

REPORT, BCP, C314117, 2001-11-01, PHASE I - II.
1993-1996

R. D.
(Please Scan to size
and in color)

FILE COPY

FILE COPY



PHASE I ENVR. AUDITS

CHARLEN & ESS
(07/93) (01/96)

PHASE II ENVR. AUDIT
GTI (12/93)

HILL ENVIRONMENTAL GROUP, INC.
Environmental & Engineering Services



FILE COPY

INVESTIGATION WORKPLAN

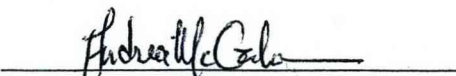
**Beacon Terminal
South Ave.
Beacon, NY**

(Volume 3 of 3)

Prepared for:
Mr. Brian Quinn
Beacon Terminal Associates, L.P.

Prepared by:
HILL ENVIRONMENTAL GROUP, INC.


J. Gregory Hill, P.E., P.G.
Technical Director


Andrea McGahan, P.G.
Manager, Environmental Projects

November 2001



ATTACHMENTS

- | | |
|--------------|---|
| Attachment 1 | Phase I Environmental Site Assessment (The Chazen Companies, 7/93) |
| Attachment 2 | Phase II Environmental Site Assessment Report (Groundwater Technology, Inc., 12/93) |
| Attachment 3 | Phase I Environmental Audit (Ecosystems Strategies, Inc., 1/96) |
| Attachment 4 | Subsurface Investigation Report (Ecosystems Strategies, Inc., 4/96) |



ATTACHMENT 1

Phase I Environmental Site Assessment

(The Chazen Companies, 7/93)

7/93

PHASE I
Environmental Site Assessment

BEACON TERMINAL BUILDINGS
579 SOUTH AVENUE
BEACON, NEW YORK

THE
Chazen
COMPANIES

Prepared for:

Eran Lighting-Plastics Ind. Ltd.
Brockway Road
P.O. Box 878
Beacon, New York

PHASE I
Environmental Site Assessment

BEACON TERMINAL BUILDINGS
579 SOUTH AVENUE
BEACON, NEW YORK

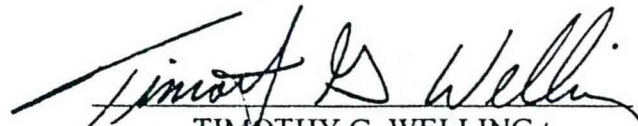
Prepared for:

Eran Lighting-Plastics Ind. Ltd.
Brockway Road
P.O. Box 878
Beacon, New York

BEACON TERMINAL BUILDINGS
579 SOUTH AVENUE
BEACON, NEW YORK



GEORGE MINERVINI
PROJECT MANAGER



TIMOTHY G. WELLING
DIRECTOR



DATE

Table of Contents

1.0 INTRODUCTION	1
1.1 Objective	1
1.2 Summary	1
1.3 Methodology	1
2.0 APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS	3
2.1 Federal Agencies	3
2.2 State Agencies	3
2.3 Local Agencies	4
3.0 SITE DESCRIPTION AND BACKGROUND	4
3.1 Site Location	4
3.2 Site History	6
3.3 Building and Facilities	8
3.4 Building Heat and Energy	11
3.5 Facility Operations	11
4.0 SUMMARY OF FINDINGS	11
4.1 Aerial Photographs	11
4.2 Aboveground and Underground Storage Tanks	12
4.3 Waste Sources	13
4.3.1 Wastewater	13
4.3.2 Solid and Hazardous Waste	13
4.3.3 Air Emissions	13
4.4 Hazardous Materials	13
4.5 Asbestos Containing Material (ACM)	14
4.6 Polychlorinated Biphenyls (PCBs)	14
5.0 GROUNDWATER	15
5.1 Groundwater	15
5.2 Wetlands	15
5.3 Flood Plain	15
6.0 CONCLUSIONS	19
7.0 RECOMMENDATIONS	19
REFERENCES	21
APPENDIX A	Site Photographs
APPENDIX B	Regulatory Information
APPENDIX C	Asbestos Sampling Results

1.0 INTRODUCTION

1.1 Objective

The objective of this Phase I Environmental Site Assessment was to determine potential environmental liabilities associated with the Beacon Terminal Buildings located on South Avenue in Beacon, New York (Figure 1.1). Particular emphasis was placed on the on-site presence of evidence of historical waste disposal, residual chemicals, and spills or leaks associated with the past and present usage of the site.

1.2 Summary

Information made available to CES has indicated that the site is not in compliance with NYSDEC and USEPA regulations governing the bulk storage of petroleum and chemical products.

A preliminary asbestos survey has indicated that asbestos containing material is present on site in the form of thermal system insulation (pipe wrap and tank coating) and as cementitious wallboard located in Building No. 4.

Transformer units are located on site which may contain PCBs.

Historic solid and hazardous material disposal practices at the site are unknown and there is photo documentation of dumping and land disturbance on site.

1.3 Methodology

The assessment was conducted during June and July of 1993 and included a historical review, a review of available regulatory agency information, an inspection of the site on June 16, 1993, and interviews and conversations with persons having knowledge of the site or records of the site.

The assessment report was conducted by George Minervini, Project Manager, with assistance from Beth Walsh.

The following persons were interviewed and/or provided pertinent information:

Mr. Weiser, owner of the property
Larry Bedowsky, Environmental Technical Services, Chemprene Corporation
Bill O'Keefe, City of Beacon Water Department

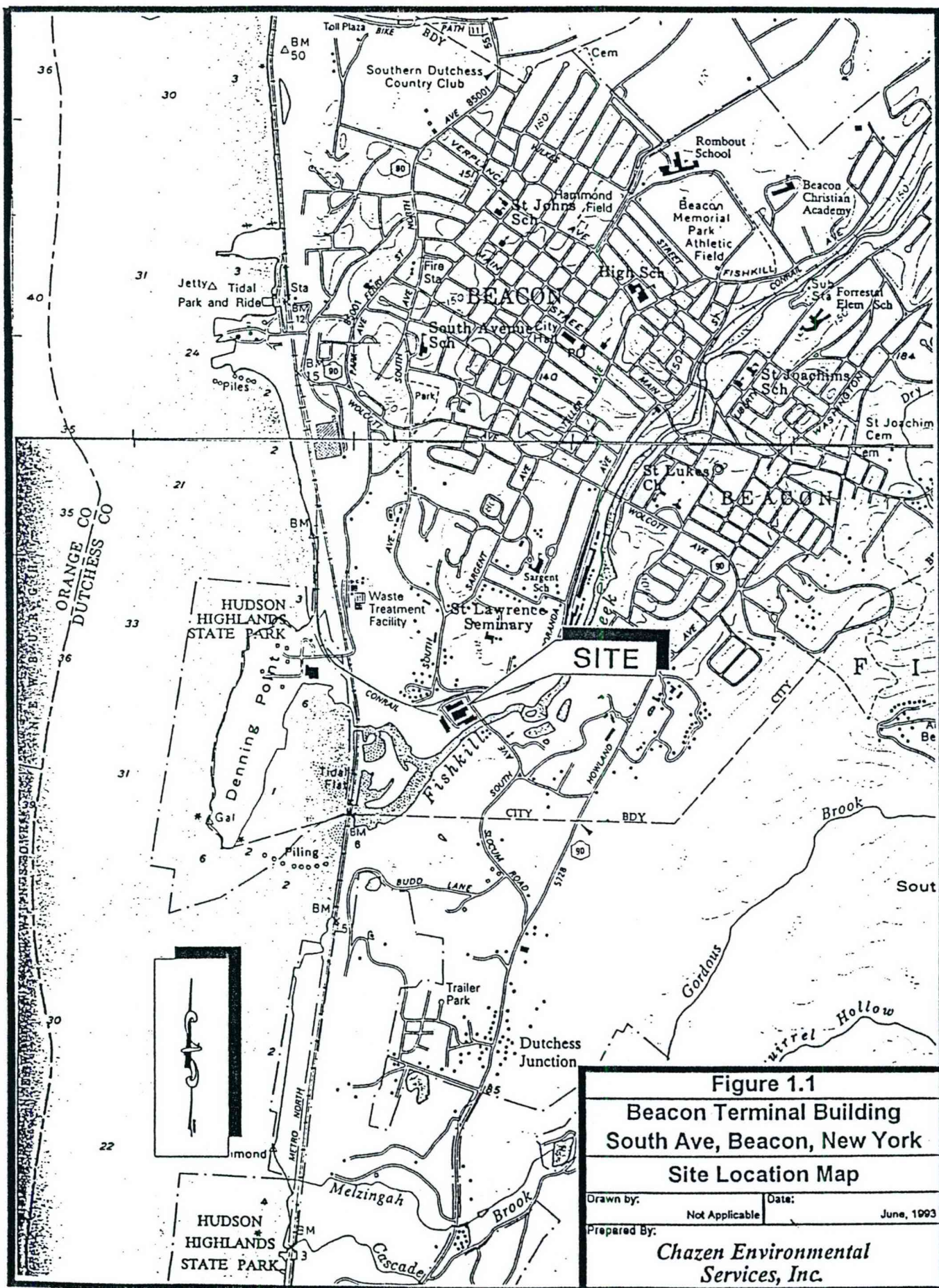


Figure 1.1
Beacon Terminal Building
South Ave, Beacon, New York
Site Location Map

Drawn by:	Date:
Not Applicable	June, 1993
Prepared By:	
Chazen Environmental Services, Inc.	

Art Tully, City of Beacon Engineer
Ms. Ellen Stoutenburgh, Records Access Officer, New York State
Department of Environmental Conservation
Richard Sewell, Freedom of Information Officer, Dutchess County
Health Department
Personnel at the Dutchess County Real Property Tax Office
Personnel at the Dutchess County Records Office

2.0 APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS

2.1 Federal Agencies

A review of United States Environmental Protection Agency (USEPA) documents has shown that the site is not currently on, nominated, or proposed for inclusion on the National Priorities List (NPL) as a Superfund site. There are no NPL sites within one mile of the Beacon Terminal Buildings facility.

An additional federal agency review was conducted of properties included in the EPA Comprehensive Environmental Responsibility, Compensation and Liability System (CERCLIS), a database of potential NPL sites. The Beacon Terminal Buildings facility is not included on the CERCLIS list. However, the following CERCLIS listed properties are located within one mile of the Beacon Terminal Buildings facility:

Tesa Tuck Industries, Tioranda Ave.
Old Beacon City Landfill
Beacon City Landfill, Dennings Ave.

The inclusion of a facility on this CERCLIS list does not confirm the presence of an environmental problem or a public health threat. All identified sites will be assessed by the USEPA to determine the extent, if any, of a hazardous waste problem.

2.2 State Agencies

The Beacon Terminal Buildings facility is not included in the New York State Department of Environmental Conservation (NYSDEC) listing of Inactive Hazardous Waste Disposal Sites (April, 1993). Additional information concerning hazardous waste generators, known or suspected hazardous waste remediation sites, solid waste management facilities, petroleum bulk storage facilities, oil or chemical spills, incidents of surface and groundwater contamination, water quality requirements and test results, and SPDES permits or application on or within the

immediate vicinity of the site was requested from the NYSDEC Region 7 Records Access Officer under the Freedom of Information Law (FOIL) (Appendix B).

Information received from the NYSDEC indicates that the site is not listed in any of the other categories listed above. However, numerous aboveground and underground storage tanks are located on the property. The NYSDEC has no record of any of the ASTs or USTs as having been registered with their office. The ASTs and USTs on site are in contravention of NYSDEC regulations governing the storage of chemicals and petroleum.

2.3 Local Agencies

Information was requested from the Dutchess County Department of Health (DCDH), Environmental Section. The DCDH responded that their department had no records on file regarding the site (Appendix B).

3.0 SITE DESCRIPTION AND BACKGROUND

3.1 Site Location

The site is located on the north bank of the Fishkill Creek and consists of three parcels of land comprising approximately twenty acres. On the Dutchess County Real Property Tax Maps the parcels are described as Tax Lots Nos. 830270, 808256, and 735246 (Figure 3.1). The property is bordered on the north by a Con Rail Corporation right-of-way. The western edge of tax parcel number 735246 is bordered by a right-of-way for the Metropolitan Transit Authority. The surrounding neighborhood consists primarily of residential properties.

The CES protocol for Phase I Assessments includes researching previous ownership of the land parcels in question and ownership of neighboring properties are researched as well. The ownership of neighboring properties can often indicate, in the event that an environmental problem is discovered, whether a neighboring property has any responsibility.

Following is a list of tax numbers, owners, and usage of the properties surrounding the Beacon Terminal Buildings facility (see Figure 3.1):

<u>Owner</u>	<u>Tax Lot No.</u>	<u>Usage</u>
Jonathan Slocum	770155	210-Resid. Single Family
Polo Field Investment	819168	311-Resid. Vacant
Blaine Sullinger	829230	120-Resid. Single Family
T. Russell	840230	220-Two Family Resid.
Central Hudson	894286	
C. Lyons	715293	311-Resid. Vacant Land
R. Riley	724284	311-Resid. Vacant Land
L. Jadick	764295	210-Resid. Single Family
Italian Capuchin Fathers	884364	
City of Beacon IDA	001258	642-Health Facility

3.2 Site History

As mentioned above, the site consists of three contiguous tax parcels. Records available at the Dutchess County Real Property Tax Office list Beacon Terminal Associates L.P. as owners of the site since April 29, 1992. Previous owners of this parcel include the following:

<u>Owner</u>	<u>Date of Ownership</u>
Beacon Terminal Associates	To April 29, 1992
Beacon Terminal Corporation	To December 23, 1986
The City of Beacon (portion)	To February 15, 1954 and November 15, 1954
Beacon Terminal Corporation	To November 19, 1952
Merrimac Hat Corporation	To February 2, 1949
Dutchess Hat Works, Inc.	To June 2, 1948
Walter N. Purdy	To January 6, 1947
Leila Ramsdel and others	To June 18, 1943
Tomkins Hat Works, Inc.	To February 1, 1942

Information obtained from the Sanborn Mapping and Geographic Information and Maps indicates that the site was occupied by the Tioronda Hat Works, Co. in 1919. The 1919 map indicates that present-day buildings 1, 2, and 4 (Figure 3.3) were present on site. The map also indicates that power to the facility was provided by water and steam. The building had electric lights and boilers were fueled with coal.

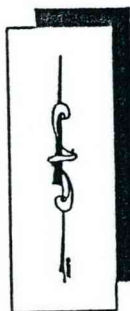
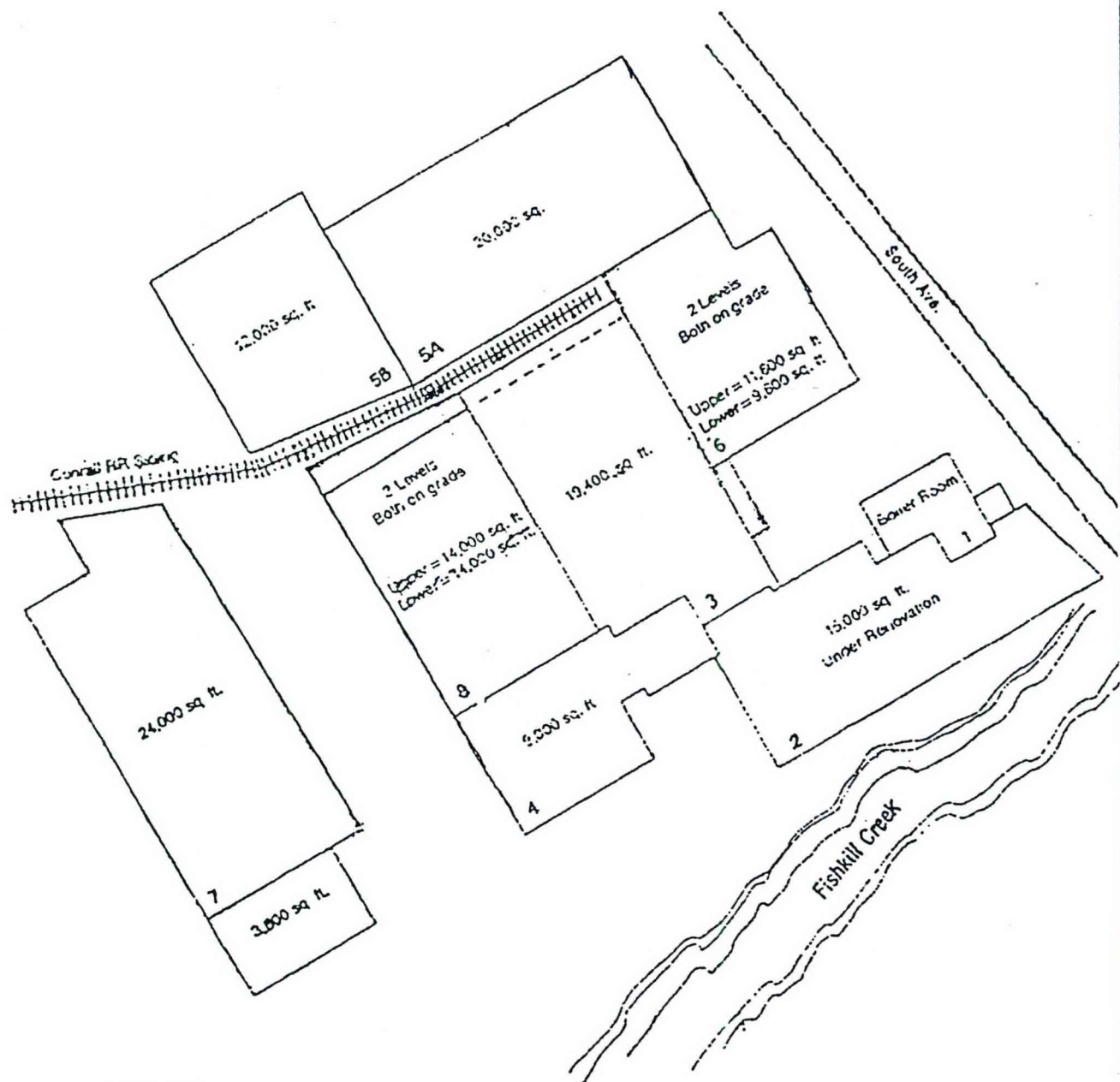


Figure 3.3	
Beacon Terminal Building	
South Ave, Beacon, New York	
Site Map	
Drawn by:	Date:
Not Applicable	June, 1993
Prepared By:	
Chazen Environmental Services, Inc.	

