUNKEN MEADOW
BRIDGE RD.
GUN CLUB RD.
PULASKI ROAD
RAILROAD
DEPOSIT ROAD
BELLROSE AVE.
BELLE ROSE AVE.
JEFFERSON
BRANCH
LONG ISLAND
SANDPIPER
MARIROD LA.
BREWSTER AVE.
VALLEY
CLARKE
SOUNDVIEW
BELLECREST
NORTON
VERNON PL.
FOREST
CATALPA DR.
MELROSE AVE.
BRIGHTSIDE
KEW
BELAND ST.
TEANECK
KENILWORTH DR.
CORDELL PL.
PULASKI
CARLL PL.
SQUIRE AVE.
WASHINGTON
GRANT
THRUSH
McKINLEY
ROOSEVELT ST.
5TH AVE.
8TH
3RD.
1ST.
SHEFFIELD
WOODY
CYNTHIA
ADAMS CT.
TERRACE
RALMIA
SURREY
WINDSOR
LAUREL
SELDER
SMITHTOWN
HARDING
ROWLEY DR.
DOVER PL.
PINE CT.
IRIS
VALVES CLOSED
LAYNE DR.
MAIN ST.
LOW ZONE
INTERMEDIATE ZONE
HIGH & VERY HIGH ZONE
LEGEND
Contour Interval - 20 Feet
4" or Smaller
8"
12" or Larger
Village Boundary
Zone Boundary
Valve
Hydrant
Town Boundary
SCALE: 1" = 400'
APPROVED:
CHIEF ENGR.
GEN'L. M'G'R.
SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
EAST NORTHPORT
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM
INTERMEDIATE, HIGH & VERY HIGH ZONE
3-J

19

4-K
4-I
SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
KINGS PARK
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM
HIGH, INTERMEDIATE { VERY HIGH ZONE
NOV. 1, 1952
4-J
APPROVED:
CONS. ENGR
GENL. MGR
LEGEND
Contour Interval - 20 Feet
Zone Boundary
12" or Larger
Village Boundary
Town Boundary
Valve
Hydrant
SCALE: 1"=400'
LOW ZONE
INTERMEDIATE ZONE
HIGH ZONE
LAWRENCE RD. WELL FIELD, PUMP STATION & DEEP WELL #1
AREA = 3.99 ACRES
N.Y.S. HWY. 25 A
SUNKEN MEADOW STATE PARKWAY
NORTHPORT RD.
MAIN ST.
CHURCH
LOVERS LA.
KINGS PARK BLVD
LONG ISLAND RAILROAD
MEADOW RD. WEST
LAWRENCE RD
SMITHTOWN W.D.
SCWA
NORTHPORT VERY HIGH ZONE

no wells

20



5-K
TRIM
N I S S E Q U O G U E R I V E R
SMITHTOWN W.D.
N.Y.S. HWY 25A
HUNTINGTON
LANDING AVE.
ST. JOHNLAND RD.
SHORE RD.
OAKSIDE
LANDING MEADOW RD.
VALLEY AVE.
MORICHES RD.
OLD MAYORS RD.
WOODCUTTERS PATH
STEEP BANK ROAD
OLD POST LANE
STONEGATE
TEAL WAY
QUAIL PATH
SMITH
TRACKLOT
NISSEQUOGUE
BEACH ST.
WALNUT ST.
OAK ST.
ROWAN ST.
MADISON ST.
HANCOCK ST.
WILLIAMS ST.
SPRUCE ST.
VERDI AVE.
ROSE ST.
LEONA ST.
DEHAN ST.
RUTH ST.
FRANK ST.
ST. NICHOLAS
GRAND ST.
WEST CT.
ASHLAND
WESTWOOD LA.
DERBY PL.
BROCTON
MAYWOOD PL.
DUDLEY LA.
BRISTOL LA.
DEXTER LA.
SPENCER WAY
CLIFFWOOD PL.
ARDMORE
SHARON CT.
RUMFORD RD.
WINDHAM CRES
DEDHAM PL.
JUNIPER
IVY
HAWTHORNE
GROVE
FOREST
ELM
DOGWOOD
CEDAR
BIRCH
ASPEN DR.
WASHINGTON
PARK DR.
WOODLAND
DAISY DR.
LAUREL DR.
MAPLE
NARCISSUS DR.
LINCOLN
GEOFFREY LA.
ANN CT.
ROSEWOOD
ACACIA RD.
WALNUT
HIGHLAND
FERN RD.
ADLER
BEAVER
CYPRESS
LONGFELLOW
WHITTIER
LAKEVIEW DR.
DOCK RD.
RIVIERA
LOCUST DR.
MAGNOLIA
HEMLOCK
TULIP
Contour Interval - 20 Feet LEGEND
SCALE: 1"=400'
APPROVED:
CHIEF ENGR.
GENL MGR.
SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
SAN REMO - NISSEQUOGUE
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM
FEB. 1, 1965
5-J
5-I

APR. 3, 1964	RWP	MAY 17, 1974	RWP	APR. 22, 1985	RTB	MAY 1, 1972	RTB												
APR. 8, 1967	RWP	MAY 24, 1972	RWP	NOV. 21, 1989	RTB	June 9, 1993	RTB												
JULY 1, 1968	RWP	JUNE 26, 1972	RWP	NOV. 21, 1990	RTB														
APR. 1, 1969	RWP	JUNE 26, 1972	RWP	MAY 21, 1984	RTB														
APR. 21, 1970	RWP	MAY 16, 1972	RWP	MAY 15, 1987	RTB														
MAY 18, 1971	RWP	JUNE 6, 1972	RWP	MAY 15, 1988	RTB														
JULY 16, 1971	RWP	APR. 26, 1972	RWP	MAY 15, 1990	RTB														
MAY 15, 1972	RWP	APR. 26, 1972	RWP	MAY 15, 1992	RTB														
		APR. 26, 1972	RTB	JUNE 15, 1992	RTB														

LOW ZONE
INTERMEDIATE ZONE
HIGH & VERY HIGH ZONE

Contour Interval - 20' est
8" or Smaller
12" or Larger
Village Boundary
SCALE: 1" = 400'

LEGEND
Zone Boundary
6"
12"
Valve
Hydrant
Town Boundary

APPROVED:
CHIEF ENGR.
GEN'L. MG'R.

SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
VERNON VALLEY – MIDDLEVILLE
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM

INTERMEDIATE ZONE

3-K

NO 022119

22

REVISIONS				
DATE	BY			
APR 1, 1958	RWP	MAY 5, 1964	RTB	
APR 1, 1959	RWP	MAY 1, 1967	RTB	
APR 1, 1960	RWP	MAY 1, 1968	RTB	
APR 1, 1961	RWP	MAY 1, 1969	RTB	
APR 1, 1962	RWP	MAY 1, 1970	RTB	
APR 1, 1963	RWP	MAY 1, 1971	RTB	
APR 1, 1964	RWP	JUNE 1, 1971	RTB	
MAY 1, 1965	RWP	MAY 1, 1972	RTB	
MAY 1, 1966	RWP	Zone Revised	RTB	
MAY 1, 1967	RWP	MAY 1, 1973	RTB	
MAY 30, 1973	RWP	MAY 15, 1974	RTB	

LEGEND

Contour Interval = 20 feet
4" or Smaller
8"
12" or Larger
Village Boundary
Zone Boundary
6"
10"
Town Boundary
Valve
Hydrant
SCALE: 1" = 400'

APPROVED:
CHIEF ENG'R.
GENL. M'G'R.

SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
SUNKEN MEADOW
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM.

HIGH ZONE

MAR. 7, 1968 | 4-K

4-J

TRIM

Contour Interval 40 ft. LEGEND
Zone Boundary
4" or Smaller
6"
8"
10"
12" or Larger
Valve Hydrant
Village Boundary
Town Boundary
SCALE: 1" = 400'

CHIEF ENG'R.
GEN'L MGR.

SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
CENTERPORT - EAST NORTHPORT
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM

VERY HIGH ZONE
JUNE 8, 1961 | 2-I

ONS		APR. 7, 1966	RWP	MAY 30, 1975	RWP	MAY 11, 1984	RTB	JUNE 4, 1993	RTB
	BY	APR. 3, 1967	RWP	APR. 30, 1976	RWP	MAY 2, 1986	RTB		
62	RWP	APR. 1, 1968	RWP	APR. 28, 1977	RWP	MAY 5, 1984	RTB		
62	RWP	APR. 21, 1969	RWP	MAY 18, 1978	RWP	MAY 11, 1987	RTB		
62	RWP	APR. 21, 1970	RWP	APRIL 6, 1979	RWP	MAY 11, 1988	RTB		
63	RWP	MAY 12, 1971	RWP	APRIL 24, 1980	RWP	MAY 11, 1989	RTB		
64	PM	MAY 3, 1972	RWP	APRIL 16, 1981	RTB	MAY 11, 1990	RTB		
64	PM	MAY 3, 1973	RWP	APRIL 16, 1982	RTB	JUNE 1, 1991	RTB		
67	RWP	MAY 13, 1974	RWP	APRIL 22, 1983	RTB	MAY 1, 1992	RTB		

LOW ZONE ○
INTERMEDIATE ZONE ◐
HIGH & VERY HIGH ZONE ●

Contour Interval - 20 Feet
6" or Smaller
8"
12" or Larger
Village Boundary
SCALE: 1" = 400'

LEGEND Zone Boundary
6"
10"
Valve hydrant
Town Boundary

APPROVED:
CHIEF ENGR.
GEN'L. M'G'R.

SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
EAST NORTHPORT & COMMACK
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM

HIGH & VERY HIGH ZONE

3-I

3-H

4-J

LEGEND	
Contour Interval - 20 Feet	Zone Boundary
4" or Smaller	6"
8"	10"
12" or Larger	Valve / Hydrant
Village Boundary	Town Boundary
SCALE: 1" = 400'	

APPROVED:

CHIEF ENGR.

GEN'L. MG'R.

SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
KINGS PARK & INDIAN HEAD
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM

HIGH & VERY HIGH ZONES

JULY 25, 1960 | 4-I

4-H

TRIM

25" x 36"

Contour Interval 20 feet	LEGEND
4" or Smaller	6"
8"	10"
12" or Larger	Valve, Hydrant
Village Boundary	Town Boundary
Scale: 1" = 400'	Zone Boundary

APPROVED:

CONS. ENGR.

GENL. MGR.

SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
SMITHTOWN BRANCH
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM

INTERMEDIATE ZONE

NOV. 1, 1952 | 5-I

3-I
BURR ROAD
180
ROAD
TURNPIKE
JERICHO
160
200
DALY RD.
LARKFIELD
140
WICKS RD.
HAUPPAUGE RD.
NORTHERN STATE PARKWAY
TOWN LINE ROAD
TERRY LA.
RUTH BLVD.
WELL FIELD & PUMP STATION
AREA = 2.12 ACRES
GENRIG
HUBBELL ST.
SPEAKER ST.
DEAN CT.
VANCE ST.
COBB
JOHNSON ST.
OLD INDIAN HEAD ROAD
JERICHO TPKE.
VETERANS MEMORIAL HWY.
TIOGA PL.
SCHUYLER DR.
SENECA ST.
GENESEE
SARATOGA
CAYUGA PL.
TOMKINS CT.
GENESEE DR.
RENSSELAER
WYOMING ST.
WAYNE PL.
120
SCHUYLER DR. WELL FIELD & PUMP STATION
AREA = 2.91 ACRES
LAURUSA
NEW HIGHWAY
MEADOW STATE PARKWAY
GREENLAWN WATER DIST. MAIN
TIE-IN BETWEEN GREENLAWN WATER DIST. & S.C.W.A.
NORTH DELAWARE AVE.
ALLEGANY
SWINEN
HARNED
LOW ZONE
INTERMEDIATE ZONE
HIGH ZONE
Contour Interval - 20 Feet
4" or Smaller
8"
12" or Larger
Village Boundary
LEGEND
Zone Boundary
Valve
Hydrant
Town Boundary
SCALE: 1" = 400'
APPROVED:
CHIEF ENGR.
GEN'L. MGR.
SUFFOLK COUNTY WATER AUTHORITY
HUNTINGTON DISTRICT
COMMACK
TOWN OF HUNTINGTON
DISTRIBUTION SYSTEM
HIGH ZONE
3-H
3-G

4-I

AUTUMN DR. WELL FIELD & PUMP STATION AREA = 1.40 ACRES
LEGEND
Contour Interval - 20 Feet
Zone Boundary
Village Boundary
Town Boundary
Valve
Hydrant
SCALE: 1" = 400'
APPROVED:
CHIEF ENGR.
GEN'L. MGR.
SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
KINGS PARK & INDIAN HEAD
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM
HIGH & INTERMEDIATE ZONES
JULY 25, 1960
4-H

4-G

Contour Interval 20 feet LEGEND	Zone Boundary
4"or Smaller	6"
8"	10"
12"or Larger	Valve Hydrant
Village Boundary	Town Boundary
SCALE: 1"=400'	400 0 400 800

APPROVED:

CONS. ENGR

GENL. MGR.

SUFFOLK COUNTY WATER AUTHORITY
SMITHTOWN DISTRICT
SMITHTOWN-BRANCH
TOWN OF SMITHTOWN
DISTRIBUTION SYSTEM

INTERMEDIATE ZONE

NOV. 1, 1952 | 5-H

Table 6. Household, Family, and Group Quarters Characteristics: 1990

[For definitions of terms and meanings of symbols, see text]

State County Place and [In Selected States] County Subdivision	Persons in households	All households	Family households: Total	Family households: Married-couple family	Family households: Female householder, no husband present	Nonfamily households: Total	Nonfamily households: Householder living alone: Total	Nonfamily households: Householder living alone: 65 years and over: Total	Nonfamily households: Householder living alone: 65 years and over: Female	Persons per— Household	Persons per— Family	Persons in group quarters: Total	Persons in group quarters: Institutionalized persons	Persons in group quarters: Other persons in group quarters
The State	**17 445 190**	**6 639 322**	**4 489 312**	**3 315 845**	**919 266**	**2 150 010**	**1 806 263**	**700 016**	**544 755**	**2.63**	**3.22**	**545 265**	**267 122**	**278 143**
COUNTY														
Albany County	278 399	115 824	71 455	54 534	13 355	44 369	35 050	13 559	10 777	2.40	3.04	14 195	4 286	9 909
Allegany County	45 639	17 011	12 318	10 231	1 466	4 693	3 943	1 927	1 478	2.68	3.15	4 831	398	4 433
Bronx County	1 163 368	424 112	288 609	146 234	118 610	135 503	119 218	46 431	35 780	2.74	3.35	40 421	28 534	11 887
Broome County	204 344	81 843	54 819	44 163	8 183	27 024	22 037	9 065	7 203	2.50	3.05	7 816	3 420	4 396
Cattaraugus County	80 833	30 456	21 657	17 395	3 228	8 799	7 543	3 651	2 789	2.65	3.18	3 401	1 035	2 366
Cayuga County	77 968	29 075	20 927	16 660	3 127	8 148	6 874	3 418	2 680	2.68	3.19	4 345	3 955	390
Chautauqua County	136 558	53 696	37 203	29 942	5 506	16 493	14 035	6 849	5 459	2.54	3.07	5 337	2 557	2 780
Chemung County	90 460	35 275	24 808	19 646	4 058	10 467	8 992	4 387	3 505	2.56	3.08	4 735	3 788	947
Chenango County	50 896	19 141	13 821	11 438	1 670	5 320	4 451	2 085	1 602	2.66	3.14	872	840	32
Clinton County	77 971	29 123	20 839	17 279	2 594	8 284	6 429	2 626	2 111	2.68	3.14	7 998	4 282	3 716
Columbia County	60 884	23 696	16 882	13 658	2 339	6 814	5 689	2 759	2 078	2.57	3.04	2 098	1 825	273
Cortland County	45 664	17 247	11 799	9 461	1 681	5 448	4 070	1 860	1 513	2.65	3.13	3 299	510	2 789
Delaware County	45 233	17 646	12 374	10 224	1 552	5 272	4 458	2 308	1 746	2.56	3.07	1 992	660	1 332
Dutchess County	240 984	89 567	64 757	53 635	8 353	24 810	19 884	7 705	6 051	2.69	3.18	18 478	11 475	7 003
Erie County	944 115	376 994	254 472	192 646	49 968	122 522	105 083	45 370	35 665	2.50	3.09	24 417	13 138	11 279
Essex County	34 824	13 721	9 498	7 805	1 204	4 223	3 520	1 682	1 280	2.54	3.07	2 328	2 223	105
Franklin County	42 549	16 284	11 265	8 976	1 677	5 019	4 197	2 064	1 612	2.61	3.16	3 991	3 012	979
Fulton County	53 276	20 995	14 602	11 601	2 242	6 393	5 412	2 894	2 281	2.54	3.05	915	700	215
Genesee County	58 858	21 614	16 050	13 269	2 054	5 564	4 671	2 312	1 840	2.72	3.19	1 202	800	402
Greene County	42 080	16 596	11 642	9 465	1 612	4 954	4 245	2 033	1 488	2.54	3.05	2 659	2 474	185
Hamilton County	5 197	2 153	1 508	1 266	170	645	550	241	172	2.41	2.89	82	82	–
Herkimer County	64 636	24 936	17 576	14 347	2 369	7 360	6 246	3 402	2 594	2.59	3.11	1 161	840	321
Jefferson County	103 614	37 851	28 163	23 155	3 680	9 688	8 005	3 772	2 996	2.74	3.19	7 329	2 589	4 740
Kings County	2 266 401	828 199	555 284	335 295	177 871	272 915	236 977	92 972	71 504	2.74	3.40	34 263	16 651	17 612
Lewis County	26 475	9 253	7 056	5 985	744	2 197	1 889	964	728	2.86	3.32	321	307	14
Livingston County	56 777	21 197	15 178	12 558	1 896	6 019	4 643	2 043	1 610	2.68	3.14	5 595	2 212	3 383
Madison County	64 006	23 567	17 162	14 137	2 176	6 405	5 050	2 326	1 808	2.72	3.17	5 114	776	4 338
Monroe County	691 387	271 944	182 813	140 622	34 008	89 131	71 166	25 702	20 400	2.54	3.11	22 581	8 405	14 176
Montgomery County	50 956	20 185	14 028	11 058	2 202	6 157	5 432	3 081	2 408	2.52	3.06	1 025	960	65
Nassau County	1 266 740	431 515	344 502	286 638	43 950	87 013	73 804	35 544	28 221	2.94	3.30	20 608	9 799	10 809
New York County	1 428 973	716 422	301 041	187 016	92 055	415 381	348 134	87 139	64 439	1.99	2.99	58 563	13 988	44 575
Niagara County	216 912	84 809	59 732	47 221	9 822	25 077	22 119	10 080	7 797	2.56	3.10	3 844	2 358	1 486
Oneida County	236 328	92 562	63 735	50 430	10 385	28 827	24 950	11 640	9 110	2.55	3.12	14 508	9 522	4 986
Onondaga County	453 012	177 898	118 575	91 978	21 081	59 323	47 047	18 082	14 374	2.55	3.12	15 961	5 859	10 102
Ontario County	92 094	34 929	25 143	20 792	3 210	9 786	7 716	3 414	2 675	2.64	3.10	3 007	1 497	1 510
Orange County	293 491	101 506	77 111	63 207	10 401	24 395	19 975	8 404	6 611	2.89	3.35	14 156	6 211	7 945
Orleans County	39 588	14 428	10 685	8 608	1 484	3 743	3 119	1 482	1 146	2.74	3.20	2 258	2 053	205
Oswego County	116 928	42 434	30 905	25 013	4 231	11 529	9 150	4 027	3 158	2.76	3.22	4 843	899	3 944
Otsego County	55 592	21 725	14 768	12 258	1 795	6 957	5 414	2 679	2 056	2.56	3.06	4 925	746	4 179
Putnam County	82 838	28 094	22 549	19 675	2 028	5 545	4 410	1 594	1 202	2.95	3.32	1 103	299	804
Queens County	1 924 375	720 149	490 915	351 675	102 674	229 234	196 008	82 433	65 305	2.67	3.25	27 223	18 938	8 285
Rensselaer County	148 564	57 612	39 356	30 925	6 446	18 256	14 715	6 211	4 881	2.58	3.13	5 865	1 538	4 327
Richmond County	371 574	130 519	99 059	78 198	16 249	31 460	27 314	10 516	8 305	2.85	3.33	7 403	5 222	2 181
Rockland County	257 325	84 874	66 583	55 520	8 357	18 291	15 067	6 038	4 838	3.03	3.46	8 150	4 994	3 156
St. Lawrence County	101 384	37 964	26 784	21 809	3 663	11 180	8 924	4 223	3 303	2.67	3.16	10 590	3 232	7 358
Saratoga County	177 151	66 425	48 363	40 835	5 597	18 062	14 204	5 263	4 073	2.67	3.14	4 125	2 224	1 901
Schenectady County	144 981	59 181	39 702	31 284	6 556	19 479	16 611	7 649	6 063	2.45	3.01	4 304	2 201	2 103
Schoharie County	29 759	11 257	8 127	6 705	1 016	3 130	2 522	1 249	916	2.64	3.10	2 100	450	1 650
Schuyler County	18 176	6 818	5 025	4 140	618	1 793	1 471	753	571	2.67	3.11	486	474	12
Seneca County	32 452	12 285	8 998	7 421	1 156	3 287	2 708	1 296	981	2.64	3.09	1 231	670	561
Steuben County	97 128	37 299	26 447	21 446	3 615	10 852	9 194	4 286	3 374	2.60	3.11	1 960	1 690	270
Suffolk County	1 292 470	424 719	340 593	282 081	44 113	84 126	67 834	29 961	23 450	3.04	3.40	29 394	16 882	12 512
Sullivan County	63 858	24 576	17 090	13 848	2 344	7 486	6 216	2 916	2 095	2.60	3.13	5 419	2 829	2 590
Tioga County	51 974	18 838	14 470	12 192	1 640	4 368	3 670	1 594	1 252	2.76	3.17	363	318	45
Tompkins County	82 093	33 338	19 049	15 488	2 661	14 289	9 066	2 608	2 105	2.46	2.98	12 004	848	11 156
Ulster County	156 774	60 807	42 213	33 839	6 186	18 594	14 799	5 988	4 628	2.58	3.09	8 530	3 653	4 877
Warren County	58 122	22 559	15 788	12 740	2 254	6 771	5 519	2 591	2 070	2.58	3.09	1 087	513	574
Washington County	55 682	20 256	15 023	12 218	2 032	5 233	4 295	2 160	1 649	2.75	3.21	3 648	3 519	129
Wayne County	87 841	31 977	23 961	19 787	3 046	8 016	6 443	2 948	2 354	2.75	3.17	1 282	962	320
Westchester County	845 770	320 030	227 827	180 205	37 133	92 203	79 330	33 373	26 725	2.64	3.16	29 096	16 022	13 074
Wyoming County	38 731	13 897	10 528	8 857	1 175	3 369	2 847	1 391	1 088	2.79	3.23	3 776	3 709	67
Yates County	22 158	8 419	6 100	5 111	698	2 319	1 909	996	782	2.63	3.09	652	269	383
PLACE AND COUNTY SUBDIVISION														
Adams village, Jefferson County	1 742	726	469	379	78	257	231	131	112	2.40	3.04	11	11	–
Adams town, Jefferson County	4 966	1 839	1 335	1 115	177	504	424	220	183	2.70	3.20	11	11	–
Adams Center CDP, Jefferson County	1 675	591	455	378	64	136	102	45	36	2.83	3.22	–	–	–
Addison village, Steuben County	1 842	711	505	378	94	206	171	106	87	2.59	3.05	–	–	–
Addison town, Steuben County	2 645	995	730	556	127	265	215	118	97	2.66	3.08	–	–	–
Afton village, Chenango County	838	337	238	207	26	99	86	52	38	2.49	3.01	–	–	–
Afton town, Chenango County	2 972	1 092	814	670	98	278	219	108	81	2.72	3.13	–	–	–
Airmont CDP, Rockland County	7 540	2 282	2 042	1 817	169	240	196	97	77	3.30	3.51	295	216	79
Akron village, Erie County	2 895	1 185	790	621	137	395	350	224	176	2.44	3.04	11	–	11
Alabama town, Genesee County	1 998	678	545	468	48	133	118	59	42	2.95	3.30	–	–	–
Albany city, Albany County	91 458	42 121	20 308	12 695	6 193	21 813	16 239	5 659	4 481	2.17	2.94	9 624	2 338	7 286
Albertson CDP, Nassau County	5 166	1 808	1 484	1 261	153	324	291	177	150	2.86	3.21	–	–	–
Albion village, Orleans County	5 710	2 317	1 504	1 061	347	813	704	350	284	2.46	3.06	153	121	32
Albion town, Orleans County	6 259	2 394	1 625	1 211	316	769	659	319	249	2.61	3.19	1 919	1 887	32
Albion town, Oswego County	2 028	638	528	442	54	110	81	26	12	3.18	3.45	15	15	–
Alden village, Erie County	2 443	955	667	558	77	288	251	134	103	2.56	3.13	14	–	14
Alden town, Erie County	8 587	2 991	2 411	2 100	226	580	491	259	200	2.87	3.25	1 785	1 771	14
Alexander village, Genesee County	445	150	123	102	12	27	23	14	13	2.97	3.28	–	–	–
Alexander town, Genesee County	2 233	742	621	543	47	121	99	41	33	3.01	3.28	–	–	–
Alexandria town, Jefferson County	3 899	1 505	1 091	878	133	414	345	186	139	2.59	3.05	50	21	29
Alexandria Bay village, Jefferson County	1 154	504	309	222	64	195	171	95	76	2.29	2.94	40	21	19
Alfred village, Allegany County	1 055	487	191	177	12	296	197	59	52	2.17	2.81	3 504	–	3 504
Alfred town, Allegany County	2 287	958	517	460	36	441	308	87	76	2.39	3.02	3 504	–	3 504
Allegany village, Cattaraugus County	1 944	754	459	383	57	295	193	114	91	2.58	3.06	36	36	–
Allegany town, Cattaraugus County	6 410	2 399	1 720	1 464	196	679	520	266	209	2.67	3.12	1 917	36	1 881
Allegany Reservation, Cattaraugus County	1 139	419	289	187	82	130	107	44	31	2.72	3.30	4	–	4
Allen town, Allegany County	406	137	109	99	6	28	26	14	8	2.96	3.40	–	–	–
Alma town, Allegany County	838	293	240	210	17	53	45	28	15	2.86	3.16	8	8	–
Almond village	458	185	133	108	22	52	47	27	21	2.48	3.00	–	–	–
Allegany County	442	175	128	103	22	47	43	25	20	2.53	3.04	–	–	–
Steuben County	16	10	5	5	–	5	4	2	1	1.60	2.00	–	–	–