A map produced in 1927 by the same company shows that the main buildings are still intact and that a junk storage building located to the northwest of the main complex had been removed. During this time, the property was known as the Dutchess Hat Works.

A map produced in 1946 shows some addition onto the southwest corner of Building 4, west of the old dye house, and that two small storage buildings and a machine shop have been constructed northwest of the main building complex. The map also indicates that coal is still the fuel used on site and that a 50,000 gallon steel water tank has been erected just north of the building complex.

A map produced in 1962 indicates that the complex is now called the Beacon Terminal and is owned by the Atlas Fibers Company. All buildings presently on site are indicated as being present in 1962 (Figure 3.3). A railroad siding has also been added. Present Buildings 1, 2, 3, 4, 6, and 8 are listed as being under the operation of the Atlas Fiber Company, a fiber reclamation operation. Fuel oil for this complex is still listed as coal. The map indicates that present Buildings 5A and 5B are occupied by Chemical Rubber Products, Inc. Building No. 7 was occupied by BASF Colors & Chemicals, Inc. The exact operations that were carried out in Buildings 5A and 7 are unknown at this time.

According to Mr. Weiser, the owner of the property, operations of the Atlas Fibers Company were terminated in 1968.

In approximately 1972 the IBM Corporation leased the facility and occupied all buildings, except Building 1 and a portion of Building 2. The facility was reportedly used for the storage of IBM equipment. IBM left the facility in approximately 1978.

New York State (possibly the Department of Corrections) occupied Buildings 5A and 5B between approximately 1978 and 1980. This was during the time that the Downstate Facility was being constructed and the buildings were used for the storage of equipment and supplies.

In 1980 the Center for Humanities, who packaged and distributed educational materials, occupied Buildings 3, 4, 6 and a portion of 8. This company left the site in July of 1992.

3.3 Buildings and Facilities

Numerous buildings are located on site as indicated on Figure 3.3 and the site map located in the pocket at the back of the report. The older

portion of the facility is located at the southeast corner of Tax Lot No. 808256 and contains the original buildings which had housed the hat works.

Building No. 1 is the boilerhouse and is believed to have been constructed in 1876. This building contains two large boiler units and attached shop area, and small office. Originally, the boilers were fired with coal and through the years were converted to burn #6 Fuel Oil. Various barrels of chemical additives for use in the boiler operation are present in the basement of the building, along with two 275 gallon aboveground storage tanks for the storage of diesel fuel. Information available in this building indicates that one of the boiler units (Riley) was built in 1939 (see photographs Appendix A).

Building No. 2, which is attached to the south end of the boiler room, was listed on the 1919 Sanborn map as having been the location of two dye houses on the creekside, a scouring room, carting and fur napping areas, and wool storage areas. This building is three stories tall, is constructed of brick, with an addition of wood and steel timbering. Portions of this building were constructed in 1876, 1887, 1902 and 1957.

The basement of this building holds the equipment (compressors, tanks, pumps) used throughout the history of the building. The floors are cement with regularly spaced floor drains. The southeast, creekside, room has a fire sprinkling system located at the extreme southeast corner and a large water treatment (softening) system located along the north wall. Eight five gallon pails of an unknown, sandy material are located toward the east side of the room. The second floor of Building 2 is a large open area with a wooden floor. This area is listed on the 1991 site map as being an idle machine shop. One of the rooms contains some five gallon pails of roof patching and coating material, indicated as containing asbestos. The third floor of this building is listed as having been a storage area for machine parts and also contains an administrative section or office area. The floor on the third story are wooden, the creekside room is a large open space. One storage room contains stacked thermal system insulation, some of which has been determined to contain asbestos.

Building 3, built in 1949, is a large open loading space, listed on the 1962 Sanborn map as being the location for cotton baling and storage. The floors in this area are concrete and slope toward the creek. A small suite of offices has been elevated on the south side of this building.

According to information supplied on the 1991 site map, Building 4 was divided into two buildings, 4 and 4A. Building 4 is listed as having been

constructed between 1949 and 1951, and Building 4A constructed in 1958. Sanborn maps indicate that Building 4 was a dye house and a portion was used for wool storage. Subsequent maps list the usage of this building as a scalding area, filter room, and machine shop.

Building 5 is a one story, brick structure that has been divided into two portions. Building 5A was constructed in 1952 and Building 5B was constructed in 1954. The buildings are located at the north end of the site, just north of the railroad siding. The building is listed as having been occupied by the Chemical Rubber Products, Inc., Plant No. 1 on the 1962 Sanborn map and as storage areas for computer parts on the 1991 site map. The interior of these buildings was not accessible during the site investigation.

Building 6 is located on the east side of Building 3 and is a two story structure built in 1952. The 1962 Sanborn map indicates that the building was part of the Atlas Fibers Company fiber reclamation operations. The 1991 site map lists the use of the building as storage for educational kits on the lower level and offices and box storage on the upper level. The lower level has a cement floor and a large open loading space. The upper level also has a large open loading area and two separate office areas located on the east side of the building.

Building 7 is a large concrete block, brick faced building, built in 1953, with an attached office building on the south side, which was constructed in 1958. This building is located in an area once occupied by a machine shop as indicated on a 1946 Sanborn map. The 1962 Sanborn map indicates that BASF Colors & Chemicals, Inc. occupied the building at that time. The interior of this building was inaccessible during the site investigation. This is the westernmost building at the facility.

Building 8 is a two level, concrete block, brick faced building constructed in 1955. The 1962 Sanborn map indicates that this building was used for cotton baling and storage during that period. The 1991 site map indicates that the storage of educational kits was the use of the lower level during that time period and does not indicate any specific usage for the upper level. This would be the time that the Center for Humanities occupied the building. A cement lined room, approximately 10' x 60', is located outside of the lower level of Building 8 (west side). The site map indicates that this room was used as a dust collector.

The remainder of the main facilities area on Tax Lot 808256 consists of paved roadways or parking areas. Three underground storage tanks are located on the north side of Building 5 and a 500 gallon propane tank is

located just north of the boilerhouse, along with a transformer, switching room, and fenced-in transformer area.

A number of aboveground storage tanks (six) are located in an open area between Buildings 2 and 4. These tanks will be discussed further in Section 4.2.

Two small, wooden storage sheds are located on the east side of South Avenue on Tax Lot 830270. A 20,000 gallon underground storage tank for #6 fuel oil is also located on this tax parcel.

3.4 Building Heat and Energy

Heat for all buildings was provided by the two boiler units located in the boilerhouse. Insulated steam lines for hot water emanate from the boilerhouse and are interconnected into all the buildings. The boilers, through time, have been fueled by coal and/or #6 fuel oil.

3.5 Facilities Operations

The facility has housed numerous and various operations through time since approximately 1876 as indicated on the 1991 site map. Known occupants of the facility have included:

- Tioranda Hat Works
- The Dutchess Hat Works
- The Merimac Hat Corp.
- Atlas Fiber Company
- BASF Colors & Chemicals, Inc.
- Chemical Rubber Products, Inc.
- The Chemprene Corporation (Witco)
- IBM
- New York State Department of Correctional Services
- The Center for Humanities

4.0 SUMMARY OF FINDINGS

4.1 Aerial Photographs

Three aerial photographs taken in 1970, 1980 and 1990, were available for comparative analysis:

1970 Photo

The photo I.D. No. is 1923-02-128, and shows that the site is active (boiler stack smoke). Debris, indicative of dumping, is visible on the hillside west of Building 7. Debris is also visible south of the Con Rail tracks near the northwest corner of the site. A land disturbance area is also seen between north of the Building 7 parking lot and the railroad siding.


1980 Photo

The photo I.D. No. is DUT-5-82. The site appears vacant as only one vehicle is visible near Building 6. The 50,000 gallon water tower, formerly located north of Building 2, has been removed. Land disturbance and debris are visible north of the rail siding and west of Building 7, respectively.

1990 Photo

The photo I.D. No. is DUT90-54, 2-160. The site appears vacant with little change from the 1980 photo.

4.2 Aboveground and Underground Storage Tanks

Ten underground storage tanks are known to presently be on the property and were used for the storage of petroleum products or chemicals. 

The underground storage tanks consist of a 20,000 gallon tank located on the east side of South Avenue, reportedly used for the storage of #6 fuel oil. According to the owner, approximately 5,000 gallons remain in the tank. The other three underground storage tanks are located on the north side of Building 5 and consist of one 4,000 gallon tank and two 2,000 gallon tanks. According to the owner, these tanks were installed and maintained by the Chemprene Corporation and reportedly were filled with sand when Chemprene vacated the property. None of these tanks were ever registered with the NYSDEC as Chemprene vacated the property before NYSDEC issued Petroleum Bulk Storage Regulations in 1985.

Six aboveground storage tanks are located in an area between Buildings Nos. 2 and 4. According to the owner, four of the tanks were used to store "batch" oil which he defined as a lubricating oil used during the fiber reclamation process. The estimated volume of these tanks is 7,500 gallons each. The remaining two tanks are reported to have stored

hydrochloric acid and sulfuric acid, respectively. Volume of these tanks is estimated at 10,000 gallons each. None of these tanks have ever been registered with the NYSDEC.

4.3 Waste Sources

4.3.1 Wastewater

Wastewater generated at the facility would have been generated from sanitary facilities, the boilerhouse, and whatever process wastewater was generated at the site. It is presumed that during the first half of this century, wastewater was directed to the Fishkill Creek. At this time it is unknown when the facility was connected to the Beacon Municipal City Sewer System.

4.3.2 Solid and Hazardous Waste

The disposition of solid waste throughout the entire history of the site is unknown. The owner has stated that, for at least ten years, during which Atlas Fibers occupied the site, the City of Beacon was responsible for the pick-up and disposal of solid waste. The owner also stated that, as other companies rented various buildings, they contracted with local carters for the pick-up and removal of solid waste from the site. These carters have included the Royal Carting Company.

It is unknown if any hazardous wastes were generated on the site throughout the history of the property. The present owner believes that companies that leased various buildings on the site, such as IBM and the Chemprene Corp., used the site only for the storage and transfer of supplies and equipment.

4.3.3 Air Emissions

The owner has stated that the site has never applied for, or been issued, an air permit for boiler stack emissions.

4.4 Hazardous Materials

The quantity of hazardous materials historically present on site is unknown. Acids, specifically hydrochloric and sulfuric acids, are known to have been stored in aboveground storage tanks located between Buildings Nos. 2 and 4. These specific chemicals were used when the Atlas Fiber Company occupied the premises. The following chemicals are

located in 55 gallon drums in the ground floor of the boilerhouse: diethylamino ethanol; Cyanamer P35; Abate, described as a fuel additive; caustic soda; sulfite; phosphate; and sodium hydroxide. No other chemicals or drums of chemical substances were seen in any of the other accessible buildings. The owner has stated that most chemicals used in the Atlas Fiber Company operations were provided by the Axton Cross Company located in Wappingers Falls, New York.

4.5 Asbestos Containing Material (ACM)

Suspect ACM is present throughout the site as thermal system insulation (pipe wrap). A limited asbestos survey was conducted at the site during the environmental site investigation. Bulk samples were collected from thermal system insulation (pipe wrap) in Building No. 2, floor tiles from Buildings Nos. 2, 4, and 6, ceiling tile from Building No. 2, wallboard from Building No. 4, and cementitious material on the water heater associated with the water softening equipment in the ground floor of Building No. 2. Also five gallon pails of patching cement and roof coating materials containing asbestos were located on the second floor of Building No. 2. The following materials tested positive for asbestos content greater than 1%: thermal system insulation stored in the third floor of Building No. 2; cementitious wallboard collected from a wall in Building No. 4, and a cementitious material taken from a water heating unit associated with the water softening equipment located on the ground floor in Building No. 2.

Thermal system insulation in the remainder of the buildings was not sampled for analyses. The present owner of the complex has stated that, to his knowledge, asbestos containing materials present as thermal system insulation or pipe wrap have been removed from all buildings except the boiler room.

4.6 Polychlorinated Biphenyls (PCBs)

A transformer unit presumed to be owned by the Beacon Terminal Associates is located by the northeast side of the boiler room and is enclosed within a chain link fence. A concrete block, power switching vault, is located to the west and south of the outside transformer area. One 600 KVA Esco zig-zag transformer is located in a garage loading bay located on the east side of the boilerhouse. No information is available as to whether the cooling oil for any of these transformer units has been tested for PCB content.

5.0 GROUNDWATER

5.1 Groundwater

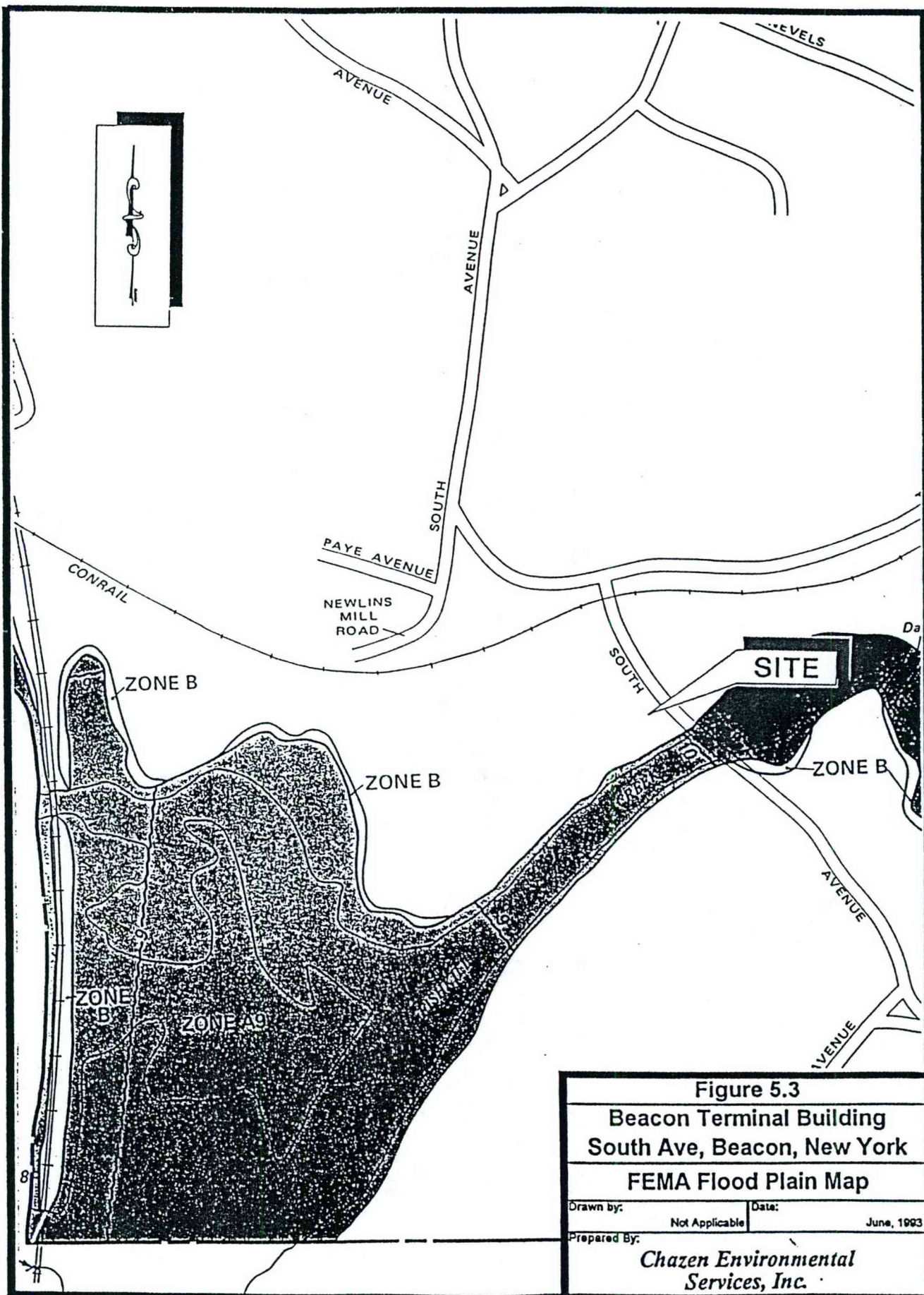
Depth to groundwater beneath the site is unknown. However, depth to groundwater is assumed to be variable beneath the site as the topography dips from north to south between elevations of 50 feet to near sea level at the creek. The Fishkill Creek marks the southern border of the site.

5.2 Wetlands

Wetland maps produced by the U.S. Department of the Interior, Fish and Wildlife Service, and prepared by the National Wetlands Inventory (NWI) in 1990, indicate that there are no NWI delineated wetlands on site (Figure 5.2-A). The Fishkill Creek is classified as R3UBH. This is a permanently flooded, upper perennial, riverine system with an unconsolidated bottom. Wetland maps produced by the NYSDEC indicate that there are no NYSDEC delineated wetlands located on the property (Figure 5.2-B).

5.3 Flood Plain

Floodway maps produced by the Federal Emergency Management Agency (FEMA) indicate that portions of the site are located within the 100 year flood boundary of the Fishkill Creek (Figure 5.3).



6.0 CONCLUSIONS

Information made available to CES has indicated that the site is not in compliance with NYSDEC and USEPA regulations governing the bulk storage of petroleum and chemical products.

A preliminary asbestos survey has indicated that asbestos containing material is present on site in the form of thermal system insulation (pipe wrap and tank coating) and as cementitious wallboard located in Building No. 4.

Transformer units are located on site which may contain PCBs.

Historic solid and hazardous material disposal practices at the site are unknown and there is photo documentation of dumping and land disturbance on site.

7.0 RECOMMENDATIONS

- Historical contaminant storage, usage and disposal practices are unknown for some of the site's industrial history and a CERCLIS listed facility (Tuck Industries) is located less than 1/4 mile upstream of the site. It is recommended that the groundwater quality at the site be investigated.
- A minimum of seven monitor wells are recommended to assess the groundwater quality on site: one well to be installed near each of the storage tank locations; one well to be installed near the east property boundary to test for contaminant migration on site from an upstream source; and three wells to be located in areas of photo documented dumping or land disturbance. The estimated cost for installation, sampling and analyses is approximately \$4,000 per well.
- Determine the amount of asbestos containing material (ACM) present on site by conducting a comprehensive asbestos survey of the facility. A limited ACM survey has shown that ACM is present as thermal system insulation in the boiler room, as pipe wrap, as wallboard, and possibly as Galbestos and transite paneling. An ACM survey can be performed for approximately \$2,500 by Asbestos Industries of America (AIA). This amount can be subtracted from any future remediation contracted to AIA. If all thermal system insulation, etc., proves to be ACM, abatement costs could be as high as \$140,000.

- All aboveground and underground storage tanks located at the facility should be registered with the NYSDEC according to NYSDEC regulations 6 NYCRR Part 612 and 6 NYCRR Part 596. Registration costs are approximately \$1,000.
- Remove all aboveground and underground storage tanks from the site if they are not to be used in the future. Estimated cost for removal and disposal is approximately \$45-50,000.
- Sample and test the cooling oils in all on-site transformer units to determine PCB content. Estimated cost for sampling and analysis is approximately \$2,000.

REFERENCES

United States Environmental Protection Agency (EPA), National Priorities List (NPL) of Sites in New York State, March, 1993.

EPA, 1993 CERCLIS list of Potential Hazardous Waste Sites in New York State.

New York State Department of Environmental Conservation (NYSDEC), Inactive Hazardous Waste Disposal Sites in New York State, April, 1993.

NYSDEC, 1993, List of Spills.

NYSDEC, 1993, List of Hazardous Waste Generators.

NYSDEC, 1993, List of Hazardous Waste Remediation Sites.

NYSDEC, 1993, List of Petroleum Bulk Storage Facilities.

NYSDEC, 1993, List of Solid Waste Management Facilities.

MAPS CONSULTED

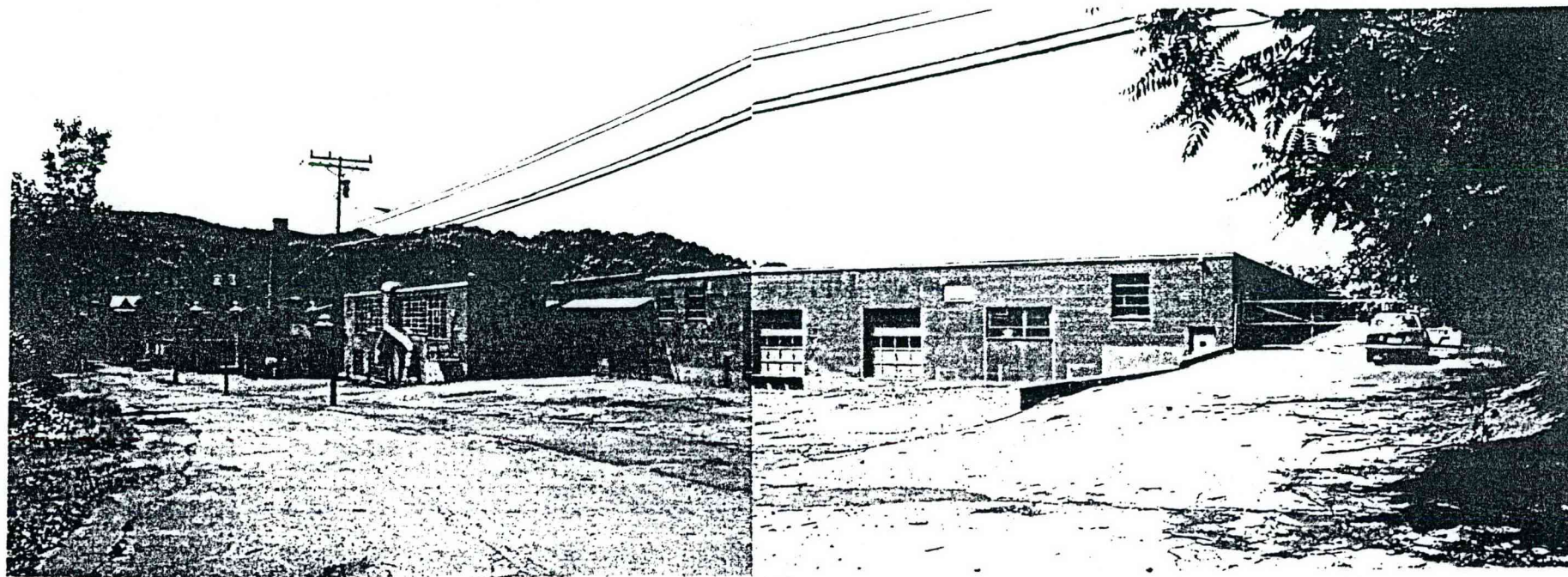
New York State Department of Transportation, 1989, West Point Quadrangle Dutchess County Real Property Tax Map

U.S. Department of the Interior, National Wetlands Inventory, West Point Quadrangle

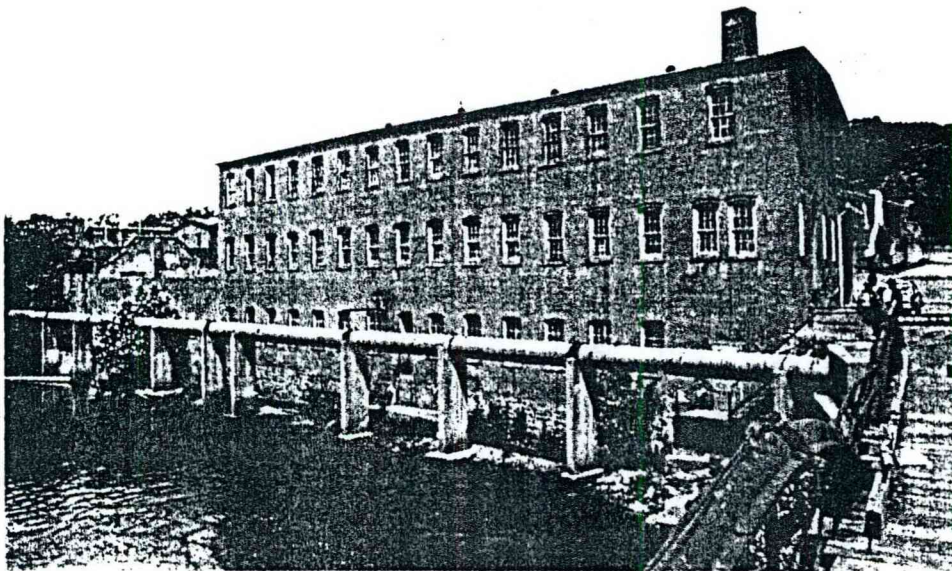
NYSDEC, Freshwater Wetlands Map, West Point Quadrangle

APPENDIX A

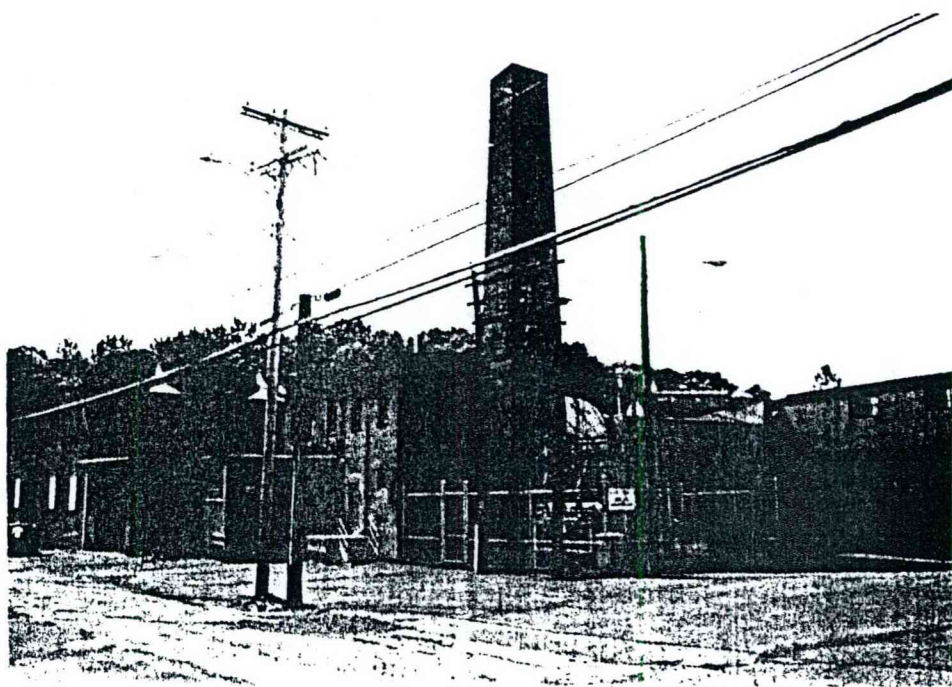
Site Photographs



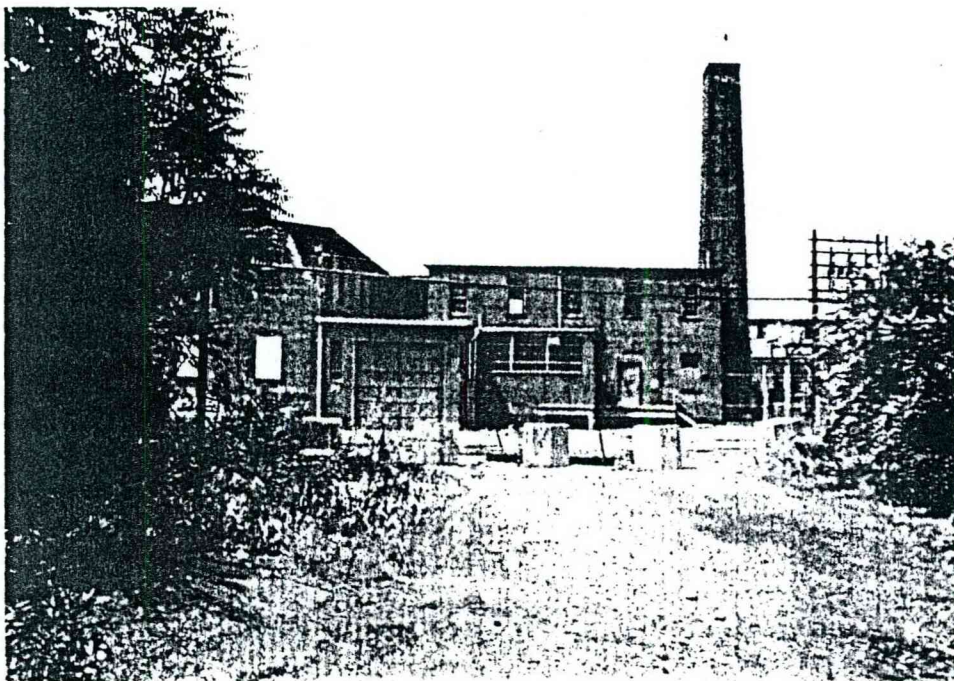
East side of Beacon Terminal Associates property.
View looking south.



2
View looking west toward south side of Building #1. South Avenue at right.
Fishkill Creek in foreground. Pipeline in center carries sewage to the city treatment plant.

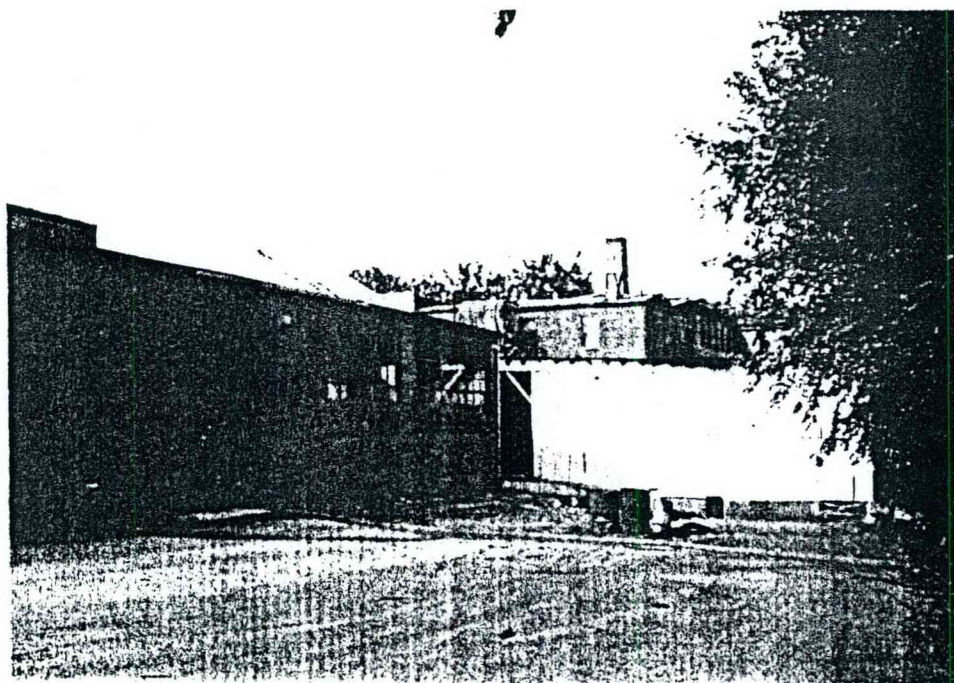


3
View looking south. Boiler house stack
and transformer power station in center.



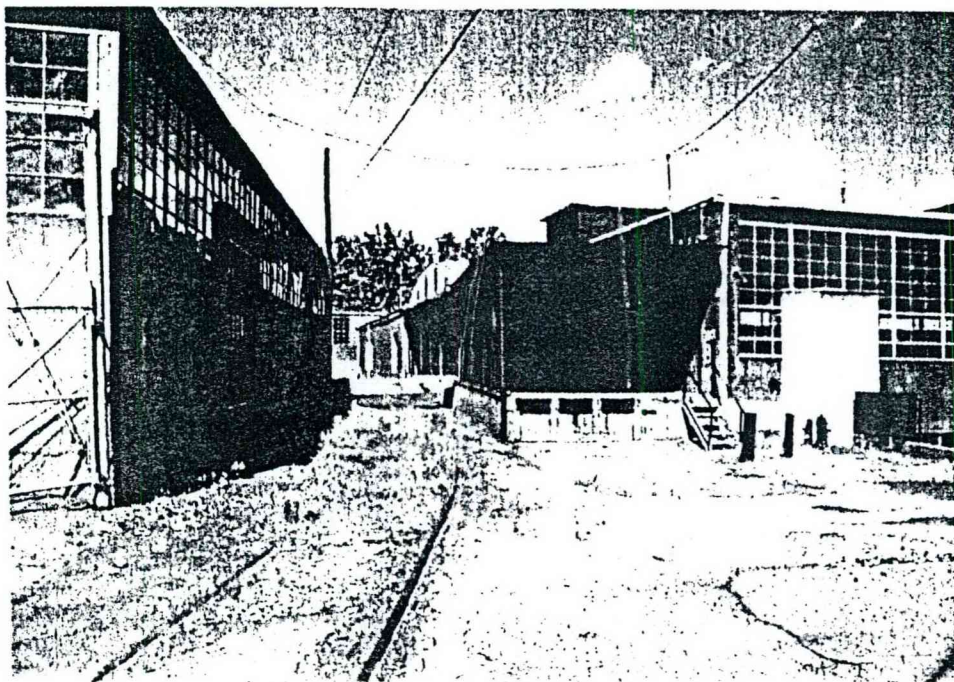
4

View looking southwest toward complex. Fill port for 20,000 gallon underground storage tank at left foreground.