30

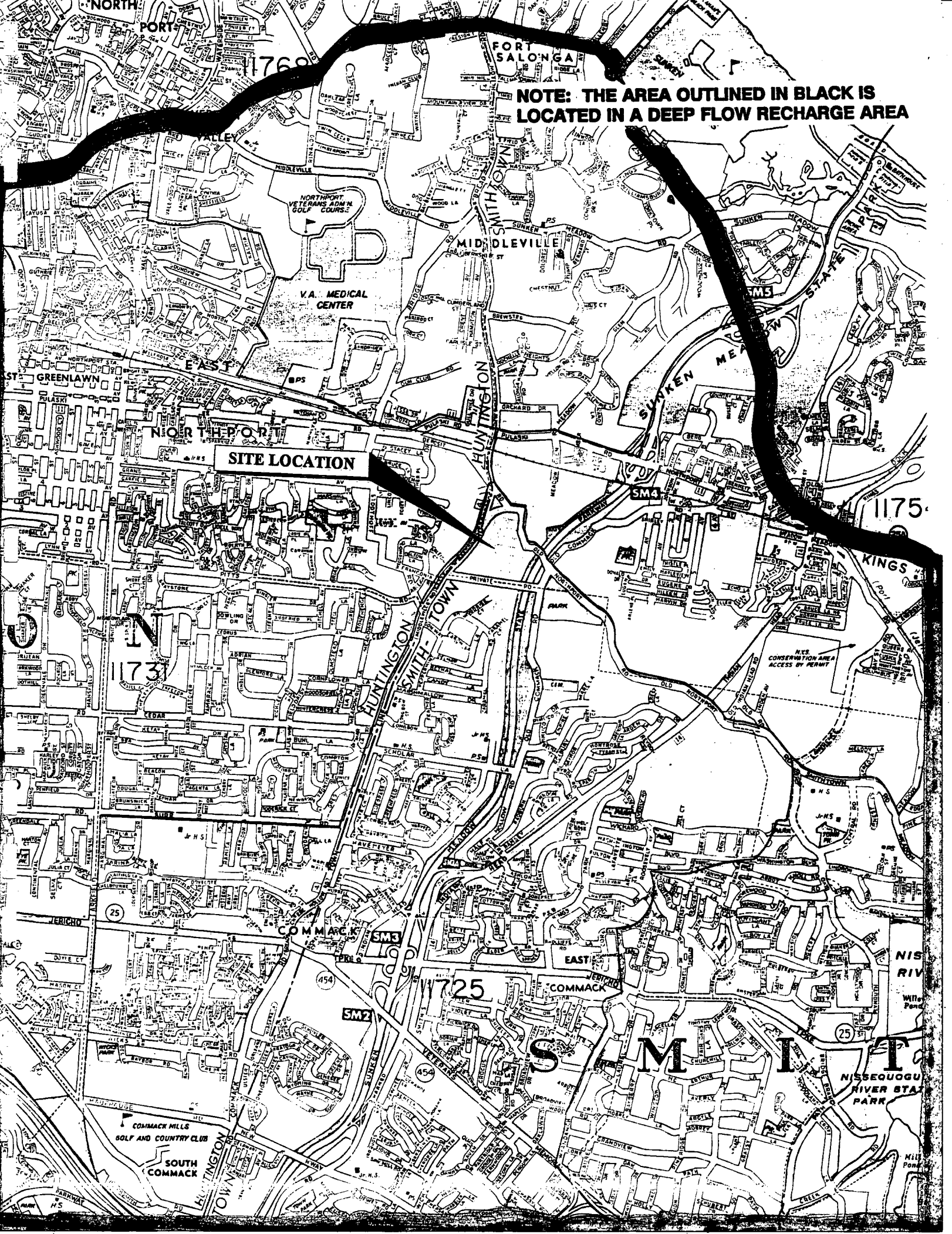
REFERENCE NO. 6

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	**Date:** 7/10/95
From: Jin Ho Jang	**Project #:** 8003-352
Subject: Wellhead Protection Areas	**Site Name:** SP Materials, Inc.

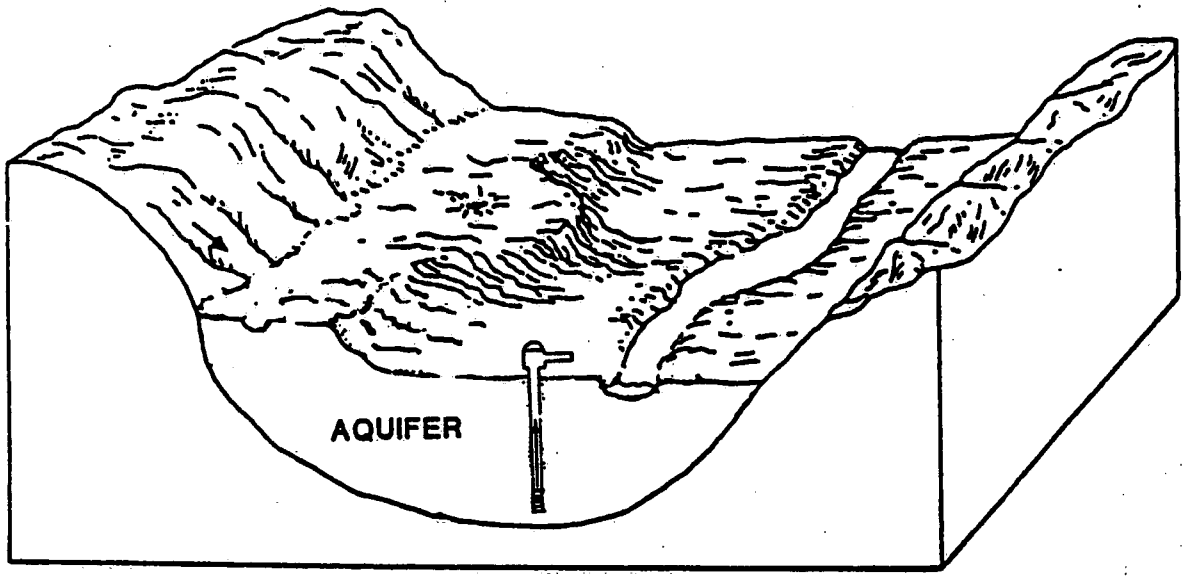
WELLHEAD PROTECTION AREAS

The SP Materials site is located in a deep flow recharge section of Long Island, New York. The following pages delineate the Glacial Aquifer and Magothy Aquifers as being deep flow recharge areas.


NOTE: THE AREA OUTLINED IN BLACK IS LOCATED IN A DEEP FLOW RECHARGE AREA
SITE LOCATION
NORTH PORT
FORT SALONGA
VALLEY
NORTHPORT VETERANS ADM'N GOLF COURSE
MIDDLEVILLE
V.A. MEDICAL CENTER
EAST GREENLAWN
NORTHPORT
HUNTINGTON
SMITHTOWN
SUNKEN MEADOW STATE PARK
SM1
SM2
SM3
SM4
SM5
COMMACK
EAST COMMACK
SOUTH COMMACK
COMMACK HILLS GOLF AND COUNTRY CLUB
NISSEQUOGUE RIVER STATE PARK
N.Y.S. CONSERVATION AREA ACCESS BY PERMIT
1768
1175
1173
1725

Department of Environmental Conservation

NEW YORK STATE WELLHEAD PROTECTION PROGRAM



Submittal
to
United States Environmental Protection Agency

New York State Department of Environmental Conservation
MARIO M. CUOMO, *Governor* THOMAS C. JORLING, *Commissioner*

September 1990

NEW YORK STATE WELLHEAD PROTECTION PROGRAM

SUBMITTAL
TO
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
IN
APPLICATION FOR IMPLEMENTATION FUNDS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
ALBANY, NY

SEPTEMBER 1990

TABLE 3.1.
WELLHEAD PROTECTION AREA
DELINEATION SUMMARY

Geographic Region	Aquifer Area	Wellhead Protection Area Baseline Delineation
Long Island	Magothy & Lloyd Aquifers	Deep Flow Recharge Area
	Glacial Aquifer	Simplified Variable Shape: 1,500 ft. radius upgradient 500 ft. radius downgradient
Upstate	Unconsolidated Aquifers	Aquifer Boundaries (land surface)
	Bedrock Aquifers	Fixed Radius: 1,500 ft. radius

REFERENCE NO. 7

MALCOLM PIRNIE, INC. **PROJECT NOTES**

To: File	Date: July 10, 1995
From: Jin Ho Jang	Project #: 8003-352
Subject: Four-mile Radius Populations	Site Name: SP Materials, Inc.