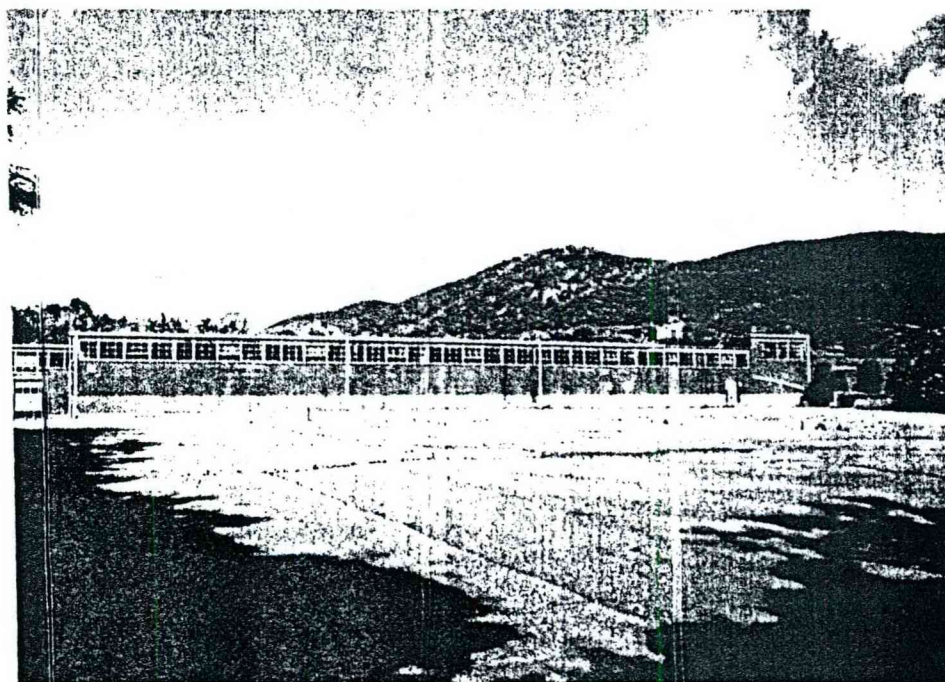
5

View looking northeast. Building #4 at left center, storage shed at right center.



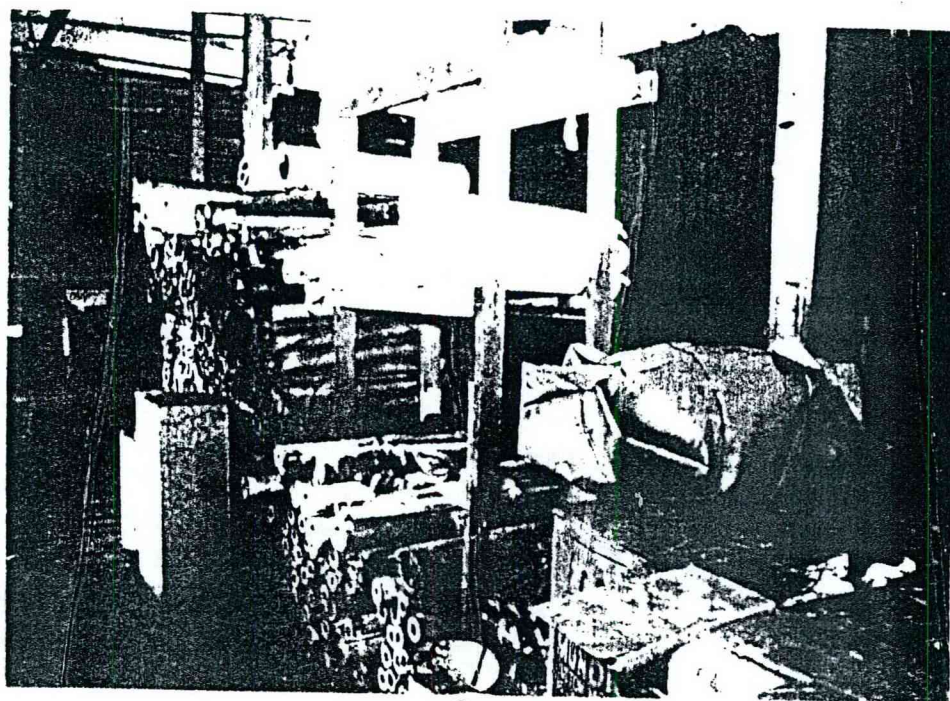
6

View looking east along rail siding south
of Buildings 5-A and 5-B (left center).



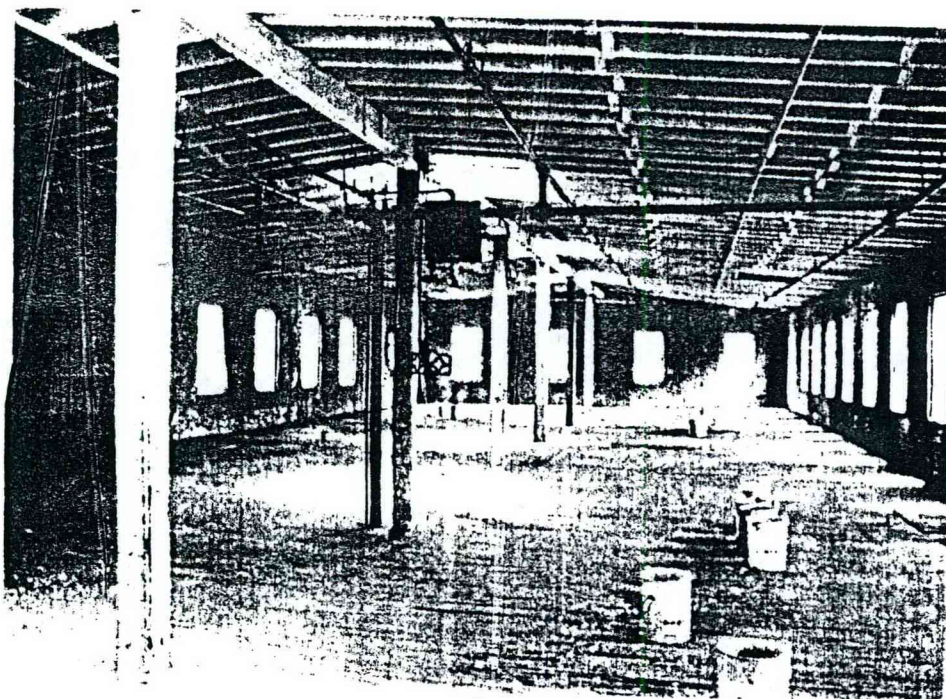
7

View looking east toward Building #7.



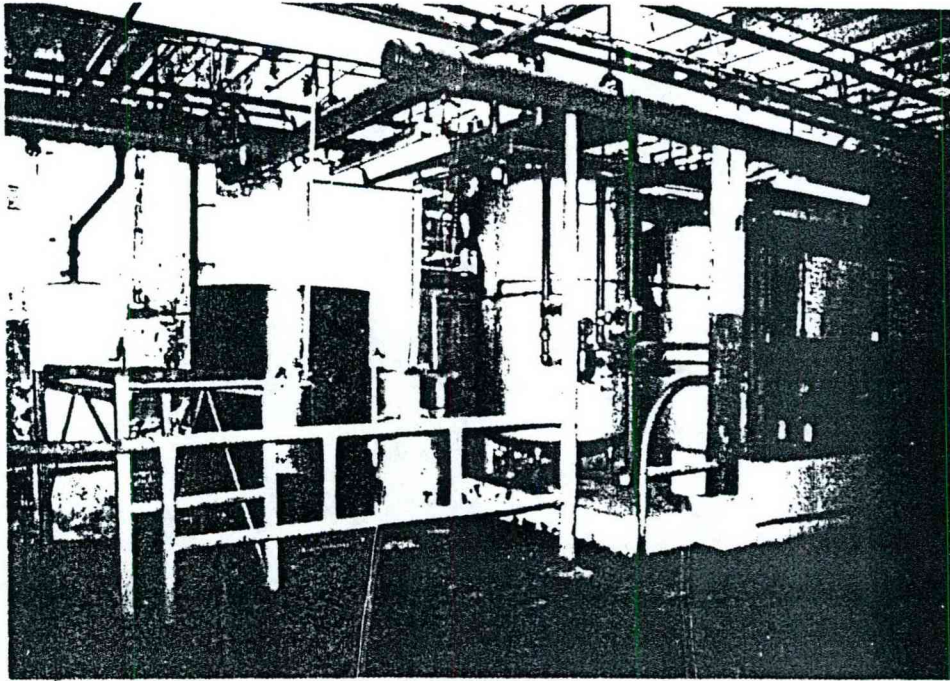
8

Storage room for thermal system insulation
on third floor of Building #2.



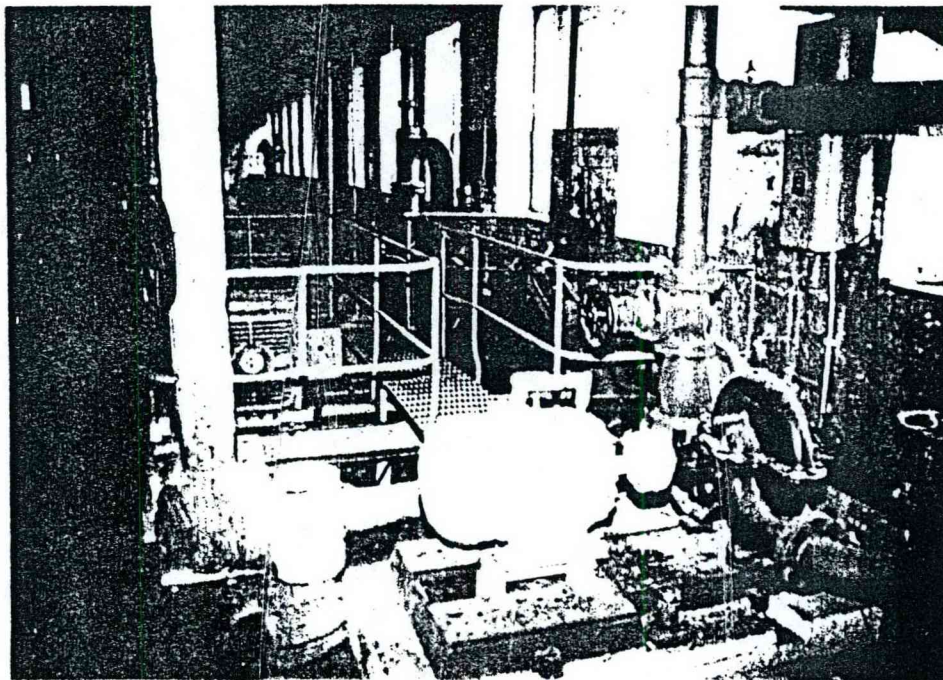
9

Second floor Building #2.



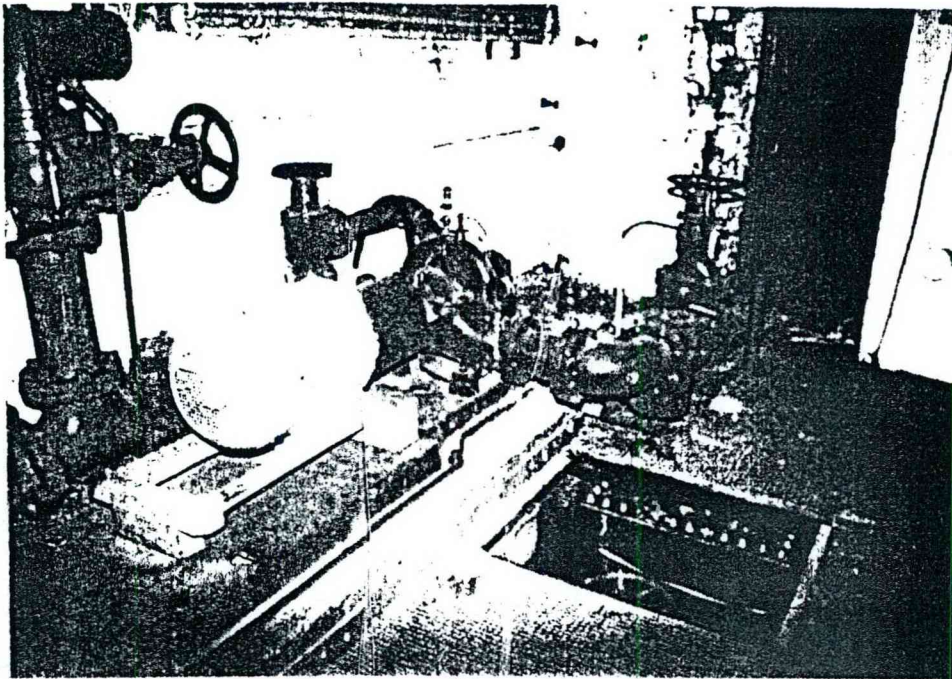
10

Water treatment system of first floor, Building #2.



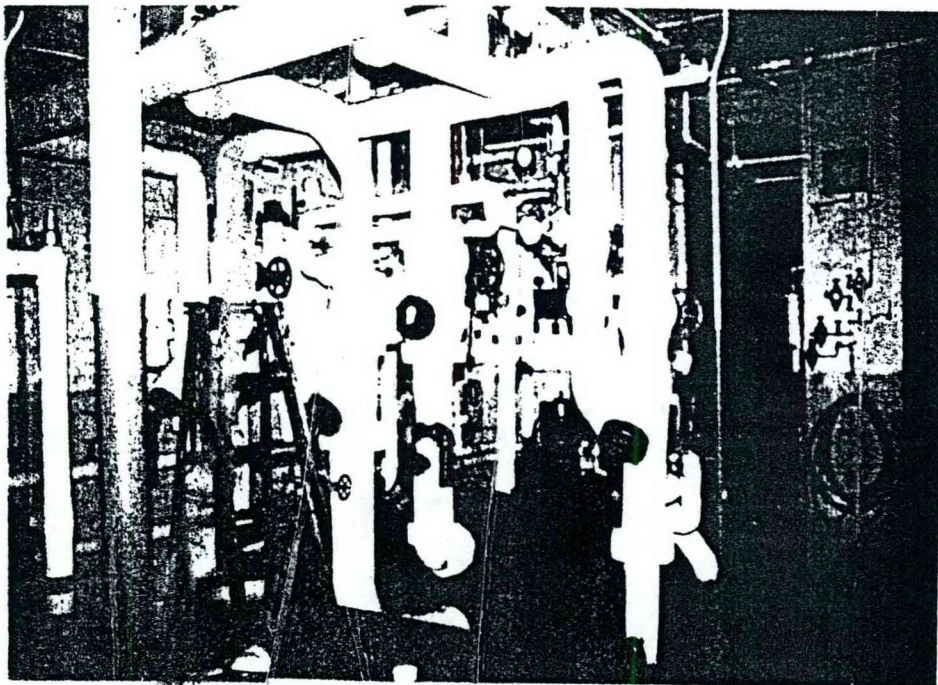
11

Equipment associated with hydraulic generator, first floor, Building #2.



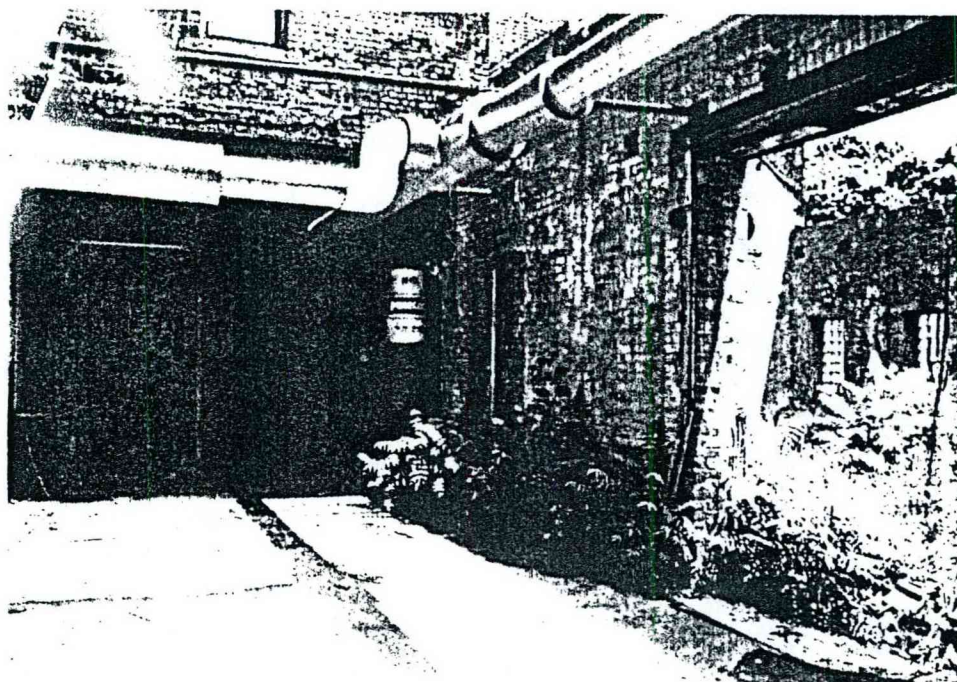
12

Fire control room (sprinkler system) located
on southeast corner of Building #2.