Population estimation within four miles of the SP Materials, Inc. Site was accomplished using the Topologically Integrated Geographic Encoding and Referencing (TIGER) data base. The results of the data base analysis is shown in the table below.

RING (MILES)	POPULATION
0 - ¼	473
¼ - ½	1,473
½ - 1	5,908
1 - 2	28,423
2 - 3	46,151
3 - 4	37,410
TOTAL POPULATION WITHIN 4 MILES:	119,838.00

FROST ASSOCIATES

P.O.Box 495, Essex, Connecticut 06426
(203) 767-7644 FAX (203) 767-1971

July 10, 1995

To: Malcolm Pirnie Inc
104 Interchange Plaza
Cranbury, New Jersey 08512-8543

Attn: Lilli Gonzalez

Fr: Frost Associates
P.O. Box 495
Essex, Conn 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: S. P. Materials
Smithtown, NY

CERCLIS:

Job: 8003-352-201

Site Longitude: 73-17-00 73.283333
Site Latitude : 40-52-00 40.866661

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

$$Area = 1/2\{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)\}$$

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 populu tion and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

S. P. Materials
Smithtown, NY

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Huntington	36103 1106 1	1715	602	591	0	0	0
2	Huntington	36103 1106 2	1219	500	492	0	0	0
3	Huntington	36103 1106 3	2017	811	799	0	10	0
4	Huntington	36103 1106 4	1350	585	572	0	0	23
5	Huntington	36103 1107 9	148	11	1	0	0	0
6	Smithtown	36103 1348 1	241	96	37	29	30	0
7	Smithtown	36103 1348 9	1832	78	78	0	0	0
8	Huntington	36103 1105011	2162	799	776	0	6	0
9	Huntington	36103 1105012	827	280	272	0	0	0
10	Huntington	36103 1105023	1397	549	562	0	0	0
11	Huntington	36103 1105024	1358	477	464	0	0	0
12	Huntington	36103 1108022	1225	456	409	0	44	0
13	Huntington	36103 1108023	3066	1083	1013	13	71	0
14	Huntington	36103 1108024	1311	418	401	0	6	0
15	Huntington	36103 1115031	619	202	203	0	0	0
16	Huntington	36103 1115032	1427	459	455	0	0	0
17	Huntington	36103 1115033	1712	764	764	0	0	5
18	Huntington	36103 1115039	948	305	304	0	0	0
19	Huntington	36103 1115041	378	132	132	0	0	0
20	Huntington	36103 1115042	269	87	90	0	0	0
21	Huntington	36103 1115049	728	242	217	0	0	0
22	Huntington	36103 1115063	963	274	266	0	0	0
23	Huntington	36103 1115069	575	172	179	0	0	0
24	Huntington	36103 1116012	188	56	42	0	0	0
25	Huntington	36103 1116013	2252	806	817	0	5	0
26	Huntington	36103 1116014	1676	591	589	0	0	0
27	Huntington	36103 1116021	1826	639	643	0	0	0
28	Huntington	36103 1116022	1395	478	481	0	0	0
29	Huntington	36103 1117011	817	309	318	0	8	0
30	Huntington	36103 1117012	1084	405	422	0	0	0
31	Huntington	36103 1117013	2235	742	732	0	0	0
32	Huntington	36103 1117014	1103	380	356	0	0	0
33	Huntington	36103 1117031	951	277	265	0	0	0
34	Huntington	36103 1117033	671	238	239	0	0	0
35	Huntington	36103 1117034	1475	472	483	0	0	0
36	Huntington	36103 1117041	1047	313	318	0	0	0
37	Huntington	36103 1117042	1554	521	515	0	0	0
38	Huntington	36103 1117043	691	261	262	0	0	0
39	Huntington	36103 1118011	1391	429	451	0	0	0
40	Huntington	36103 1118012	1571	479	472	0	0	0
41	Huntington	36103 1118013	2462	768	746	0	19	0
42	Huntington	36103 1118021	1360	431	429	0	5	0
43	Huntington	36103 1118022	1135	344	337	0	6	0
44	Huntington	36103 1118023	438	145	143	0	0	0
45	Huntington	36103 1118031	1607	493	482	0	0	0
46	Huntington	36103 1118032	1166	362	375	0	0	0
47	Huntington	36103 1118041	2200	682	670	0	10	0
48	Huntington	36103 1121029	1774	521	542	0	0	0
49	Huntington	36103 1121031	1865	590	584	0	0	0
50	Huntington	36103 1121032	1056	335	344	0	0	0
51	Huntington	36103 1121033	1374	344	342	0	0	0
52	Huntington	36103 1121039	9	5	4	0	0	0
53	Huntington	36103 1121044	1295	403	391	0	0	0
54	Huntington	36103 1121049	1592	503	504	0	4	0
55	Huntington	36103 1122111	3112	911	912	0	0	0

S. P. Materials
Smithtown, NY

56	Smithtown	36103	1347021	2137	799	780	0	0	0
57	Smithtown	36103	1347022	3127	1289	1299	0	0	0
58	Smithtown	36103	1347029	307	91	87	0	13	0
59	Smithtown	36103	1347032	1167	343	298	0	50	0
60	Smithtown	36103	1347033	1045	345	297	0	37	0
61	Smithtown	36103	1347034	651	244	182	12	46	0
62	Smithtown	36103	1347039	711	242	225	0	27	0
63	Smithtown	36103	1347041	2385	855	855	0	0	0
64	Smithtown	36103	1347049	203	3	3	0	0	0
65	Smithtown	36103	1349021	1221	379	369	0	10	0
66	Smithtown	36103	1349022	3526	1076	910	17	149	0
67	Smithtown	36103	1349031	815	244	206	0	0	0
68	Smithtown	36103	1349039	497	162	133	15	20	0
69	Smithtown	36103	1349043	1485	572	595	0	38	0
70	Smithtown	36103	1349051	1328	488	521	0	0	0
71	Smithtown	36103	1349052	1966	581	556	0	0	0
72	Smithtown	36103	1349054	659	181	170	0	0	6
73	Smithtown	36103	1349059	59	29	6	0	20	0
74	Smithtown	36103	1349062	979	323	316	0	7	0
75	Smithtown	36103	1349063	1253	399	359	6	0	0
76	Smithtown	36103	1349064	3215	1199	1164	9	0	22
77	Smithtown	36103	1349069	79	27	26	0	0	0
78	Smithtown	36103	1350041	1620	576	22	33	521	0
79	Smithtown	36103	1351011	2288	705	679	0	0	0
80	Smithtown	36103	1351012	1432	479	505	0	0	0
81	Smithtown	36103	1351019	152	48	48	0	0	0
82	Smithtown	36103	1351021	1411	442	424	0	0	0
83	Smithtown	36103	1351022	2026	698	705	0	6	5
84	Smithtown	36103	1351029	705	205	205	0	0	0
85	Smithtown	36103	1351031	1851	566	553	7	0	7
86	Smithtown	36103	1351039	3456	967	966	0	0	0
87	Smithtown	36103	1351041	2625	798	782	0	7	0
88	Smithtown	36103	1351042	1833	547	559	0	0	0
89	Smithtown	36103	1351049	296	91	88	0	0	0
90	Smithtown	36103	1352011	2177	688	705	0	0	0
91	Smithtown	36103	1352021	1910	621	632	0	0	0
92	Smithtown	36103	1352022	2730	883	863	5	0	0
93	Smithtown	36103	1352041	2686	799	750	0	34	0
94	Smithtown	36103	1352042	891	268	228	0	8	0
95	Smithtown	36103	1352043	1095	314	352	0	9	0
96	Smithtown	36103	1352052	914	281	294	0	6	0
97	Smithtown	36103	1352053	1666	514	496	0	0	0
98	Smithtown	36103	1352054	2042	772	753	0	12	0
99	Smithtown	36103	1352055	619	185	191	0	0	0
100	Smithtown	36103	1352061	1543	592	593	0	0	0
101	Smithtown	36103	1352062	0	0	0	0	0	0
102	Smithtown	36103	1352065	433	131	117	0	0	0
103	Smithtown	36103	1352069	0	0	0	0	0	0
104	Smithtown	36103	1353019	1321	436	453	0	17	0
	Totals:			140396	46092	44607	146	1261	68

S. P. Materials
Smithtown, NY

City	Census Tract ID	Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Sources
Huntington	36103 1106 1	1715	602	591	0	0	0
Huntington	36103 1106 2	1219	500	492	0	0	0
Huntington	36103 1106 3	2017	811	799	0	10	0
Huntington	36103 1106 4	1350	585	572	0	0	23
Huntington	36103 1107 9	148	11	1	0	0	0
Huntington	36103 1117014	1103	380	356	0	0	0
Huntington	36103 1117031	951	277	265	0	0	0
Huntington	36103 1105011	2162	799	776	0	6	0
Huntington	36103 1105012	827	280	272	0	0	0
Huntington	36103 1105023	1397	549	562	0	0	0
Huntington	36103 1105024	1358	477	464	0	0	0
Huntington	36103 1108022	1225	456	409	0	44	0
Huntington	36103 1108023	3066	1083	1013	13	71	0
Huntington	36103 1108024	1311	418	401	0	6	0
Huntington	36103 1115031	619	202	203	0	0	0
Huntington	36103 1115032	1427	459	455	0	0	0
Huntington	36103 1115033	1712	764	764	0	0	5
Huntington	36103 1115039	948	305	304	0	0	0
Huntington	36103 1115041	378	132	132	0	0	0
Huntington	36103 1115042	269	87	90	0	0	0
Huntington	36103 1115049	728	242	217	0	0	0
Huntington	36103 1115063	963	274	266	0	0	0
Huntington	36103 1115069	575	172	179	0	0	0
Huntington	36103 1116012	188	56	42	0	0	0
Huntington	36103 1116013	2252	806	817	0	5	0
Huntington	36103 1116014	1676	591	589	0	0	0
Huntington	36103 1116021	1826	639	643	0	0	0
Huntington	36103 1116022	1395	478	481	0	0	0
Huntington	36103 1117011	817	309	318	0	8	0
Huntington	36103 1117012	1084	405	422	0	0	0
Huntington	36103 1117013	2235	742	732	0	0	0
Huntington	36103 1118031	1607	493	482	0	0	0
Huntington	36103 1118032	1166	362	375	0	0	0
Huntington	36103 1117033	671	238	239	0	0	0
Huntington	36103 1117034	1475	472	483	0	0	0
Huntington	36103 1117041	1047	313	318	0	0	0
Huntington	36103 1117042	1554	521	515	0	0	0
Huntington	36103 1117043	691	261	262	0	0	0
Huntington	36103 1118011	1391	429	451	0	0	0
Huntington	36103 1118012	1571	479	472	0	0	0
Huntington	36103 1118013	2462	768	746	0	19	0
Huntington	36103 1118021	1360	431	429	0	5	0
Huntington	36103 1118022	1135	344	337	0	6	0
Huntington	36103 1118023	438	145	143	0	0	0
Huntington	36103 1121033	1374	344	342	0	0	0
Huntington	36103 1121039	9	5	4	0	0	0
Huntington	36103 1118041	2200	682	670	0	10	0
Huntington	36103 1121029	1774	521	542	0	0	0
Huntington	36103 1121031	1865	590	584	0	0	0
Huntington	36103 1121032	1056	335	344	0	0	0
Huntington	36103 1121049	1592	503	504	0	4	0
Huntington	36103 1122111	3112	911	912	0	0	0
Huntington	36103 1121044	1295	403	391	0	0	0
	Sub Totals:	69786	23441	23172	13	194	28