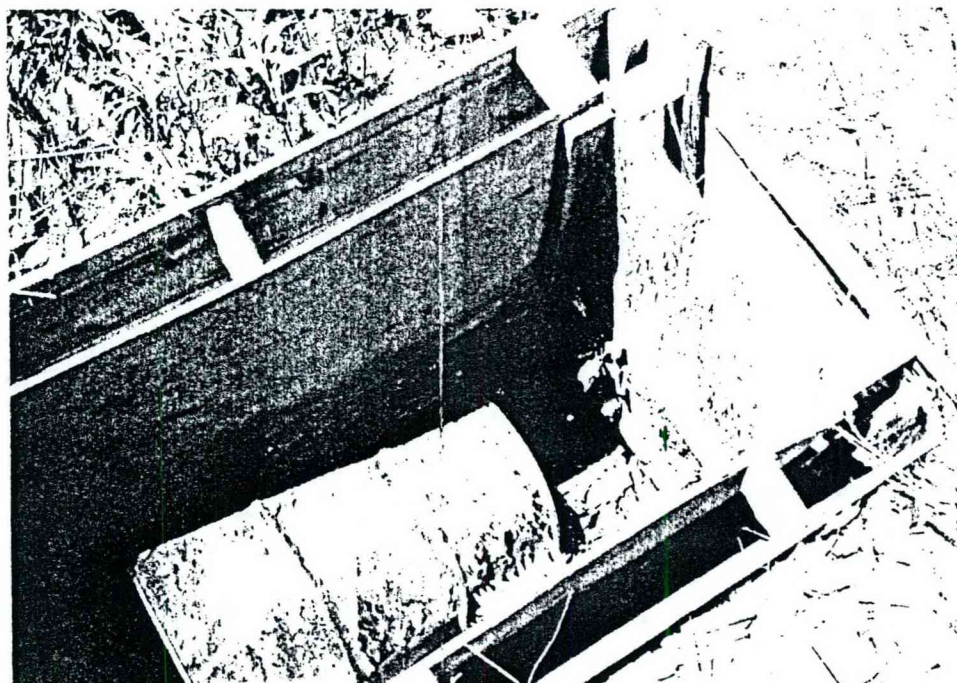
13

Interior of boiler control room.



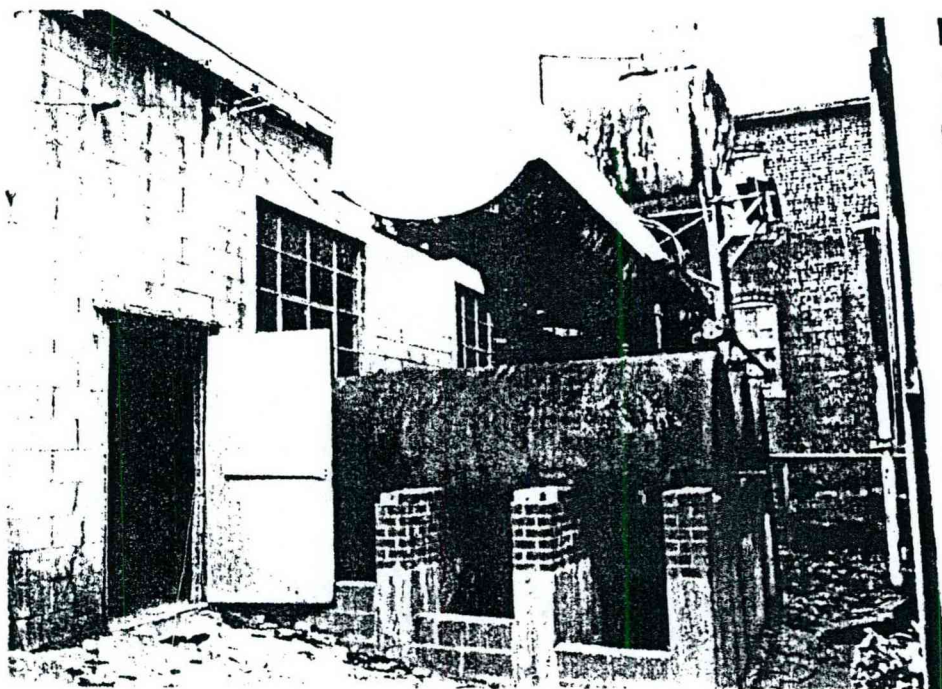
14

Remains of west end of Building #2.
Empty 55 gallon chemical barrels at left center.



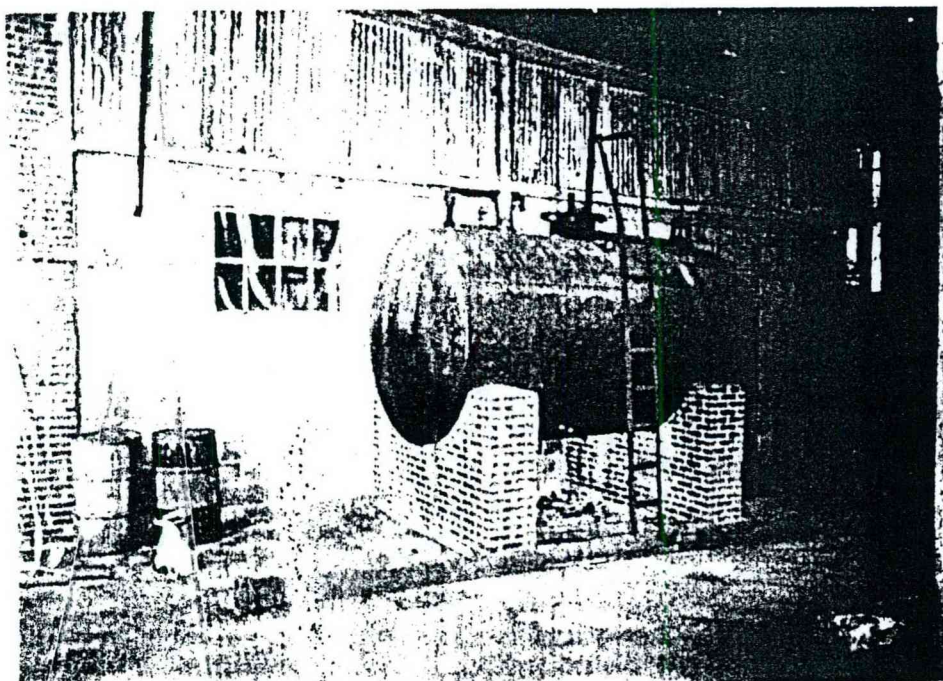
15

55 gallon chemical drum located in ground.
Building #2.



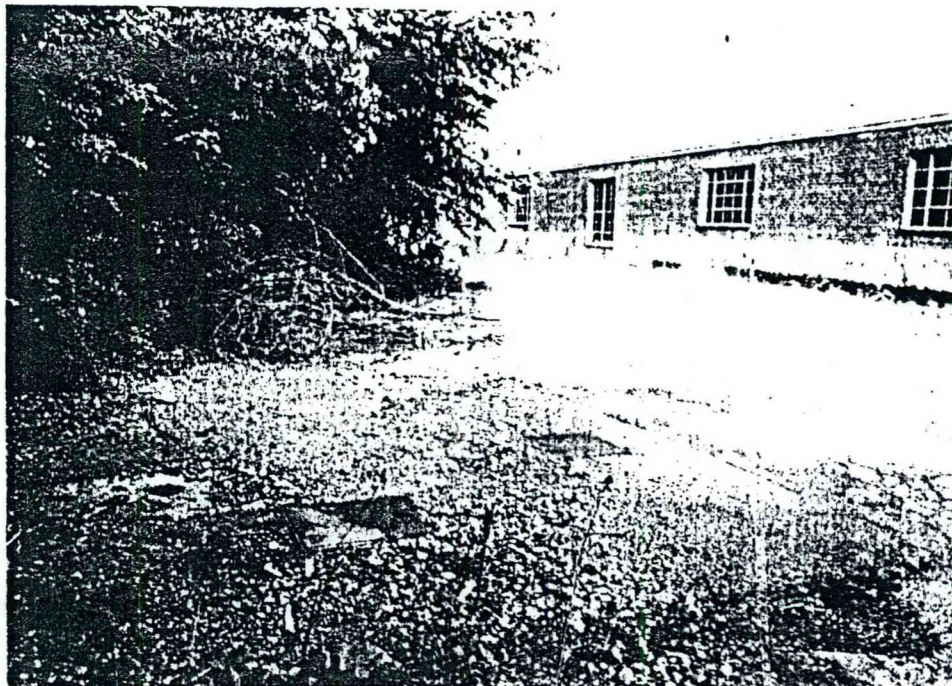
16

Above ground storage tanks located
between Buildings #4 (left) and #2.



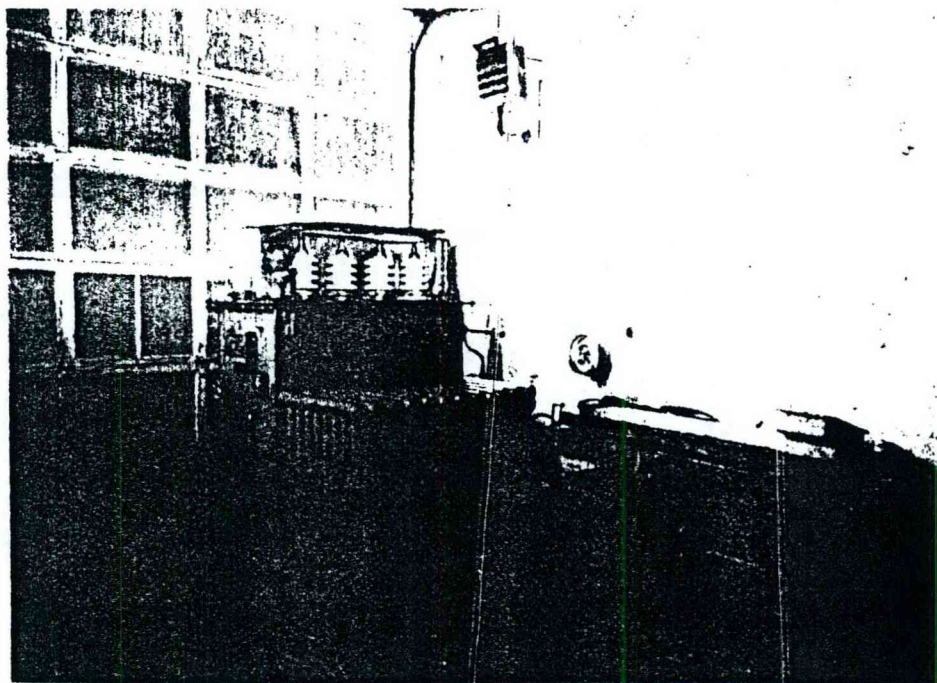
17

Above ground storage tank located in
storage shed on west side of Building #2.



18

North side of Building #5. Grates in foreground are location of three underground storage tanks.



19

Spare transformer located in garage area on east side of Building #2.

APPENDIX B

Regulatory Information

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGION 3
21 SOUTH PUTT CORNERS ROAD
NEW PALTZ, NEW YORK 12561-1696
(914) 255-5453



GEORGE B MINERVINI
CHAZEN ENVIRONMENTAL
SERVICES INC
PO BOX 3479 229 B PAGE PK
MANCHESTER RD
POUGHKEEPSIE NY 12603

Date 6. 30-93

RE: F.O.I.L. Request # 93-581

Beacon Terminal Buildings
Beacon DTC

Received 6-15-93

Dear Mr Minervini:

☒ Please note that the following programs have reviewed your request for records referenced above:

☒ Solid Waste

☒ Hazardous Waste Generators

☒ Hazardous Waste Remediation

☒ Spills

☒ Petroleum Bulk Storage

☒ Mined Land Reclamation

☐ Regulatory Affairs

☒ Legal Affairs none

☒ Law Enforcement none

☒ S.A.R.A. Title III, Section 313

☐ _____

☐ _____

Most of our records are filed by number under the names of individuals or corporations. We have no way of locating or retrieving records if they are filed under names or addresses other than those you have provided. If no records have been located, this does not necessarily mean, and should not be interpreted to mean, that there have never been any violations, complaints, claims, investigations or inquiries involving those names or addresses. We cannot make any representations as to whether there are or have been any such violations, complaints, claims, investigations or inquiries.

☒ Please review the enclosed lists and identify in writing the names and numbers of any records to which you seek access. Also reference F.O.I.L. # _____
Summaries are available only for Spill, PBS and HWR files.

☐ We can locate no records for the names and/or addresses which you provided.

☒ Enclosed please find records which you requested under the Freedom of Information Law.

☒ Further explanation: A further response from Regulatory Affairs will be sent separately.

☐ _____ lists of records to which access was excepted are enclosed. If you wish to appeal this determination, please write within 30 days receipt to:

General Counsel
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-1500.

☐ Please send in the enclosed envelope _____ checks or money orders for:

\$ _____ payable to _____

\$ _____ payable to _____

Very truly yours,

Ellen Stautenburg

Ellen Stautenburg
Regional Records Access Officer
Region 3

cc:

Encs. 12 pp - billing
accounting
balance
response

CHAZEN ENVIRONMENTAL SERVICES, INC.

Dutchess County Office:

PO Box 3479, 229B Page Park, Manchester Road
Poughkeepsie, NY 12603
Phone: (914) 454-3980 Fax: (914) 454-4026

Orange County Office:

Suite G, 201 Ward Street
Montgomery, NY 12549
Phone: (914) 457-1521 Fax: (914) 457-1523

June 11, 1993

Ms. Ellen Stoutenburgh
Records Access Officer
New York State Department of
Environmental Conservation
21 South Platt Corners Road
New Paltz, New York 12561-1696

*Re: Freedom of Information Law - Beacon Terminal Buildings
Located on South Avenue in Beacon, New York*

Dear Ms. Stoutenburgh:

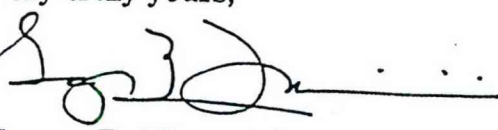
Please provide any information you can concerning known:

1. Hazardous waste remediation site
2. Oil or chemical spills
3. Inactive hazardous waste disposal sites
4. Solid waste management facilities
5. Hazardous waste generators
6. Petroleum bulk storage facilities

on or within the immediate vicinity of the properties mentioned above. Also, would you please have the DEC Section controlling Regulatory Affairs, Legal Affairs and Law Enforcement check their respective files.

Thank you for your assistance.

Very truly yours,


George B. Minervini
Environmental Consultant

GBM:mga

(Untitled)

Dutchess County Hazardous Waste Remediation Sites

01/08/93

SITE CODE	SITE CLASS	SITE NAME	STREET	CITY	ZIP
314001	2	IGN - Poughkeepsie	South Road	Poughkeepsie	12601
314002	2	Pawling Rubber Company	157 Charles Colman Blvd.	Pawling	12564
314003	2	Schatz Federal Bearings	Van Wagner Road	Poughkeepsie	12602
314004	2	Texaco Research Center	Old Glenham Road	East Fishkill	12508
314005	01	United Nuclear Corp.	Old Route 55	Pawling	
314006	2a	Amenia (Town)	Route 22	Amenia	12501
314007	2	Sarney (a.k.a. Giannattasio)	Benson Hill Road	Amenia	12569
314008	2	NGW Corporation	Route 9-G	Clinton	12514
314009	01	Mica Products	Route 22, Dover Plains	Dover	12522
314010	01	Seventh Day Adventist Church	Lake Ellis Road	Dover	12594
314011	2a	Royal Carting Service	Route 82	East Fishkill	12533
314012	2	Jones Sanitation	Cardinal Road	Hyde Park	12538
314013	2	Qual Krom (Lessee)	462 Violet Avenue	Hyde Park	12538
314014	01	Viking Iron Works (LaGrange Co	Overlook Rd., Poughkeepsie, NY	LaGrange	12603
314015	2	Taconic Products	Route 22	Northeast	12546
314016	01	Mackey (Lafko)	Pine Hill Road & Scout Road	Pleasant Valley	12569
314017	2a	Pardee Property	Brown Road	Pleasant Valley	12563
314018	01	Herb Redl Property	Salt Point Turnpike	Poughkeepsie	12601
314019	01	Atlantic Asbestos	Spring Lake Road	Red Hook	12571
314020	02	Dutchess Metal Finishers	Route 199	Red Hook	12571
314021	2a	Saponara Property (Red Hook Ro	Freeborn Lane	Red Hook	12571
314022	01	Dutchess County Airport Landfi	Route 376	Wappinger	12590
314023	01	Dutchess County Airport Salefi	Airport Park	Wappinger	12590
314024	01	Beacon City Landfill (Inactive	Municipal Park adjacent to rai	Beacon	12508
314025	01	Braendly Dye Company	Leonard & Grove Streets	Beacon	12508
314026	01	Berncolors Dye Co.	North Water Street	Poughkeepsie	12601
314027	01	Old Seekman Site	DeForest Drive	Seekman	
314028	01	Green Haven Correctional Facil	State Route 216	Seekman	
314029	01	Route 22, Westside	West side of Route 22, 2 mi so	Dover	
314030	2a	Cricket Hill Road	Cricket Hill Road	Dover	12522
314031	01	Harlem Valley Psychiatric Cent	Route 22	Wingdale	12594
314032	01	Route 22, East Side	Route 22, across from Grand Un	Dover	
314033	01	Fishkill Town Landfill	Carey Road	Fishkill	12524
314034	01	Hyde Park Town Landfill	Forest Drive	Hyde Park	12538
314035	2a	LaGrange Town Landfill	Stringham Road	LaGrange	12569
314036	2a	Pawling Village Landfill	River Road	Pawling	12564
314037	2a	Pleasant Valley Town Landfill	Pine Hill Road	Pleasant Valley	12569
314038	3	Page Industrial Park (Tau Indu	Route 55	Poughkeepsie	
314039	01	VanDeWater Property	Route 44 Plaza	Poughkeepsie	
314040	2a	VanDeWater Property	Between Van Wagner Road and Ro	Poughkeepsie	
314041	01	Bard College	Route 9G	Red Hook	12504
314042	01	Sessler Property	Metzgar Road	Red Hook	12571
314043	01	Millbrook Village Landfill	Sharon Turnpike	Washington	12545
314044	2a	Tuck Industries	Tioronda Avenue	Beacon	12508
314045	01	Wappingers Falls Village Landf	Franklindale Avenue	Wappinger	12590
314046	01	Beacon City Landfill	Dennings Avenue	Beacon	12508
314047	2	Dutchess Sanitation (FICA)	275 Van Wagner Road	Poughkeepsie	12603
314048	2	North East Town Landfill	Coleman Station Road	North East	12546
314049	2a	Clinton Town Landfill	Slate Quarry Road	Clinton	12514
314050	01	Dolfinger Property	Baxtertown Rd.	Fishkill	12524

2052

SITE CODE	SITE CLASS	SITE NAME	STREET	CITY	ZIP
314051	D1	Dutchess Sanitation	275 Van Wagner Road	Poughkeepsie	
314052	2a	Hopewell Precision Inc.	Ryan Road	East Fishkill	12524
314053	D1	Culver Property	Rt. 82A	Stanford	12581
314054	2	IBM-East Fishkill	Route 52	East Fishkill	12524
314055	D1	Red Hook Town Landfill	Rokeby Rd. and Rt. 9-G	Red Hook	12571
314056	2a	East Fishkill Landfill	Hosner Mt. Road	East Fishkill	12533
314057	D1	Rhinebeck Town Landfill	Stone Church Road	Rhinebeck	12572
314058	2	Three Star Anodizing	Market Street	Wappingers Falls	12590
314059	2	Haviland Complex and Haviland	Rt. 9-G & Haviland Road	Hyde Park	12538
314060	D1	NYSOOT Spill-No. 811902	Rt. 22	Pawling	12554
314061	2	Harris Corporation	Mid-Hudson Industrial Park, Ov	Poughkeepsie	12603
314062	D1	White House Crossing	White House Crossing Road	Northeast	12546
314063	2a	Hudson River Psych. Center (HR)		Poughkeepsie	12601
314064	D1	Andrews Property	Clapp Hill Road	Union Vale	12540
314065	2a	Great Eastern Lithographic Co.	40 Violet Avenue	Poughkeepsie	12601
314066	D1	Dover Landfill, Mtn. road	Mountain Rd., Wingdale, NY	Dover	12594
314067	2	Fairchild	91 All Angels Hill Road	Wappinger Falls	12590
314068	D1	Poughkeepsie Gas Works	Laurel Street	Poughkeepsie	12601
314069	D1	Beacon Gas Plant	River Street	Beacon	12508
314070	D1	Poughkeepsie Gas Works	North Water Street	Poughkeepsie	12601
314072	D1	Vassar College		Poughkeepsie	12601
314073	D1	Wiltzie Property	Bower Rd.	Pleasant Valley	12569
314074	2	Schatz Plant	70 Fairview Avenue	Poughkeepsie	12601
314075	D3	IBM 8991	High Street	Poughkeepsie	12602
314076	2a	IBM 8952/992	Neptune Road	Poughkeepsie	12602
314077	2a	IBM 8906/931	Route 55	Poughkeepsie	12602
314078	2	Dutchess County Airport Hangar	Route 104	Poughkeepsie	12602
314079	5	IBM-Country Club	Route 9	Poughkeepsie	12602
314080	D1	IBM Boardman Road	Boardman Road	Poughkeepsie	12602
314081	2a	A. C. Dutton Lumber Corporatio	1 Hoffman Street	Poughkeepsie	12601
314082	2	Fargo Manufacturing	130 Salt Point Turnpike	Poughkeepsie	12603
314083	2	Circle M Wood Treating Corp.	Brockway Road	Beacon	12508
314084	2	Apple Valley Shopping Center	Route 49 & 55	LaGrange	12603
314085	2	Jorgensen Residence	378A Meddaugh Road	Pleasant Valley	12569
314089	2	Conklin Instruments	West Road	Pleasant Valley	12569
314092	2	Former Cavalier Gage & Electro	Hibernia Road	Salt Point	12578

SITE CLASSIFICATION CODES

1. Causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or environment -- immediate action required.
2. Significant threat to the public health or environment -- action required.
- 2a. Temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications.
3. Does not present a significant threat to the public health or environment -- action may be deferred.
4. Site properly closed -- requires continued management.
5. Site properly closed, no evidence of present or potential adverse impact -- no further action required.
- D. Site has been delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

GENERATOR-NAME

(Hazardous Waste)

 GENERATOR-CITY

GENERATOR-ID-NUMBER

GENERATOR-STREET

FAIRCHILD SEMICONDUCTOR CORP-ATTN THOMAS
 NEW YORK STATE DEPT. OF TRANSPORTATION
 CIRCLE M WOOD TREATING CORPORATION
 DOREL HAT COMPANY
 FEDERAL PAPER BOARD COMPANY INC
 FISHKILL CORRECTIONAL FACILITY
 FRENCH CLEANERS
 HEALY CHEVY & OLDS MOTORS
 PALISI AUTO BODY INC.
 SHELL OIL COMPANY
 TALLIX
 TEXACO INC BEACON RESEARCH LABORATORY
 TUCK INDUSTRIES INC
 WITCO CHEMICAL - CHEMPRENE DIVISION
 VASSAR COLLEGE
 DOVER JR/SR HIGH SCHOOL
 N. APPLEBAUM
 UNITED STATES ENVIRONMENTAL PROTECTION
 AIR PRODUCTS & CHEM INC
 B AND B AUTO SPECIALISTS
 DELUXE CLEANERS
 DUTCHESS CLEANERS
 KETCHAM MOTORS INCORPORATED
 MC CALLUM CHEVROLET INCORPORATED
 MEMORIAL CLEANERS
 INSTITUTE OF ECOSYSTEM STUDIES, NEW YORK
 TOM SULLIVAN
 1929 ASSOCIATES
 GIGIS TAILORS LTD
 HOPEWELL PRECISION INCORPORATED
 SUPERIOR MARINE PRODUCTS INCORPORATED
 THAO'S CLEANERS INCORPORATED
 B & B AUTO SPECIALISTS
 FEDERAL PRODUCTS CORPORATION
 HYDE PARK CENTRAL SCHOOLS-F D ROOSEVELT
 HYDE PARK CLEANERS
 WJZ GAGE
 AIR PRODUCTS & CHEMICALS INCORPORATED
 HARRIS CORPORATION-ATT: ROBERT SANDS
 AUDIA MOTOR SALES INCORPORATED
 HIPOTRONICS, INC
 KEUFFEL AND ESSER COMPANY TACONIC PLANT
 NEW ENGLAND CLEANERS
 STATELINE AUTO
 NANCY ENVIRONMENTAL SERVICES INC
 NATIONAL PARK SERVICE
 BILL KIERAN INCORPORATED
 CORRAL FORD
 DITRON INCORPORATED
 NEW YORK STATE DEPT OF TRANSPORTATION
 PAWLING CORPORATION/PRESRAY CORPORATION
 PAWLING ELEMENTARY SCHOOL
 PAWLING, VILLAGE OF
 RAY'S AUTO BODY
 EXPRESS VALET CLEANERS
 CONKLIN INSTRUMENT CORPORATION
 JAMES FIELD AUTO BODY INCORPORATED
 SIMMONS ELECTRONICS

333 WESTERN AV-S. PORTLAND
 ALBANY
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BEACON
 BOX 41 - POUGHKEEPSIE
 DOVER PLAINS
 EASTCHESTER
 EDISON
 FISHKILL
 FISHKILL
 FISHKILL
 FISHKILL
 FISHKILL
 FISHKILL
 FISHKILL
 FISHKILL
 GARDEN, MILLBROOK
 HARRIMAN
 HOPEWELL JUNCTION
 HOPEWELL JUNCTION
 HOPEWELL JUNCTION
 HOPEWELL JUNCTION
 HOPEWELL JUNCTION
 HUGHSONVILLE
 HYDE PARK
 HYDE PARK
 HYDE PARK
 HYDE PARK
 HYDE PARK
 I.B.M. EAST FISHKILL
 MELBOURNE
 MILLBROOK
 MILLERTON
 MILLERTON
 MILLERTON
 MILLERTON
 P.O. BOX 10 HOPEWELL JCT
 PARK--HYDE PARK
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PAWLING
 PLEASANT VALLEY
 PLEASANT VALLEY
 PLEASANT VALLEY

NYD980765507
 NYD981140973
 NYD981494388
 NYD0001398551
 NYD086947520
 NYD091899419
 NYD089106579
 NYD981141666
 NYD982539439
 NYD981876345
 NYD056304470
 NYD091894899
 NYD0001396894
 NYD050420512
 NYD080464001
 NYD159639475
 NYP000785634
 NYP000788364
 NYP000778308
 NYD982271710
 NYD982539124
 NYD981078280
 NYD981180714
 NYD054010533
 NYD091901223
 NYD980773501
 NYD041770403
 NYD981557747
 NYD982180762
 NYD990881492
 NYP000774638
 NYD041004094
 NYD011917168
 NYD080464571
 NYD981565911
 NYD086950789
 NYD0001393396
 NYD980759377
 NYP000885863
 NYD012890521
 NYD148618747
 NYD012891503
 NYD077220168
 NYD012891420
 NYD075819540
 NYD052425154
 NYP000872911
 NYD071103947
 NYD075820241
 NYD000780908
 NYD001354347
 NYD101281939
 NYP000869149
 NYD084072131
 NYD982534505
 NYD001399518
 NYD981482730
 NYD077219145

CLARK, DIV ENV/CHEM SRVS MGR
 1220 WASHINGTON AVENUE
 PO BOX 940
 1 MAIN STREET
 WOLCOTT AVENUE
 PROSPECT STREET
 285 MAIN STREET
 PO BOX 840-365 FISHKILL AVENUE
 5 MAIN STREET
 MAIN STREET & FISHKILL AVENUE
 BOX 1302-175 FISHKILL AVENUE
 P.O. BOX 509
 248 TIORONDA AVENUE
 570 FISHKILL AVENUE
 GARY H CHASEN, DIRECTOR
 P.O. BOX 6311
 63 HICKORY HILL RD
 AGENCY-REGION 11 HYDE PARK
 P O BOX 49
 RR 1 BOX 75
 BLOODGETT ROAD ROUTE 52
 DUTCHESS MALL
 62 MAIN STREET
 ROUTE 52 BRINKERHOFF EAST
 150 MAIN STREET ROUTE 52
 BOX AB, NEW YORK BOTANICAL
 JUNCTIONS 6/17/32
 P. O. BOX 308
 RD 2 RT 52 WICCOPEE PLAZA
 PO BOX 27-RYAN DRIVE & RTE 82
 JACKSON ROAD
 ROUTES 376 & 82 EAST FISHKILL
 BOX 511-ROUTE 90
 10 BOICE RD
 H S --SOUTH CROSS ROAD
 95 POST ROAD
 EAST PARK ROAD
 ROUTE 52 & SHENAUDDAH RD-C/O
 1025 WEST NASA BOULEVARD
 ROAD 1 BOX 47
 RT. 22 & 199 PO DRAWER W
 STATE HIGHWAY 22
 P. O. BOX 8-ROUTE 44 EAST
 3 MAIN STREET
 UNITY STREET AT ROUTE 376
 249 ALBANY POST RD-VANDERBILT
 P.O. BOX 500-ROUTE 22
 ROUTE 22
 85 ROUTE 22
 ROUTE 22
 157 CHARLES COLEMAN BLVD
 HAIGHT STREET
 9 MEMORIAL AVENUE
 ROUTE 22 P.O. BOX 22
 KALYTO PLAZA
 PO BOX 650
 BOX 500, RD#3(ROUTE 44)
 WEST ROAD

4-89

Department of Environmental Conservation
 3 Spills
 Information Request

*C = Closed
 A = Active*

Environmental Conservation
 Spills
 Information Request

Name	Spill Date	Status	Pin #	Spill Location
	04-03-1986	C	0	BEACON
	01-01-1987	C	0	
	01-06-1989	A	98511	HOPEWELL JUNCTION
	09-13-1985	C	95043	359 MAIN ST.
	04-01-1986	C	0	UNKNOWN
	04-01-1986	C	0	RTE. 52
	04-26-1986	C	0	BEACON
	05-05-1986	C	0	23 LINCOLN AVE.
ANIO	07-07-1986	C	0	121 SOUTH CHESTNUT ST
	08-20-1986	C	0	570 FISHKILL AVE
ET	11-24-1986	C	0	365 FISHKILL AVE
	03-29-1987	C	0	2 WILSON ST
	04-10-1987	C	97049	386 MAIN ST
	04-27-1987	C	0	BROCKWAY RD
	08-24-1987	C	0	371 FISHKILL AVE.
BEACON BRIDGE	08-26-1987	C	0	TOLL BOOTHS
	10-09-1987	C	0	RT.52
MENT PLANT	11-20-1987	C	0	BENNINGS AVE.
ET	11-20-1987	C	0	365 FISHKILL AVE.
ICE CENTER	12-11-1987	C	0	133 VERTLANCK AVE
DRK	12-23-1987	C	0	404 MAIN ST
POOL	01-12-1988	C	0	LIBERTY STREET
SIT MIX	01-26-1988	C	0	RT 55
T DRUMS	04-12-1988	C	0	CASTLA POINT VA HOSPITAL
HOOL	04-20-1988	C	0	
	05-17-1988	C	0	RT52
SCERY	06-16-1988	C	0	139 DEPUGFTEN AVE.
G #4	08-16-1988	C	0	CLINTON POINT
	04-04-1989	C	99002	FERRY STREET
	07-14-1989	C	0	365 FISHKILL AVE.
RAILOR PARK	08-30-1989	C	0	7 PATRICIA LANE
IDGE	10-25-1989	C	0	RT 84
	12-08-1989	C	0	BEACON-NEWBURGH BRIDGE
NORBEH HALL	12-13-1989	C	0	217 MAIN ST.
ACON BRIDGE	02-09-1990	C	0	1-84
	04-03-1990	C	0	OFF OF DEPUYSTER AVE.
	04-02-1990	C	0	BROCKWAY DRIVE
HOUSE	05-05-1990	C	0	EAST MAIN & LEONARD STS.
	06-25-1990	C	0	570 FISHKILL AVE.
	06-27-1990	C	0	220 MAIN STREET
	06-28-1990	C	0	RT. 9G
	07-17-1990	C	0	STERLING DR.OFF GARDNER
ENT DYEING CO.	07-31-1990	C	0	10 FRONT STREET
CHOO	08-08-1990	A	0	FISHKILL & VERPLANK RD.
LET	08-13-1990	C	0	FISHKILL AVE.
	10-30-1990	C	0	FISHKILL AVE.
OPY INC.	11-08-1990	C	0	EAST MAIN STREET
	03-06-1991	C	0	4-10 FRONT STREET
STATION	04-18-1991	C	0	MAIN STREET
	05-02-1991	C	0	570 FISHKILL AVE.
IDENCE	06-04-1991	C	0	19 N. CEDAR STREET
CE APT.	06-14-1991	C	0	21 TOMPKINS AVE.
STREET	06-15-1991	C	0	LIBERTY STREET
T.IND.PARK	06-27-1991	C	0	FRONT ST.(BRIDGE ST.)
IART	07-15-1991	A	0	FISHKILL AVE.
CH	09-30-1991	C	0	OLD GLENHAM ROAD
CH CENTER	10-01-1991	C	0	OLD GLENHAM ROAD

	Spill Date	Status	Pin #	Spill Location
	11-08-1991	C	0	MAIN STREET RT.52
	12-04-1991	C	0	72 FISHKILL
STREET	12-13-1991	C	0	MAIN & E.MAIN ST.
	01-10-1991	A	0	570 FISHKILL AVE.
ILITY	02-11-1992	A	0	RED SCHOOLHOUSE ROAD
	04-13-1992	C	0	RT. 9D & 1-84
	07-13-1992	C	0	RT. 9D
	09-22-1992	C	0	60 MAPLE STREET

NYS Department of Environmental Conservation
Region 3 Petroleum Bulk Storage
Freedom of Information