Smithtown	36103	1348 1	241	96	37	29	30	0
Smithtown	36103	1348 9	1832	78	78	0	0	0
Smithtown	36103	1347021	2137	799	780	0	0	0
Smithtown	36103	1347022	3127	1289	1299	0	0	0
Smithtown	36103	1347029	307	91	87	0	13	0
Smithtown	36103	1347032	1167	343	298	0	50	0
Smithtown	36103	1347033	1045	345	297	0	37	0
Smithtown	36103	1347034	651	244	182	12	46	0
Smithtown	36103	1347039	711	242	225	0	27	0
Smithtown	36103	1347041	2385	855	855	0	0	0
Smithtown	36103	1347049	203	3	3	0	0	0
Smithtown	36103	1349021	1221	379	369	0	10	0
Smithtown	36103	1349022	3526	1076	910	17	149	0
Smithtown	36103	1349031	815	244	206	0	0	0
Smithtown	36103	1349039	497	162	133	15	20	0
Smithtown	36103	1349043	1485	572	595	0	38	0
Smithtown	36103	1349051	1328	488	521	0	0	0
Smithtown	36103	1349052	1966	581	556	0	0	0
Smithtown	36103	1349054	659	181	170	0	0	6
Smithtown	36103	1349059	59	29	6	0	20	0
Smithtown	36103	1349062	979	323	316	0	7	0
Smithtown	36103	1349063	1253	399	359	6	0	0
Smithtown	36103	1349064	3215	1199	1164	9	0	22
Smithtown	36103	1349069	79	27	26	0	0	0
Smithtown	36103	1350041	1620	576	22	33	521	0
Smithtown	36103	1351011	2288	705	679	0	0	0
Smithtown	36103	1351012	1432	479	505	0	0	0
Smithtown	36103	1351019	152	48	48	0	0	0
Smithtown	36103	1351021	1411	442	424	0	0	0
Smithtown	36103	1351022	2026	698	705	0	6	5
Smithtown	36103	1351029	705	205	205	0	0	0
Smithtown	36103	1351031	1851	566	553	7	0	7
Smithtown	36103	1351039	3456	967	966	0	0	0
Smithtown	36103	1351041	2625	798	782	0	7	0
Smithtown	36103	1351042	1833	547	559	0	0	0
Smithtown	36103	1351049	296	91	88	0	0	0
Smithtown	36103	1352011	2177	688	705	0	0	0
Smithtown	36103	1352021	1910	621	632	0	0	0
Smithtown	36103	1352022	2730	883	863	5	0	0
Smithtown	36103	1352041	2686	799	750	0	34	0
Smithtown	36103	1352042	891	268	228	0	8	0
Smithtown	36103	1352043	1095	314	352	0	9	0
Smithtown	36103	1352052	914	281	294	0	6	0
Smithtown	36103	1352053	1666	514	496	0	0	0
Smithtown	36103	1352054	2042	772	753	0	12	0
Smithtown	36103	1352055	619	185	191	0	0	0
Smithtown	36103	1352061	1543	592	593	0	0	0
Smithtown	36103	1352062	0	0	0	0	0	0
Smithtown	36103	1352065	433	131	117	0	0	0
Smithtown	36103	1352069	0	0	0	0	0	0
Smithtown	36103	1353019	1321	436	453	0	17	0
	Sub Totals:		70610	22651	21435	133	1067	40

S. P. Materials
Smithtown, NY

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Huntington	36103 11061	0.668984	0.231476	34.60
2	Huntington	36103 11062	0.291590	0.291590	100.00
3	Huntington	36103 11063	0.759449	0.389638	51.31
4	Huntington	36103 11064	0.270232	0.174910	64.73
5	Huntington	36103 11079	0.207481	0.207481	100.00
6	Smithtown	36103 13481	0.273530	0.273530	100.00
7	Smithtown	36103 13489	0.624986	0.624986	100.00
8	Huntington	36103 1105011	2.450520	0.231160	9.43
9	Huntington	36103 1105012	0.667497	0.667485	100.00
10	Huntington	36103 1105023	0.542114	0.321263	59.26
11	Huntington	36103 1105024	0.793963	0.049126	6.19
12	Huntington	36103 1108022	2.259846	0.000257	0.01
13	Huntington	36103 1108023	3.057268	2.223735	72.74
14	Huntington	36103 1108024	1.375567	1.375567	100.00
15	Huntington	36103 1115031	0.169375	0.169375	100.00
16	Huntington	36103 1115032	0.216759	0.051589	23.80
17	Huntington	36103 1115033	0.551450	0.405132	73.47
18	Huntington	36103 1115039	0.306448	0.287799	93.91
19	Huntington	36103 1115041	0.073770	0.073770	100.00
20	Huntington	36103 1115042	0.181878	0.181878	100.00
21	Huntington	36103 1115049	0.668594	0.668594	100.00
22	Huntington	36103 1115063	0.723087	0.723087	100.00
23	Huntington	36103 1115069	0.935299	0.278552	29.78
24	Huntington	36103 1116012	0.057262	0.057262	100.00
25	Huntington	36103 1116013	0.401577	0.401577	100.00
26	Huntington	36103 1116014	0.315451	0.315451	100.00
27	Huntington	36103 1116021	0.445672	0.445672	100.00
28	Huntington	36103 1116022	0.248186	0.248186	100.00
29	Huntington	36103 1117011	0.153780	0.153780	100.00
30	Huntington	36103 1117012	0.147983	0.147983	100.00
31	Huntington	36103 1117013	0.328313	0.328313	100.00
32	Huntington	36103 1117014	0.187922	0.187922	100.00
33	Huntington	36103 1117031	0.424656	0.424656	100.00
34	Huntington	36103 1117033	0.219673	0.219673	100.00
35	Huntington	36103 1117034	0.369246	0.369246	100.00
36	Huntington	36103 1117041	0.323993	0.323993	100.00
37	Huntington	36103 1117042	0.339728	0.339728	100.00
38	Huntington	36103 1117043	0.127619	0.127619	100.00
39	Huntington	36103 1118011	0.420845	0.420845	100.00
40	Huntington	36103 1118012	0.440066	0.440066	100.00
41	Huntington	36103 1118013	0.587483	0.587483	100.00
42	Huntington	36103 1118021	0.395758	0.395758	100.00
43	Huntington	36103 1118022	0.334523	0.334523	100.00
44	Huntington	36103 1118023	0.167280	0.167280	100.00
45	Huntington	36103 1118031	0.457320	0.457320	100.00
46	Huntington	36103 1118032	0.333671	0.333671	100.00
47	Huntington	36103 1118041	0.721149	0.721149	100.00
48	Huntington	36103 1121029	1.461352	0.830441	56.83
49	Huntington	36103 1121031	0.371898	0.371898	100.00
50	Huntington	36103 1121032	0.178034	0.178034	100.00
51	Huntington	36103 1121033	0.413039	0.413039	100.00
52	Huntington	36103 1121039	0.269960	0.269960	100.00
53	Huntington	36103 1121044	0.357782	0.357782	100.00

54	Huntington	36103 1121049	1.661132	1.104280	66.48
55	Huntington	36103 1122111	1.347895	0.635214	47.13
56	Smithtown	36103 1347021	0.545706	0.545706	100.00
57	Smithtown	36103 1347022	0.947969	0.947969	100.00
58	Smithtown	36103 1347029	0.441229	0.441229	100.00
59	Smithtown	36103 1347032	0.959555	0.959555	100.00
60	Smithtown	36103 1347033	0.857629	0.857629	100.00
61	Smithtown	36103 1347034	0.519507	0.519507	100.00
62	Smithtown	36103 1347039	3.857327	3.594976	93.20
63	Smithtown	36103 1347041	0.688423	0.688423	100.00
64	Smithtown	36103 1347049	0.751286	0.751286	100.00
65	Smithtown	36103 1349021	0.355108	0.355108	100.00
66	Smithtown	36103 1349022	2.108750	1.029265	48.81
67	Smithtown	36103 1349031	0.256055	0.223832	87.42
68	Smithtown	36103 1349039	1.054033	0.946000	89.75
69	Smithtown	36103 1349043	0.941559	0.032035	3.40
70	Smithtown	36103 1349051	0.293558	0.271934	92.63
71	Smithtown	36103 1349052	0.359822	0.359822	100.00
72	Smithtown	36103 1349054	0.096487	0.096487	100.00
73	Smithtown	36103 1349059	0.363766	0.172013	47.29
74	Smithtown	36103 1349062	0.165910	0.165910	100.00
75	Smithtown	36103 1349063	0.216029	0.216029	100.00
76	Smithtown	36103 1349064	0.728800	0.728800	100.00
77	Smithtown	36103 1349069	0.132005	0.132005	100.00
78	Smithtown	36103 1350041	7.979118	0.091869	1.15
79	Smithtown	36103 1353019	1.618241	0.773472	47.80
80	Smithtown	36103 1351012	0.289328	0.289328	100.00
81	Smithtown	36103 1351019	0.159303	0.159303	100.00
82	Smithtown	36103 1351021	0.284190	0.284190	100.00
83	Smithtown	36103 1351022	0.399410	0.399410	100.00
84	Smithtown	36103 1351029	0.721322	0.721322	100.00
85	Smithtown	36103 1351031	0.417138	0.417138	100.00
86	Smithtown	36103 1351039	0.985524	0.985524	100.00
87	Smithtown	36103 1351041	1.274882	1.274882	100.00
88	Smithtown	36103 1351042	0.351916	0.351916	100.00
89	Smithtown	36103 1351049	0.536410	0.536410	100.00
90	Smithtown	36103 1352011	0.542083	0.542083	100.00
91	Smithtown	36103 1352021	0.590615	0.590615	100.00
92	Smithtown	36103 1352022	0.718270	0.718270	100.00
93	Smithtown	36103 1352041	1.105489	1.105489	100.00
94	Smithtown	36103 1352042	0.330589	0.330589	100.00
95	Smithtown	36103 1352043	0.321278	0.321278	100.00
96	Smithtown	36103 1352052	0.805872	0.578108	71.74
97	Smithtown	36103 1352053	0.659748	0.659748	100.00
98	Smithtown	36103 1352054	0.724286	0.724286	100.00
99	Smithtown	36103 1352055	0.300887	0.220704	73.35
100	Smithtown	36103 1352061	0.331260	0.191688	57.87
101	Smithtown	36103 1352062	0.654151	0.633535	96.85
102	Smithtown	36103 1352065	0.928477	0.428742	46.18
103	Smithtown	36103 1352069	0.300169	0.013279	4.42
104	Smithtown	36103 1351011	0.948815	0.948815	100.00
	Totals:		72.999214	50.339294	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius

5	Huntington	36103	11079	0.207481	0.207481	100.00
7	Smithtown	36103	13489	0.624986	0.514025	82.25
9	Huntington	36103	1105012	0.667497	0.018251	2.73
13	Huntington	36103	1108023	3.057268	0.494533	16.18
14	Huntington	36103	1108024	1.375567	1.375567	100.00
15	Huntington	36103	1115031	0.169375	0.131168	77.44
17	Huntington	36103	1115033	0.551450	0.045155	8.19
21	Huntington	36103	1115049	0.668594	0.293501	43.90
24	Huntington	36103	1116012	0.057262	0.054989	96.03
25	Huntington	36103	1116013	0.401577	0.232185	57.82
26	Huntington	36103	1116014	0.315451	0.082253	26.07
27	Huntington	36103	1116021	0.445672	0.379644	85.18
28	Huntington	36103	1116022	0.248186	0.248186	100.00
29	Huntington	36103	1117011	0.153780	0.153780	100.00
30	Huntington	36103	1117012	0.147983	0.147983	100.00
31	Huntington	36103	1117013	0.328313	0.328313	100.00
32	Huntington	36103	1117014	0.187922	0.187922	100.00
33	Huntington	36103	1117031	0.424656	0.424656	100.00
34	Huntington	36103	1117033	0.219673	0.219673	100.00
35	Huntington	36103	1117034	0.369246	0.369246	100.00
36	Huntington	36103	1117041	0.323993	0.323993	100.00
37	Huntington	36103	1117042	0.339728	0.339728	100.00
38	Huntington	36103	1117043	0.127619	0.127619	100.00
39	Huntington	36103	1118011	0.420845	0.420845	100.00
40	Huntington	36103	1118012	0.440066	0.439300	99.83
41	Huntington	36103	1118013	0.587483	0.500095	85.13
42	Huntington	36103	1118021	0.395758	0.395758	100.00
43	Huntington	36103	1118022	0.334523	0.334523	100.00
44	Huntington	36103	1118023	0.167280	0.167280	100.00
45	Huntington	36103	1118031	0.457320	0.457320	100.00
46	Huntington	36103	1118032	0.333671	0.333671	100.00
47	Huntington	36103	1118041	0.721149	0.721149	100.00
49	Huntington	36103	1121031	0.371898	0.371898	100.00
50	Huntington	36103	1121032	0.178034	0.178034	100.00
51	Huntington	36103	1121033	0.413039	0.413039	100.00
52	Huntington	36103	1121039	0.269960	0.170439	63.13
53	Huntington	36103	1121044	0.357782	0.309375	86.47
54	Huntington	36103	1121049	1.661132	0.043253	2.60
56	Smithtown	36103	1347021	0.545706	0.545706	100.00
57	Smithtown	36103	1347022	0.947969	0.947969	100.00
58	Smithtown	36103	1347029	0.441229	0.441229	100.00
59	Smithtown	36103	1347032	0.959555	0.959555	100.00
60	Smithtown	36103	1347033	0.857629	0.733263	85.50
62	Smithtown	36103	1347039	3.857327	1.147912	29.76
63	Smithtown	36103	1347041	0.688423	0.614402	89.25
64	Smithtown	36103	1347049	0.751286	0.280592	37.35
68	Smithtown	36103	1349039	1.054033	0.036799	3.49
71	Smithtown	36103	1349052	0.359822	0.155262	43.15
72	Smithtown	36103	1349054	0.096487	0.065823	68.22
74	Smithtown	36103	1349062	0.165910	0.001090	0.66
75	Smithtown	36103	1349063	0.216029	0.024036	11.13
76	Smithtown	36103	1349064	0.728800	0.495266	67.96
77	Smithtown	36103	1349069	0.132005	0.132005	100.00
80	Smithtown	36103	1351012	0.289328	0.289328	100.00
81	Smithtown	36103	1351019	0.159303	0.159303	100.00
82	Smithtown	36103	1351021	0.284190	0.284190	100.00
83	Smithtown	36103	1351022	0.399410	0.399410	100.00
84	Smithtown	36103	1351029	0.721322	0.721322	100.00
85	Smithtown	36103	1351031	0.417138	0.417138	100.00
86	Smithtown	36103	1351039	0.985524	0.985524	100.00
87	Smithtown	36103	1351041	1.274882	1.115069	87.46

88	Smithtown	36103 1351042	0.351916	0.351916	100.00
89	Smithtown	36103 1351049	0.536410	0.312066	58.18
90	Smithtown	36103 1352011	0.542083	0.542083	100.00
91	Smithtown	36103 1352021	0.590615	0.184705	31.27
92	Smithtown	36103 1352022	0.718270	0.718270	100.00
93	Smithtown	36103 1352041	1.105489	0.713717	64.56
94	Smithtown	36103 1352042	0.330589	0.329817	99.77
95	Smithtown	36103 1352043	0.321278	0.321278	100.00
97	Smithtown	36103 1352053	0.659748	0.249717	37.85
98	Smithtown	36103 1352054	0.724286	0.651488	89.95
104	Smithtown	36103 1351011	0.948815	0.948815	100.00
	Totals:		41.686028	28.231895	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
5	Huntington	36103 11079	0.207481	0.000027	0.01
7	Smithtown	36103 13489	0.624986	0.005982	0.96
14	Huntington	36103 1108024	1.375567	0.797444	57.97
28	Huntington	36103 1116022	0.248186	0.003658	1.47
30	Huntington	36103 1117012	0.147983	0.002348	1.59
33	Huntington	36103 1117031	0.424656	0.424656	100.00
34	Huntington	36103 1117033	0.219673	0.106712	48.58
35	Huntington	36103 1117034	0.369246	0.327189	88.61
36	Huntington	36103 1117041	0.323993	0.323993	100.00
37	Huntington	36103 1117042	0.339728	0.339728	100.00
38	Huntington	36103 1117043	0.127619	0.102923	80.65
39	Huntington	36103 1118011	0.420845	0.027976	6.65
40	Huntington	36103 1118012	0.440066	0.006499	1.48
42	Huntington	36103 1118021	0.395758	0.395758	100.00
43	Huntington	36103 1118022	0.334523	0.334523	100.00
44	Huntington	36103 1118023	0.167280	0.167280	100.00
45	Huntington	36103 1118031	0.457320	0.457320	100.00
46	Huntington	36103 1118032	0.333671	0.317639	95.20
47	Huntington	36103 1118041	0.721149	0.562848	78.05
49	Huntington	36103 1121031	0.371898	0.105058	28.25
50	Huntington	36103 1121032	0.178034	0.020716	11.64
56	Smithtown	36103 1347021	0.545706	0.396000	72.57
57	Smithtown	36103 1347022	0.947969	0.947969	100.00
58	Smithtown	36103 1347029	0.441229	0.358584	81.27
59	Smithtown	36103 1347032	0.959555	0.723018	75.35
62	Smithtown	36103 1347039	3.857327	0.321959	8.35
63	Smithtown	36103 1347041	0.688423	0.074803	10.87
64	Smithtown	36103 1347049	0.751286	0.001761	0.23
80	Smithtown	36103 1351012	0.289328	0.289328	100.00
81	Smithtown	36103 1351019	0.159303	0.159303	100.00
82	Smithtown	36103 1351021	0.284190	0.284190	100.00
83	Smithtown	36103 1351022	0.399410	0.399410	100.00
84	Smithtown	36103 1351029	0.721322	0.721322	100.00
85	Smithtown	36103 1351031	0.417138	0.337219	80.84
86	Smithtown	36103 1351039	0.985524	0.906636	92.00
87	Smithtown	36103 1351041	1.274882	0.103177	8.09
88	Smithtown	36103 1351042	0.351916	0.002667	0.76
90	Smithtown	36103 1352011	0.542083	0.452489	83.47
92	Smithtown	36103 1352022	0.718270	0.022535	3.14
94	Smithtown	36103 1352042	0.330589	0.010974	3.32

95	Smithtown	36103 1352043	0.321278	0.016734	5.21
98	Smithtown	36103 1352054	0.724286	0.197388	27.25
104	Smithtown	36103 1351011	0.948815	0.948815	100.00
	Totals:		24.889492	12.506564	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
33	Huntington	36103 1117031	0.424656	0.255830	60.24
36	Huntington	36103 1117041	0.323993	0.160798	49.63
42	Huntington	36103 1118021	0.395758	0.046496	11.75
43	Huntington	36103 1118022	0.334523	0.300278	89.76
45	Huntington	36103 1118031	0.457320	0.147651	32.29
57	Smithtown	36103 1347022	0.947969	0.219469	23.15
59	Smithtown	36103 1347032	0.959555	0.114297	11.91
80	Smithtown	36103 1351012	0.289328	0.029257	10.11
81	Smithtown	36103 1351019	0.159303	0.082668	51.89
82	Smithtown	36103 1351021	0.284190	0.243244	85.59
83	Smithtown	36103 1351022	0.399410	0.002845	0.71
84	Smithtown	36103 1351029	0.721322	0.478500	66.34
86	Smithtown	36103 1351039	0.985524	0.000056	0.01
104	Smithtown	36103 1351011	0.948815	0.948815	100.00
	Totals:		7.631668	3.030205	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
33	Huntington	36103 1117031	0.424656	0.007327	1.73
36	Huntington	36103 1117041	0.323993	0.003299	1.02
43	Huntington	36103 1118022	0.334523	0.052408	15.67
104	Smithtown	36103 1351011	0.948815	0.722364	76.13
	Totals:		2.031987	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
104	Smithtown	36103 1351011	0.948815	0.196350	20.69
	Totals:		0.948815	0.196350	

S. P. Materials
Smithtown, NY

========== Site Data ==========

Population:	119838.39
Households:	38920.02
Drilled Wells:	99.60
Dug Wells:	533.02
Other Water Sources:	58.56

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	37409.75
Households:	12572.31
Drilled Wells:	78.19
Dug Wells:	302.11
Other Water Sources:	27.11

** Population On Private Wells: 1131.58

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	46151.07
Households:	14559.84
Drilled Wells:	15.59
Dug Wells:	147.57
Other Water Sources:	20.79

** Population On Private Wells: 517.18

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	28422.95
Households:	9310.10
Drilled Wells:	5.82
Dug Wells:	71.38
Other Water Sources:	10.62

** Population On Private Wells: 235.66

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	5907.81
Households:	1879.17
Drilled Wells:	0.00
Dug Wells:	11.03
Other Water Sources:	0.04

** Population On Private Wells: 34.68

S. P. Materials
Smithtown, NY

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	1473.33
Households:	452.70
Drilled Wells:	0.00
Dug Wells:	0.94
Other Water Sources:	0.00

** Population On Private Wells: 3.06

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	473.48
Households:	145.89
Drilled Wells:	0.00
Dug Wells:	0.00
Other Water Sources:	0.00

** Population On Private Wells: 0.00

** Total Population On Private Wells: 1922.17

REFERENCE NO. 8

MALCOLM PIRNIE, INC.	PROJECT NOTE

TO:	Project File	DATE:	July 21,1995
FROM:	Jin Ho Jang	PROJECT #:	8003-352
SUBJECT:	Wetlands Acreage	SITE NAME	SP Materials, Inc.

The following table summarizes the acreage for each ring of the SP Materials, Inc. site.

Distance From Site	Wetlands Acreage
0 - ¼ mile	0
¼ - ½ mile	0
½ - 1 mile	0
1 - 2 mile	1
2 - 3 mile	87
3 - 4 mile	316

Acreage was obtained using the National Wetlands Inventory maps. Map quads used include:

Central Islip, NY (4/80)
Saint James, NY (4/80)
Greenlawn, NY (4/80)
Northport, NY (4/80)

Only wetlands with the following System, Subsystem, and Class were counted for acreage:

E2EM
E2FO
E2SS
L2EM
PEM
PFO
PML
PSS
R1EM
R2EM

REFERENCE NO. 9

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: July 10, 1995 Time: 4:20 AM [] PM [x]

Incoming Call

From: Stephen Pomaro (516) 266-1000
Telephone No.

Affiliation: (Owner) SP Materials, Inc.

Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

Mr. Pomaro returned my call inquiring about the rusted drum on his property. Mr. Pomaro stated that the drum the NYSDEC Inspector (Robert Becherer) discovered was rusted with the top cut off. It looked as if it had been used for burning purposes and no waste was associated with the drum. Mr. Pomaro stated that he picked the drum up in front of the NYSDEC representative and verified that the drum was empty. Mr. Pomaro stated that the condition of the drum would have made it impossible to contain any type of waste. Mr. Pomaro stated that the drum must have been dumped onto his property since constant illegal dumping of refuse occurs at his property. Mr. Pomaro then placed the empty drum along with his steel scrap for disposal.

REFERENCE NO. 10

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: June 29, 1995 Time: 9:43 AM [] PM []

Outgoing Call

To: Smithtown Tax Assessors Office (516) 360-7560
Telephone No.

Affiliation: Tax Assessor

Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

I phoned the tax assessors office to obtain the lot and block numbers for the S.P. Materials site. The tax assessor informed me that the property is listed under S.N. Materials, Inc. and is section 23, block no. 3, and lot no. 5.

REFERENCE NO. 11

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: July 10, 1995 Time: 2:55 AM [] PM [x]

Incoming Call

From: Robert Becherer (516) 444-0240
Telephone No.

Affiliation: NYSDEC Senior Sanitary Engineer

Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

Mr. Becherer returned my phone call regarding his inspection of the SP Materials site in Kings Park, New York. I questioned whether Mr. Becherer remembered the rusted drum he noticed at the site and if he noticed any types of wastes in the drum. Mr. Becherer stated he did remember visiting the site but did not know for sure if there were wastes in the drum.

REFERENCE NO. 12

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-281

Date: February 3, 1994 Time: 10:38 AM [] PM []

Outgoing Call

To: Robert P. Santoriello, Superintendent (516)-261-0926 Telephone No.

Affiliation: Greenlawn Water District

Malcolm Pirnie Staff: Lisa Szegedi (609) 860-0100 Telephone No.

Summary of Conversation:

I contacted Mr. Santoriello in order to obtain information about the Greenlawn Water District. Altogether, the district operates 15 wells. Of those 15, four are located within four miles of the site. These four wells are at the following locations: 1) GWD Well #5 is located at Wicks Road and Larkfield Road, Commack. 2) GWD Well #7 is located on Hedgerow Lane, Commack. 3) GWD Well #8 is located on Burr Road between Grey Lane and Holly Drive, Commack. 4) GWD Well #12 is located on Huntsman Lane, Commack. Each of these sites has only one well, and all of the wells are screened in the Magothy Aquifer. The entire system is interconnected, and the water from the wells is blended. The system serves a total of 11,000 service connections. None of the wells supplies greater than 40% of the total water to the system. Attached to this telecon is the Distribution System Map for the Greenlawn Water District.

REFERENCE NO. 13

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-352

Date: July 12, 1995 Time: 10:40 AM [x] PM []

Outgoing Call

To: Stephen Pomaro (516) 266-1000
Telephone No.

Affiliation: SP Materials, Inc. (Owner)

Malcolm Pirnie Staff: Jin Ho Jang JHJ (609) 860-0100
Telephone No.

Summary of Conversation:

I contacted Mr. Pomaro to inquire about the number of employees on site during regular hours. Mr. Pomaro stated that there were two employees, himself and a mechanic.

REFERENCE NO. 14

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wildlife Resources Center
700 Troy-Schenectady Road
Latham, NY 12110-2400 (518) 783-3932

July 14, 1995

Jin Ho Jang
Malcolm Pirnie Inc.
104 Interchange Plaza
Cranbury, New Jersey 08512-9543

Dear Mr. Jang:

We have reviewed the New York Natural Heritage Program files with respect to your recent request for biological information concerning the EPA Hazardous Waste Site: S. P. Materials Inc., site as indicated on your enclosed map, located in the Town of Smithtown, Suffolk County, New York State.

Enclosed is a computer printout covering the area you requested to be reviewed by our staff. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

Our files are continually growing as new habitats and occurrences of rare species and communities are discovered. In most cases, site-specific or comprehensive surveys for plant and animal occurrences have not been conducted. For these reasons, we can only provide data which have been assembled from our files. We cannot provide a definitive statement on the presence or absence of species, habitats or natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

This response applies only to known occurrences of rare animals, plants and natural communities and/or significant wildlife habitats. You should contact our regional office, Division of Regulatory Affairs, at the address enclosed for information regarding any regulated areas or permits that may be required (e.g., regulated wetlands) under State Law.

If this proposed project is still active one year from now we recommend that you contact us again so that we can update this response.

Sincerely,
Information Services
New York Natural Heritage Program

Encs.
cc: Reg. 1, Wildlife Mgr.
Reg. 1, Fisheries Mgr.

MALCOLM PIRNIE, INC.	PROJECT NOTES

To: File	**Date:** 7/14/95
From: Jin Ho Jang	**Project #:** 8003-352
Subject: Sensitive Environment Information	**Site Name:** SP Materials, Inc.

SENSITIVE ENVIRONMENT INFORMATION

According to the New York State Department of Environmental Conservation (New York Natural Heritage Program), there are six state threatened/endangered species within four miles of the SP Materials, Inc. site.

REFERENCE NO. 15

WELL LEGEND

Well ID	Well #	Well ID
l. Pump Station Wells	15	Laurel Hill Rd. Well Field
Rd. Well Field	16	Washington St. Well Field
. Well Field	17	Church St. Well Field
. Well Field	18	Reservoir Ave. Well Field
Rd. Hydropillar	19	Douglas Ave.
. Kings Park Pumping Station	20	St. Johnsland Rd. Well Field
l. Well Field	21	Waterside Rd. Well Field & Pumping Station
Well Field	22	Greenlawn Water District Well # 8
Well Field	23	Greenlawn Water District Well # 7
Well Field	24	Greenlawn Water District Well # 12
Well Field	25	Greenlawn Water District Well # 5
Well Field	26	Greenlawn Water District Well # 4
	27	Greenlawn Water District Well # 14
Well Field	28	Kings Park Psychiatric Center Wells
	29	Northport VA Hospital Wells

TITLE: **FOUR–MILE VICINITY MAP**

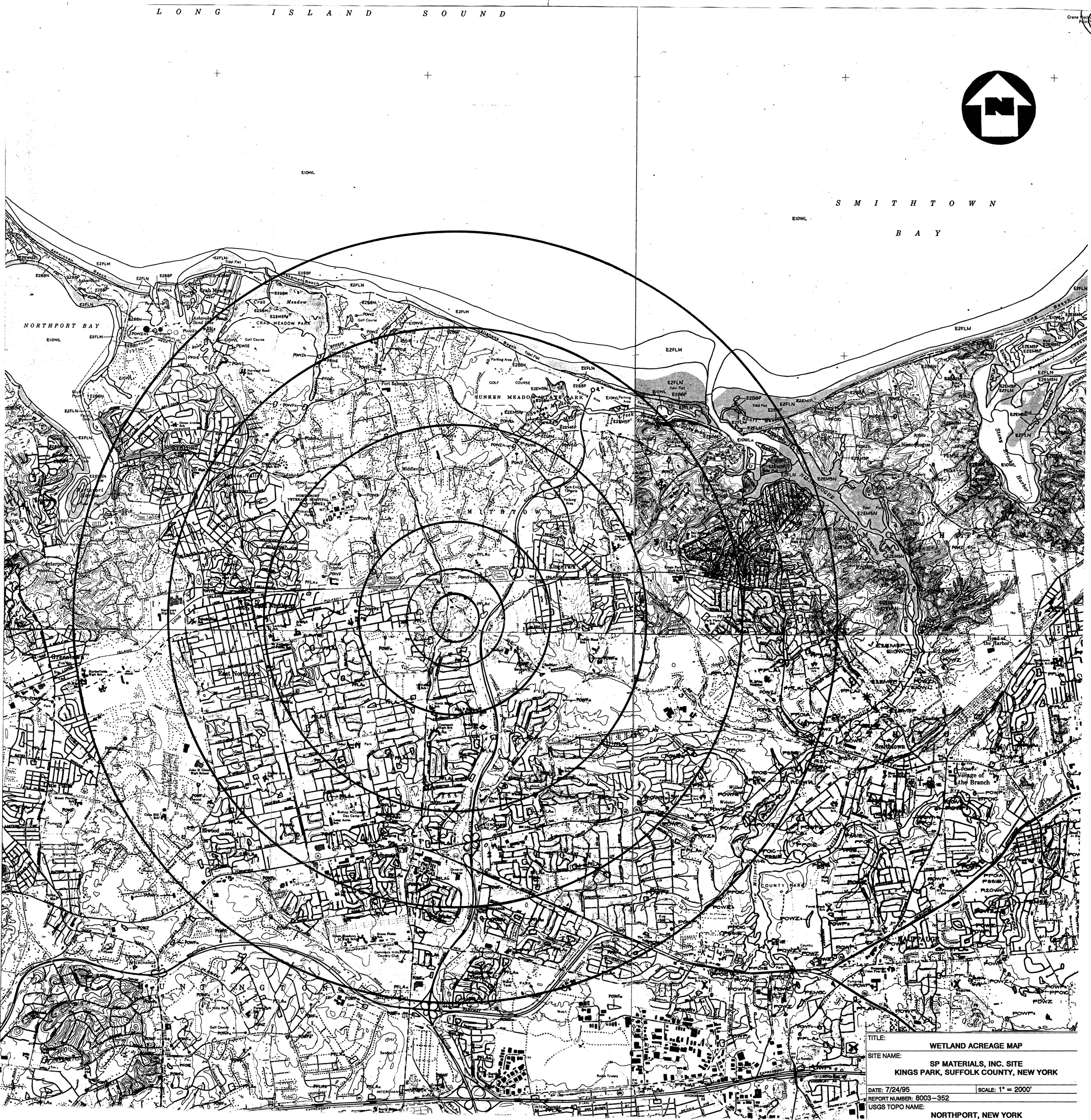
SITE NAME: **SP MATERIALS INC.**
KINGS PARK, SUFFOLK COUNTY, NEW YO

DATE: 7/06/95 | SCALE: 1" = 2000'

REPORT NUMBER: 8003–352

USGS TOPO NAME: **NORTHPORT, NEW YORK**

REFERENCE NO. 16



TITLE: WETLAND ACREAGE MAP

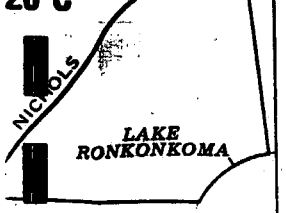
SITE NAME: SP MATERIALS, INC. SITE
KINGS PARK, SUFFOLK COUNTY, NEW YORK

DATE: 7/24/95 | SCALE: 1" = 2000'