Facility Name	PBS No.	Swis #	Street	City
ALBANY SAVINGS BANK	3-029521	1302	364 MAIN STREET	BEACON
BANK OF NEW YORK	3-074128	1302	404 MAIN STREET	BEACON
BEACON - GETTY	3-600140	1302	220 MAIN STREET	BEACON
BEACON HIGH SCHOOL	3-104086	1302	72 FISHKILL AVE	BEACON
BEACON INDUSTRIAL PARK	3-266191	1302	10 FRONT ST	BEACON
BEACON POST OFFICE	3-436305	1302	369 MAIN ST.	BEACON
BEACON SCHOOLS BUS GARAGE	3-104094	1302	ROUTE 9D	BEACON
BEACON WASTEWATER TREATMENT FA	3-031003	1302	DENNINGS AVE	BEACON
BEACON WATER SUPPLY PLANT	3-175781	1302	460 LIBERTY ST	BEACON
BREWSTER TRANSIT MIX	3-410780	1302	RTE 52	BEACON
BRUNETTO CHEESE MFG CORP	3-005665	1302	33 NORTH CEDAR ST BOX 67	BEACON
CAMP BEACON	3-074667	1322	ASYLUM ROAD	BEACON
CARMELITE MONASTERY	3-170003	1302	139 DE PUYSTER AVE	BEACON
CENCO GAS STATION	3-137227	1302	386 MAIN ST	BEACON
CENTRAL CONSTRUCTION COMPANY	3-449334	1302	105 CATHERINE ST.	BEACON
CHESTNUT BEACON SERVICE CTR.IN	3-493619	1302	357-363 MAIN STREET	BEACON
CIRCLE M WOOD TREATING CORP	3-039241	1302	PO BOX 940	BEACON
CITY OF BEACON HIGHWAY DEPT	3-175803	1302	CHURCHILL ST	BEACON
CITY OF BEACON HOUSING AUTHOR	3-104485	1302	1 FORRESTAL HEIGHTS	BEACON
CRAIG HOUSE HOSPITAL	3-173657	1302	HOWLAND AVE	BEACON
EDWARD EHRBAR, INC.	3-488143	1302	580 FISHKILL AVE., PO BOX 670	BEACON
FISHKILL CORRECTIONAL FACILITY	3-031038	1302	BOX 307	BEACON
FREEDOM FORD INC	3-005681	1302	371 FISHKILL AVE	BEACON
HEALEY CHEV-OLDS INC	3-011428	1302	365 FISHKILL AVE	BEACON
I 84 TEXACO	3-171778	1302	ROUTE 84 & 9D	BEACON
J V FORRESTAL SCHOOL	3-104132	1302	LIBERTY STREET	BEACON
L&S CONTRACTING INC.	3-488631	1302	RT 52 M.D.	BEACON
LLOYDS GAS & SERVICE CENTER	3-136778	1302	FISHKILL & TOWNSEND AVE	BEACON
LO-RAC FUEL CORP DBA BEACON OL	3-012548	1302	16 MAIN ST	BEACON
MULTI POWER WASH, INC.	3-600100	1330	769 ROUTE 52	BEACON
NEW YORK TELEPHONE	3-184039	1302	443 MAIN ST	BEACON
NEWBURGH-BEACON BRIDGE	3-037699	1302	1-84 / TOLL PLAZA	BEACON
PINES AUTO REPAIR	3-440612	1302	WOLCOTT AVE + PROSPECT ST.	BEACON
ROMBOUT JR HIGH SCHOOL	3-104167	1302	MATTEAWAN ROAD	BEACON
SAINT FRANCIS HOSP OF BEACON	3-031054	1302	60 DELAVAN AVENUE	BEACON
SARGENT AVE SCHOOL	3-104124	1302	445 WOLCOTT AVE	BEACON
SOUTH AVE SCHOOL	3-104108	1302	SOUTH AVE	BEACON
ST JOACHIMS CHURCH	3-078344	1302	61 LEONARD STREET	BEACON
ST JOHN'S CHURCH & SCHOOL	3-166073	1302	35 WILLOW STREET	BEACON
ST. LAWRENCE SEMINARY	3-437638	1302	182 SARGENT AVENUE	BEACON
TALLIX INC	3-409677	1302	PO BOX 1320 175 FISHKILL AVE	BEACON
TESA TUCK INC	3-001791	1302	248 TIORONDA AVE	BEACON
THREE STAR ANODIZING CORP/BEAC	3-104701	1302	ONE EAST MAIN STREET	BEACON
TOMPKINS SOS	3-409790	1302	220 MAIN ST	BEACON
TONYS SERVICE STATION	3-170100	1302	133 VERPLANK AVE	BEACON
WITCO CORPORATION CHEMPRENE DIVISION	3-016853	1302	570 FISHKILL AVE	BEACON

Solid Waste Facilities - Dutchess County

178.052

5192

DUTCHESS COUNTY 202 FACILITIES

FACILITY	NUMBER	T/V/C
SANITARY LANDFILL+++++		
FICA	14S01	POK
MILAN	14S02	MLN
TIVOLI	14S03	TVL
BAIRD ST.PK.	14S04	LaG
BEACON	14S05	BCN
BEEKMAN	14S06	BKMN
CLINTON	14S07	CLNTN
DOVER	14S08	DVR
EAST FISHKILL	14S09	E.FKL
FISHKILL	14S10	FKL
HARLEM VALLEY	14S11	AMN
HYDE PARK	14S12	HD PK
NORTHEAST	14S13	NE
PINE PLAINS	14S14	PP
RHINEBECK	14S15	RBK
STANFORD	14S16	STFD
UNIONVALE	14S17	UVL
WASHINGTON	14S18	WASH
DOC FISHKILL	14S19	FKL
WILCOX PARK	14S20	MLN
FKL/E.FKL	14S21	FKL

COMPOST+++++		
JONES	14C01	HD PK
TRI-MUNICIPAL	14C02	POK
MOODY HILL	14C03	NE
S & B	14C05	RD HK
GREENHAVEN CORRECTIONAL		E.FISHKILL
FISHKILL CORRECTIONAL		FISHKILL

YARDWASTE COMPOST+++++		
BEACON	14Y01	BCN
ROOS NURSERY		POK
VASSAR		POK

TRANSFER STATIONS+++++		
PAWLING	14T01	PWLG
PLEASANT VLY	14T02	PL VL
WATCH HILL	14T03	E.FKL
G & F	14T04	POK
POUGHKEEPSIE	14T05	POK
RELIABLE	14T06	LaG
BEACON	14T07	BCN
NRRR	14T08	POK
VASSAR HOSP		POK
AHENIA	14T10	AMN
A & H	14T11	DVR
NORTHEAST		NE
DOVER	14T13	DVR

FACILITY	NUMBER	T/V/C
LAGRANGE	14T14	LaG
ALL COUNTY	14T15	FKL
HYDE PARK	14T16	HD PK
RED HOOK		RD HK
CLINTON		CLINT
EVANS SEPTIC		

INCINERATORS+++++		
BEACON	14I01	BCN

ENERGY RECOVERY+++++		
DCRRA	14E01	POK

BALING+++++		
POK BALING	14P01	POK

LANDSPREADING+++++		
HEDGES	14L01	NE
O'DELLS SEPTIC	14O10	BKMN
TABOR & WYMAN	14O15	DVR

SEPTAGE LAGOONS+++++		
S&B	14O13	RD HK
L & O	14O14	
E.FKL SANITAT	14O16	E.FKL
SUPERIOR	14O25	PP
SUPERIOR	14O25	NE
MOCANN		FKL

CONSTRUCTION & DEMOLITION+++++		
PALUMBO		DVR
IBM	14D05	POK
WATERMAN'S WRECKING		PL VLY
(T) WAPPINGERS	14D21	WPGR

LANDFILLS+++++		
McPHILOMY 343		AMN

BERLINGHOFF		AMN
WASSAIC DEV CTR		AMN
SCHNEIDER		AMN
B & H		AMN
FISH & GAME		AMN
L & R		AMN
ROUTE 44 TRAIL		AMN
CASCADE MOUNTAIN RD		AMN
LECHNER PROPERTY		BKMN
HARLEM VALLEY PSY CTR		DVR
DWY PROPERTY		DVR
OLD BRANCH ROAD		DVR
OLD CTY IRN WRKS		DVR
TRIANGLE DINER		DVR
DYKEMANS		DVR
BONADO		DVR

FACILITY	NUMBER	T/V/C
LACROIX (SPRAGUE RD)		DVR
YENO'S		DVR
ROUTE 22 EAST		
TINA'S		E.FKL
PACKAGE PAVEMENT		E.FKL
LAKE VISTA		E.FKL
52 AND TACONIC DOT		E.FKL
STORMVILLE AIRPORT		E.FKL
CHELSEA COVE		E.FKL
NYSOOT LIMEKILN PATROL		E.FKL
WICOPPEE		E.FKL
NENNI		E.FKL
STORMVILLE DOLOMITE		E.FKL
Rt 52/82 CONVENT STORE		E.FKL
LOT 16, JEFFERSON		E.FKL
GREENHAVEN CORRECTIONAL		E.FKL
DOT FISHKILL		FKL
CAMP BEACON		FKL
S. AVE BEACON		FKL
RKDK		FKL
CAVACCINI I		FKL
CAVACCINI II		FKL
DOWNSTATE CORRECTIONAL		FKL
CAREY RD		FKL
BUSKIRK		HD PK
PINEBROOK ESTATES		HD PK
QUAIL RUN		HD PK
MORANO		HD PK
FOREST DRIVE		HD PK
PATRICIA LANE		HD PK
BARD PARK		HD PK
J&D		HD PK
DAYTOP II		HD PK
JOHN'S AUTO BODY 9G		HD PK
ANDERSON SCHOOL		HD PK
ROLLING HILLS SUBDIV.		LaG
LAGRANGE AUTOMOTIVE		LaG
ARLINGTON HIGH SCH		LaG
CARUTHERS		MLN
PALMER GRAVEL		NE
RAY'S AUTO BODY		PWLG
COLANDRO'S		PWLG
NYSOOT		PWLG
GILLETTE (WEST WIND)		PWLG
BOWDOIN PARK		POK
C POK GARAGE		POK
VASSAR		POK
VIKING IRON WORKS		POK
ARLINGTON FIREHOUSE		POK
FULTON ST		POK
HERB REDL PROPERTY		POK
GASPARROS		PL VLY
REDL PROPERTY		PL VLY

FACILITY NUMBER T/V/C

QUATTRO'S FARM HOUSE PL VLY
COPPERFIELDS PL VLY
TYRELL ROAD PL VLY
PARDEE PL VLY
SALVATICO RD HK
BARD RD HK
RED HOOK LANDFILL RD HK
DAYTOP I RBK
HOLYCROSS RBK
(V) RHINEBECK RBK
N. DUTCHESS HOSPITAL RBK
ANDREWS PROPERTY UNVL
OSWEGO ROAD UNVL
THORTONS GARAGE WPGR
SABIA ROAD WPGR
KETCHAM HIGH SCHOOL WPGR
FLICK WPGR
JIH PROPERTIES WPGR
(V) WAPPINGER FALLS WPGR
IMPERIAL PLAZA WPGR
CARLIFE TRANSMISSION WPGR
DUTCHESS AVIATION WPGR
T & R ENTERPRISES WPGR
HALLS ROAD WASH
(V) OF HILLBROOK WASH
DULBERGER

WASTE TIRE STORAGE FACILITIES+++

HUDSON VALLEY TIRE DISP FKL
QUEEN CITY TIRE CTR POK
DUTCHESS TIRE INC POK
ACTIVE TIRE SERVICE WPGR
FIRESTONE MASTERCARE WPGR

JUNK YARD & SCRAP PROCESSORS++++

POUGHQUAG AUTO WRECKERS BKHN
A & J PARSONS E.FKL
BEACON SALVAGING CO FKL
VOLCE SALVAGE HDPK
JOHN'S AUTO REBUILDERS HDPK
A & T AUTO PARTS HDPK
JIH'S AUTO PARTS HDPK
DURADYN BATTERY CO LAG
THEW'S (AMOCO SERV.STA) PLVL
REDL'S AUTO PARTS PLVL
AARON SCRAP METAL POK
EAST PARK USED AUTO'S POK
CHARLES MOLT POK
GAUDET/BECK ROAD POK
DUTCHESS BANDING POK
EISNER BROS POK
CHAS. EFFRON & SON POK
BRIDGE CITY SCRAP POK
MID-HUDSON AUTO WRECKERS POK
ACKERT HOOK ROAD RBK
DOUBLE Z MOTORS WPGR

FACILITY NUMBER T/V/C

RECYCLING CENTERS+++++++

(T) AMENIA AMN
(T) DOVER DVR
(T) E. FISHKILL EFKL
(C) BEACON RECYC CTR FKL
(T) HYDE PARK HD PK
(T) LaGRANGE LaG
(T) NORTHEAST NE
(T) PAWLING PWLG
(T) PINE PLAINS PNPL
(T) PLEASANT VALLEY PLVL
(C) POUGHKEEPSIE POK
(T) POUGHKEEPSIE POK
MID HUDSON ALUMINUM POK
(T) RED HOOK RECYCLING RDHK
(T) RHINEBECK RECYCL RBK
(T) STANFORD STNFD
(T) UNIONVALE UVALE
(T) WASHINGTON WASH

MATERIALS RECOVERY+++++++

DCRRA MRF 14M01 POK
JC PAPER 14M02 POK
RED HOOK PAPER RDHK

COUNTY SOLID WASTE PLAN+++++++

DUTCHESS IS IN THE PROCESS OF SITING ASH AND BYPASS LANDFILLS.
FEIS RECENTLY RELEASED. COMPREHENSIVE SWMP UNDERWAY AND UNDER
GRANT. REGION REVIEWED THE HYDROGEOLOGIC WORKPLANS FOR WASHINGTON AND RED HOOK.
CSWMP SUBMITTED 8/91 NOT APPROVED.

8pp

Dutchess County

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SARA TITLE III
SECTION 313 FACILITY COMPLIANCE
COUNTY LISTING OF REPORTING COMPANIES AND COUNT OF CHEMICALS
DATA COMPLETE AS OF JULY 18, 1991

COUNTY	KEY	COMPANY	88 FORM	89 FORM	90 FORM
DUTCHESS	3300822	A.C.DUTTON LUMBER CO.	3	3	3
	3168072	CHEMPRENE INC.(DIV.WITCO CHEMICAL CORP.)	5	5	4
	3410180	CIRCLE M WOOD TREATING CORPORATION	3	0	0
	3178198	DUPONT SEMI CONDUCTOR PROD.	0	1	1
	3300881	HUDSON VALLEY POLYMERS	1	0	0
	3178856	IBM CORP.(POUGHKEEPSIE PLANT)	7	6	6
	3177702	IBM EAST FISHKILL	19	19	21
	3178328	KEM PLASTIC PLAYING CARDS INC.	1	2	2
	3177827	KEUFFEL & ESSER CO (TACONIC PLT)	8	8	8
	3166297	PAWLING CORP.	1	4	4
	3301097	TALLIX INC.	1	1	0
	3168075	THREE STAR ANODIZING CORP OF BEACON	4	4	0
	3002793	TRI-WALL CONTAINERS(DIV. OF INDIAN HEAD	1	1	0

To obtain access to these records,
contact: Records Access Officer
NYS DEC
50 Wolf Rd
Albany NY 12233-2751