REPORT NUMBER: 8003-352

USGS TOPO NAME: NORTHPORT, NEW YORK

REFERENCE NO. 17



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

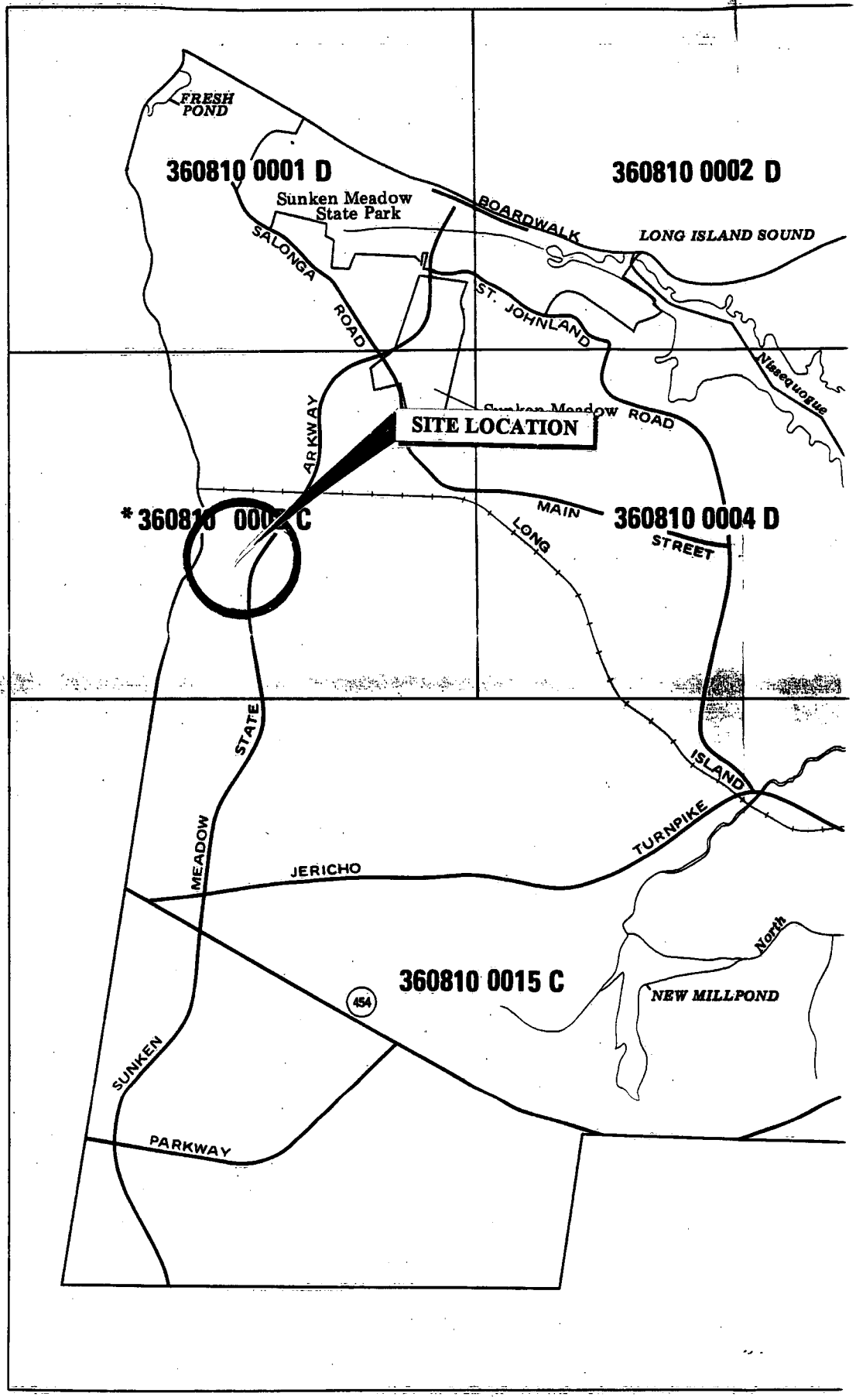
TOWN OF
SMITHTOWN,
NEW YORK
SUFFOLK COUNTY

MAP INDEX
PANELS PRINTED: 1, 2, 4, 15,

COMMUNITY-PANEL NUMBERS
360810 0001-0020

MAP REVISED:
JUNE 2, 1992

Federal Emergency Management Agency



*PANEL NOT PRINTED-AREA IN ZONE C OR AREA NOT INCLUDED

REFERENCE NO. 18

1

LOG BOOK

SITE RECONNAISSANCE

S.P. MATERIALS, INC.

APRIL 12, 1995

4/12/95

1130 ARRIVE AT OUTER PERIMETER
OF SITE (S.P. MATERIALS 4/12/95)

HNU IS NOT WORKING

ON SITE PERSONNEL (MALCOLM PIRNIE)

JIN MO JANG
LISA GRECO
BERNARD PIERRE

WEATHER : RAIN / DRIZZLE
OVERCAST
TEMP = 50 - 55°F

1132 LISA GRECO CONDUCTS
HEALTH & SAFETY MEETING

1 CAMERA ID #
73746
SECOND CAMERA HAS NO ID #

1135 BEGIN RECON ON OUTER
PERIMETER OF THE SITE

[signature] 4/12/95

1135 ACROSS STREET (TOWNLINE RD)
HUNTINGTON RESOURCE RECOVERY
FACILITY (NORTHPORT LANDFILL)

INCINERATOR / SOME RECYCLING

1139 140 OLD NORTHPORT RD
CARLSON PRECAST (CONCRETE)

OLD NORTHPORT RD
R. SCHLEZDER CONTRACTING CO. (RECYCLING)
516 - 269 - 4249

SAND CO ALSO SOUTH OF
S.R. MATERIALS (MIKE NASTI SAND CO.)

A&G SAND AND GRAVEL COMPANY
168 TOWN LINE RD
516 - 369 - 6200

TRI-COUNTY EQUIPMENT
HEAVY EQUIPMENT REPAIR (SAME PHONE
AS A&G SAND)

4/12/95

1146 ROVAC SANDBLASTING MANUFACTURER
169 TOWNLINE RD.

NOTE SOUTH OF SITE MULTIPLE SAND AND GRAVEL COMPANIES LOCATED.
USED MOSTLY FOR CONSTRUCTION (MASON SUPPLIES).

1310 ARRIVE AT SITE.

1315 SPEAK WITH STEPHEN POMARO ABOUT WHAT'S HAPPENED AT THE SITE MR. POMARO STATES THAT AREA WHERE SOIL GAS TESTING AND SB-1 WAS TAKEN BY YAK ENGINEERING DURING PHASE II IS NOW FILLED IN.

1345 MR. POMARO DRIVES MALCOLM PIRIE AROUND PROPERTY BOUNDARIES.

1355 IP/13
PICTURE OF MW 2. NEAR SITE FENCE BORDER EASTERN BORDER.

4/12/95

SITE IS RELATIVELY CLEAN WITH
HIGH PILES OF GRAVEL & SAND
SOME BULLDOZING WORK IS BEING
DONE IN THE CENTER OF SITE.

1405 2P/2S
3P/3S
4P/4S

PANORAMIC VIEW OF THE SITE FROM
SOUTHWESTERN CORNER OF SITE
GOING FROM NORTHEAST TO EAST.

1412 5P/5S
PICTURE OF PIT AREA WHERE SOIL
GAS TESTING WAS DONE DURING PHASE II.
THE PIT AREA IS NOW FILLED IN.
MOUND OF SAND & GRAVEL NEAR AREA.

1417 6P/6S
PICTURE OF MW 3.

[illegible] 4/12/95

1422 7P/7S
8P/8S
9P/8S

PANORAMIC VIEW OF SITE FROM NORTHEAST CORNER FACING SOUTHWEST TO WEST. VIEW OF SCHLEIDER C & D DUMP IN THE BACKGROUND.

1425 10P/10S
PICTURE OF OLD NORTHPORT LANDFILL ACROSS TOWNLINE ROAD DUE WEST OF THE SITE. PICTURE TAKEN FROM NORTHEAST CORNER.

NEAR HOPPER AND STORAGE TRAILER PARTS OF METAL BEING ~~EXTRACTED~~ J.J. SEPARATED FOR DUMPING AND REUSE

BLUE SHACK NEAR MAIN BUILDING IS LOCATION OF WATER WELL (NOT IN USE ANYMORE).

1440 SPEAK WITH MR. POMARO
FINISH REGION.

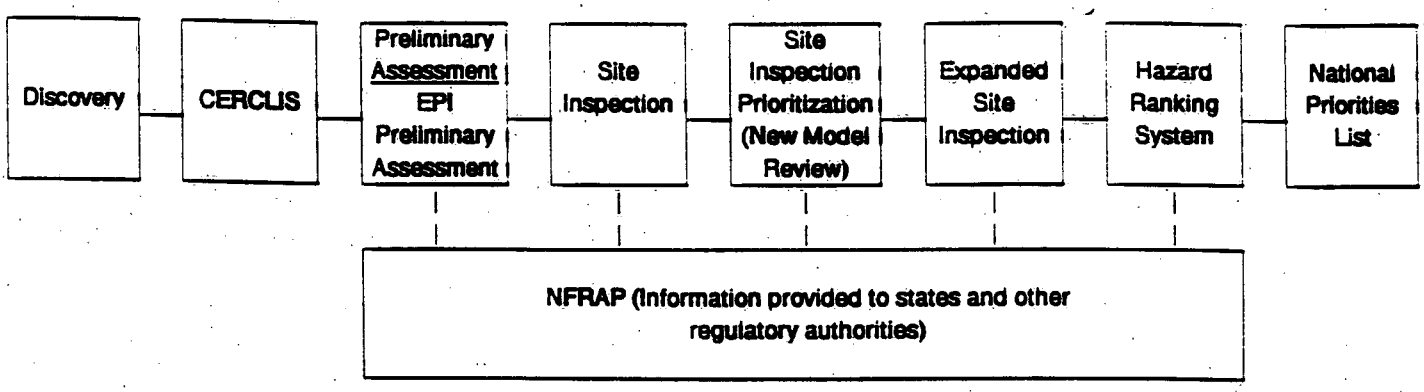
4/12/95

ATTACHMENT 3

Review of Analytical Data

If previous analytical data are available, they should be reviewed for information which supports the design of the sampling and analysis program, tests site hypotheses, and documents the site score. The SI investigator should review all previous analytical data. While analytical data collected for other purposes may not meet SI objectives, site-specific analytical data are generally helpful in better understanding the nature of the problem at the site, regardless of data sources or data quality. The depth of the review depends on the overall quality and quantity of data, the intended use of the data, and whether they are representative of current site conditions and comparable to SI data. Determining whether available data can be applied as SI-generated data requires the professional judgement of an experienced reviewer. Both validated and non-validated analytical data may be available. Previous SI data will be validated and of CLP-quality. Non-validated data may contain false positives and false negatives, as well as quantitation, transcription, and calculation errors. If data of unknown or questionable quality are used for decision-making, the investigator should review all available information to assess the level of certainty associated with the data. If these data are used for HRS documentation, data validation will be necessary. The investigator should be able to determine the general quality of the data set by reviewing QC data for evaluation under the Superfund Program.

SUPERFUND SITE ASSESSMENT PROGRAM



SITE ASSESSMENT REPORTS

1. PRELIMINARY ASSESSMENT
   - Quick Review of Readily Accessible Records and Reports
   - Undertaken to Determine the Existence of a Problem and the Need for Further Action at a Site by Characterizing:
     - Magnitude of the Hazard
     - Source and Nature of the Release or Potential Release
     - Identification of Targets
   - Does Not Include Sample Collection
2. SITE INSPECTION
   - The Purpose of the Site Inspection is to:
     - Further Define and Characterize the Problem
     - Provide Data for the Hazard Ranking System (HRS) Scoring and Compute Initial Score
     - Identification of Targets
     - Determine the Necessity of Further Action
   - The Site Inspection Involves an On-Site Visit and Sampling (10+/- Samples)
   - A Site Inspection is not an Extent of Contamination Study
3. SITE INSPECTION PRIORITIZATION
   - Quick Review of Readily Accessible Records and Reports
   - Undertaken to Determine the Validity and Update Background Conditions Under the New HRS Model, and the Need for Further Action at a Site by Characterizing:
     - Magnitude of the Hazard
     - Source and Nature of the Release or Potential Release
   - Included On-Site Visits or Sample Collection as needed
     - Analyze Samples/Limited Analytical Resources
     - Account for Significant Safety Hazards On-Site
4. EXPANDED SITE INSPECTION

   A Follow-Up Inspection May Be Recommended After the SI To:
   - Gather Additional Data Necessary to Strengthen or Substantiate the Initial HRS Score
     - Geophysical Surveys
     - Installation of Groundwater Monitoring Wells
     - Additional Sampling