Mined Land Reclamation Sites

Dutchess County

name	county	street	city	zip	mineral	phone	acr_tot	exp_date	status
GEORGE H. COCHRANE JR. EXCAVATING	DELAWARE	RD 1, BOX 38A	DELANCEY	13752	SAND AND GRAVEL	607-746-2878	19	08/21/94	A
TOMPKINS BLUESTONE CO. INC.	DELAWARE	PO BOX 776 TAR HOLLOW RD.	HANCOCK	13783	DIMENSION STONE	607-637-5222	6	06/07/94	A
RIFENBURG CONSTRUCTION INC.	DELAWARE	RD3 BOX 290	TROY	12180	SHALE	518-279-3265	5	05/10/92	A
LOUIS PICCIAHO SR CORP	DELAWARE	1204 WITHERILL ST	ENDICOTT	13760	SAND AND GRAVEL	607-754-2222	2	05/20/84	R
CHUMUNG CONTRACTING CORP	DELAWARE	P O BOX 26	STAMFORD	12167	SAND AND GRAVEL	607-652-2170	3	**/**/84	R
LOUIS PICCIAHO SR CORP	DELAWARE	1204 WITHERILL ST	ENDICOTT	13760	SAND AND GRAVEL	607-754-2222	2	05/20/84	R
DELAWARE COUNTY HIGHWAY DEPT	DELAWARE	P O BOX 311	DELHI	13753	SAND AND GRAVEL	607-746-2128	2	**/**/84	R
LAFAVER EXCAVATING INC	DELAWARE		BOVINA CENTER	13740	SAND AND GRAVEL	607-832-4240	10	04/01/85	R
LAFAVER EXCAVATING INC	DELAWARE		BOVINA CENTER	13740	SAND AND GRAVEL	607-832-4240	2	04/01/85	R
GPP INC.	DELAWARE	RT.3 BOX 228	ELMIRA	14901	SAND AND GRAVEL		2	04/29/82	R
LAFAVER EXCAVATION INC.	DELAWARE	STAR ROUTE BOX 134	BOVINA CENTER	13740	SAND AND GRAVEL		12	**/**/84	R
TOWN OF HARPERSFIELD	DELAWARE		HARPERSFIELD	13786	SAND AND GRAVEL		7	**/**/84	R
LANCASTER DEVELOPMENT CORP.	DELAWARE	P.O. BOX 189	COBLESKILL	12043	SAND AND GRAVEL		10	07/11/90	R
ECONOMY PAVING CO INC.	DELAWARE	34 FRANKLIN ST.	CORTLAND	13045	SAND AND GRAVEL		2	09/02/88	R
JOHNSTON & RHOADES BLUESTONE CO	DELAWARE		EAST BRANCH	13756	STONE	607-363-2282	1	07/16/81	R
WASHED AGGREGATE RESOURCES INC	DUTCHESS	P O BOX 395	DOVER PLAINS	12522	SAND AND GRAVEL	914-877-9955	6	05/02/91	A
WALTER A VINCENT	DUTCHESS	R D #2 BOX 47	DOVER PLAINS	12522	SAND AND GRAVEL	914-832-6902	10	04/30/90	A
PATTERSON MATERIALS CORPORATION	DUTCHESS	PO BOX 800	WINGDALE	12597	SAND AND GRAVEL	914-832-6000	64	02/12/94	A
DONALD R STICKLE	DUTCHESS	STONE CHURCH ROAD	RHINEBECK	12572	SAND AND GRAVEL	914-876-4777	4	07/09/90	A
HOSNER MOUNTAIN SAND AND STONE CO	DUTCHESS	136 HOSNER MT. RD.	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-226-6183	5	12/15/90	A
THALLE CONSTRUCTION CO INC	DUTCHESS	51 ROUTE 100	BRIARCLIFF MANOR	10510	SAND AND GRAVEL	914-762-3415	20	05/05/91	A
WILLIS R PLACE	DUTCHESS	Route 55	POUGHQUAG	12570	SAND AND GRAVEL	914-724-5466	10	12/15/90	A
CLOSEBURN STUD FARM	DUTCHESS	KENNELS ROAD & ROUTE 44	MILLBROOK	12545	SAND AND GRAVEL	914-677-6088	2	04/03/88	A
AMENIA SAND AND GRAVEL INC	DUTCHESS	P O BOX C	AMENIA	12501	SAND AND GRAVEL	914-373-8151	160	05/06/90	A
F W DAVIDSON INC	DUTCHESS	120 ELM ST	S. DARTMOUTH	02743	SAND AND GRAVEL	914-896-6630	22	05/08/90	A
VAIL BROTHERS FARM	DUTCHESS	REILLY ROAD	LAGRANGEVILLE	12540	SAND AND GRAVEL	914-223-3036	32	03/15/93	A
MATHER JAMES D./HUNNS LAKE SAND	DUTCHESS	123 WEST HUNN'S LAKE ROAD	STANFORDVILLE	12581	SAND AND GRAVEL	914-868-7333	19	02/23/93	A
HIGH VIEW ASSOCIATES	DUTCHESS	110 LENOX AVE.	STAMFORD	06906	SAND AND GRAVEL	914-855-9200	2	07/06/87	A
WHORTLEKILL ROD AND GUN CLUB	DUTCHESS	R R #6 BOX 82	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-266-5371	22	04/05/91	A
RICHARD AND JOHN HERMANS	DUTCHESS	Main St.	MILLERTON	12546	SAND AND GRAVEL	914-789-3633	5	08/22/83	A
PALUMBO SAND & GRAVEL INC	DUTCHESS	ROUTE 22	DOVER PLAINS	12522	SAND AND GRAVEL	914-832-6791	18	06/01/92	A
FLORIEN A PALMER	DUTCHESS	KINGS HILL ROAD	SHARON	06069	SAND AND GRAVEL	203-364-5967	4	12/15/90	A
DUTCHESS QUARRY AND SUPPLY CO INC	DUTCHESS	BOX 65	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-8151	8	05/31/93	A
DONALD C COOKINGHAM	DUTCHESS	COOKINGHAM DRIVE	STAATSBURG	12580	SAND AND GRAVEL	914-889-4875	4	08/26/91	A
EMMADINE LAND ASSOCIATES	DUTCHESS	QUAKER HILL ROAD	PAWLING	12564	SAND AND GRAVEL	914-855-3000	5	06/15/87	A
L.P.L. DEVELOPMENT, INC.	DUTCHESS	PO BOX 115	PINE PLAINS	12567	SAND AND GRAVEL	914-758-5337	5	06/12/93	A
GERTRUDE HANZI	DUTCHESS	PO BOX 34	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-221-9355	2	05/16/85	A
ROSA FREIHOFFER	DUTCHESS	BRUZGUL ROAD	LAGRANGEVILLE	12540	SAND AND GRAVEL	914-223-3113	5	12/13/82	A-
J D VON DER LIETH AND SONS INC	DUTCHESS	63 WHITE SCHOOLHOUSE RD.	RHINEBECK	12572	SAND AND GRAVEL	914-876-5411	12	01/05/91	A
CHARLES J ANDREWS	DUTCHESS	RFD 2 BOX 79	LAGRANGEVILLE	12546	SAND AND GRAVEL	914-223-3260	40	12/10/87	A
WILFORD S JUDSON	DUTCHESS	PLEASANT RIDGE ROAD	WINGDALE	12594	SAND AND GRAVEL	914-832-6058	4	03/31/94	A
O'NEILL; FRANCIS E.	DUTCHESS	BOX 158	ARMONK	10504	SAND AND GRAVEL	914-273-3786	13	12/31/90	A
WINNIE ENTERPRISES INC	DUTCHESS	RD 2 BOX 34C	RHINEBECK	12572	SAND AND GRAVEL	914-876-7771	4	01/07/92	A
WILLIAM C DARLING	DUTCHESS	P.O. Box 141	STANFORDVILLE	12581	SAND AND GRAVEL	914-868-7427	15	03/04/91	A
NICHOLAS J VIGLUCCI	DUTCHESS	DAVIS RD	SALT POINT	12578	SAND AND GRAVEL	914-635-2952	5	04/22/92	A
JOHN A PALMQUIST	DUTCHESS	CRAMER ROAD	POUGHKEEPSIE	12603	SAND AND GRAVEL	914-454-2849	1	01/05/92	A
STORMVILLE DOLOMITE INC	DUTCHESS	BOX 36	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-221-0399	15	12/31/89	A
TOWN OF WASHINGTON	DUTCHESS	BOX 667	MILLBROOK	12545	SAND AND GRAVEL	914-677-3419	10	12/15/90	A
SLOCUM; EGBERT J	DUTCHESS	PLEASANT RIDGE ROAD	WINGDALE	12594	SAND AND GRAVEL	914-832-6267	10	10/25/92	A
LAWTON ADAMS	DUTCHESS	P O BOX 309	SOMERS	10589	SAND AND GRAVEL	914-232-3275	3	06/15/93	A
HARLEM VALLEY MATERIALS INC	DUTCHESS	RTE. # 6	CARMEL	10512	SAND AND GRAVEL	914-232-5156	39	04/16/93	A
SOUTHERN DUTCHESS SAND & GRAVEL CORP	DUTCHESS	BOX 420	FISHKILL	12524	SAND AND GRAVEL		36	03/31/90	A
ORR ROBERT W.	DUTCHESS	43 MILLER HILL RD.	LAGRANGEVILLE	12540	SAND AND GRAVEL	914-221-9614	4	07/26/90	A

name	county	street	city	zip	mineral	phone	acr_tot	exp_date	status
DOVER STONE AND SAND	DUTCHESS	BOX 464	DOVER PLAINS	12522	SAND AND GRAVEL	914-832-6541	5	08/18/87	A
BREWSTER SAND AND STONE CORPORATION	DUTCHESS	P.O.BOX J.FIELDS LANE	BREWSTER	10509	SAND AND GRAVEL	914-279-3738	20	07/26/93	A
DUTCHESS QUARRY AND SUPPLY CO INC	DUTCHESS	P O BOX 65	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-8151	19	06/30/93	A
WASHINGTON GRAVEL INC	DUTCHESS	R D #2 BOX 54	MILLBROOK	12545	SAND AND GRAVEL	914-677-3619	18	04/28/93	A
ROBERT J KELLER & RICHARD POLHEMUS	DUTCHESS	RD 1 BOX 68	DOVER PLAINS	12522	SAND AND GRAVEL	914-877-6245	5	09/28/91	A
RED WING PROPERTIES INC	DUTCHESS	ROUTE 52	STORMVILLE	12582	SAND AND GRAVEL	914-221-2224	53	05/01/87	A
KELLER ROBERT J.	DUTCHESS	BENSON HILL ROAD	DOVER PLAINS	12522	SAND AND GRAVEL	914-877-6245	5	08/13/90	A
RICHARD ALLEN SAND & GRAVEL	DUTCHESS	BOX 679	POUGHQUAG	12570	SAND AND GRAVEL	914-724-5217	13	03/01/89	A
KENT HOLLOW INC	DUTCHESS	C/O STEINER INC	BETHEL	06801	SAND AND GRAVEL	203-744-3782	9	05/02/89	A
RED WING PROPERTIES INC	DUTCHESS	ROUTE 52	STORMVILLE	12582	SAND AND GRAVEL	914-221-2224	65	01/02/94	A
VAIL BROTHERS FARM - CLOVE EXCAVATORS	DUTCHESS	REILLY RD	LEGRANGEVILLE	12540	SAND AND GRAVEL	914-223-3036	10	03/15/93	A
DALEY, ROBERT	DUTCHESS	BOX 425 PARKSVILLE RD.	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-3568	2	09/15/93	A
AAKJAR, FREDERICK H	DUTCHESS	PO BOX 40	VERBANK	12568	SAND AND GRAVEL	914-677-5269	3	05/31/93	A
NICHOLAS F DOMAIN SAND & GRAVEL CO.	DUTCHESS	RR1 BOX 47	BETHEL	06801	SAND AND GRAVEL	203-797-1723	47	02/06/94	A
SHENANDOAH FARMS	DUTCHESS	RR7, BOX 182	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-226-5417	6	07/20/91	A
JAMES A. MURPHY	DUTCHESS	RD2 BOX 102	PINE PLAINS	12507	SAND AND GRAVEL	518-398-7097	6	08/03/91	A
CLOVE VALLEY ROO AND GUN CLUB	DUTCHESS	WEST CLOVE MT. RD	LAGRANGEVILLE	12540	SAND AND GRAVEL	914-677-3775	5	07/15/94	A
ROBERT BARLOW	DUTCHESS	KENT RD.BOX 56	WASSAIC	12592	SAND AND GRAVEL	914-373-9149	5	09/28/90	A
SEGALLA JOHN,A	DUTCHESS	PO BOX C	AMENIA	12501	SAND AND GRAVEL	518-674-2028	4	06/06/91	A
WESLEY VIRTUE	DUTCHESS	41 VERPLANCK AVE.	HOPEWELL JUNCTION	12590	SAND AND GRAVEL	914-226-6708	1	10/15/91	A
RED WING PROPERTIES CORP.	DUTCHESS	ROUTE 52 BOX 8	STORMVILLE	12582	SAND AND GRAVEL	914-221-2224	31	08/23/93	A
SHEKOMEKO VILLAGE CO.,INC.	DUTCHESS	RD 2 BOX 89A	PINE PLAINS	12567	SAND AND GRAVEL	914-485-6911	6	04/10/92	A
JAY AND STANLEY DOMIN	DUTCHESS	MOUNTAIN RD	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-3828	3	03/01/92	A
JESSE BONTECOU	DUTCHESS	RALLY FARM	MILLBROOK	12545	SAND AND GRAVEL		13	03/04/90	A
STUART BATES	DUTCHESS	STAR RIDGE RD.	BREWSTER	10509	SAND AND GRAVEL	914-279-8952	5	08/01/90	A
CYNTHIA C. COGSWELL	DUTCHESS	RD 1 BOX 90A KENNELS RD.	MILLBROOK	12545	SAND AND GRAVEL	914-677-6068	4	10/10/91	A
TOWN OF STANFORD	DUTCHESS	TOWN HALL RT.82	STANFORDVILLE	12581	SAND AND GRAVEL		5	11/30/93	A
JAY GIARDINA	DUTCHESS	RR 1 BOX 547A	PINE PLAINS	12567	SAND AND GRAVEL	518-398-7748	2	10/16/93	A
NEW YORK TRAP ROCK CORP	DUTCHESS	162 OLD HILL RD	WEST NYACK	10994	DOLOSTONE	914-358-4500	616	11/28/93	A
CRYSTAL SPRING COMPANY	DUTCHESS	RD 3 BOX 376	WAPPINGER FALLS	12590	SAND AND GRAVEL	914-221-2201	4	01/15/94	A
JOHN LOBOTSKY	DUTCHESS	WHITE SCHOOLHOUSE RD.	RHINEBECK	12572	SAND AND GRAVEL	914-876-3875	7	08/31/93	A
SCOLAND FARMS, INC.	DUTCHESS	BOX 133 RD 2	MILLERTON	12546	DOLOSTONE	518-329-1366	4	10/07/94	A
DUTCHESS QUARRY AND SUPPLY CO INC	DUTCHESS	P O BOX 65	PLEASANT VALLEY	12569	STONE	914-635-8151	58	06/30/93	A
TOWN OF DOVER	DUTCHESS	PLEASANT RIDGE ROAD	WINGDALE	12594	SAND AND GRAVEL	914-832-6243	9	12/27/82	I
BREWSTER SAND AND STONE CORPORATION	DUTCHESS	P O BOX J	BREWSTER	10509	SAND AND GRAVEL	914-279-4270	7	07/01/91	I
ELIZABETH KING LANSING	DUTCHESS	NORTH AVENUE	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-3071	60	01/05/86	I
DOUGLAS C WAINWRIGHT	DUTCHESS	RD 3 BOX 287	FISHKILL	12524	SAND AND GRAVEL	914-897-4274	4	03/24/88	I
HENRY FRANK	DUTCHESS	403 DUTCHESS TURNPIKE	POUGHKEEPSIE	12603	SAND AND GRAVEL	914-471-4822	6	04/01/84	I
ROCK CITY SAND AND GRAVEL CORP	DUTCHESS	ROUTE 199	RED HOOK	12571	SAND AND GRAVEL	914-758-1100	20	06/16/84	I
RICHARD T MEAD	DUTCHESS	WILLOWBROOK ROAD	CLINTON CORNERS	12581	SAND AND GRAVEL	914-266-3220	3	05/12/86	I
LOUIS DE SIMONE	DUTCHESS	379 BARWAY DRIVE	YORKTOWN HEIGHTS	10598	SAND AND GRAVEL	914-245-5212	17	10/04/82	I
ALEXANDER AND HOGAN	DUTCHESS	300 NEW HACKENSACK ROAD	WAPPINGERS FALLS	12596	SAND AND GRAVEL	914-462-2400	4	04/30/87	I
TEN MILE RIVER HOLDING LTD	DUTCHESS	SAND HILL ROAD	DOVER PLAINS	12522	SAND AND GRAVEL	914-877-9432	42	05/06/85	I
A COLARUSSO AND SON INC	DUTCHESS	PO BOX 302	HUDSON	12534	SAND AND GRAVEL	518-828-3218	2	10/12/84	I
THOMAS J OAK	DUTCHESS	R D #1	RED HOOK	12571	SAND AND GRAVEL	914-758-5406	5	10/31/84	I
WOLCOTT HOME LAND	DUTCHESS	C/O D WOLCOTT	RHINEBECK	12572	SAND AND GRAVEL	914-876-3804	6	10/31/84	I
TOWN OF UNIONVALE	DUTCHESS	ROUTE 55	LAGRANGEVILLE	12540	SAND AND GRAVEL	914-724-5600	6	12/16/82	I
FIELDSTONE LAKES PARTNERSHIP	DUTCHESS	P.O.BOX 277	MAHOPAC	10541	SAND AND GRAVEL		0	**/**/88	I
RED WING PROPERTIES,INC.	DUTCHESS	RTE.52	STORMVILLE	12582	SAND AND GRAVEL	914-221-2224	0	**/**/88	N
DOMAIN SAND AND GRAVEL	DUTCHESS	81 OLD HAWLEYVILLE RD	BETHEL	06801	SAND AND GRAVEL	914-832-9605	0	**/**/88	N
DUTCHESS QUARRY AND SUPPLY	DUTCHESS	(DARBORIO RD. BOX 651	PLEASANT VALLEY	12569	SAND AND GRAVEL	914-635-2174	0	**/**/88	N
JOAN AND ROBERT KELLER	DUTCHESS				SAND AND GRAVEL		0	**/**/88	N
HARLEM VALLEY LANDFILL CORP.	DUTCHESS	PO BOX C	AMENIA	12501	LIMESTONE	914-373-9535	0	**/**/88	N

name	county	street	city	zip	mineral	phone	acr_tot	exp_date	status
O AND G INDUSTRIES	DUTCHESS	112 WALL ST	TORRINGTON	06790	AGGREGATE	315-471-2244	30	**/**/91	N
JOHN AND RICHARD HERMANS	DUTCHESS	MAIN ST.	MILLERTON	12546	SAND AND GRAVEL		0	**/**/91	N
BURDICK SOIL MINE	DUTCHESS	ROUTE 82 BOX 240	STANFORDVILLE	12581	SAND AND GRAVEL		0	**/**/91	N
JOSEPH SMITH	DUTCHESS	16 ROCKWOOD LANE	GREENWICH	06830	SAND AND GRAVEL	203-869-6257	0	**/**/91	N
POND HILLS DEVELOPMENT CORP.	DUTCHESS	COMMERCE ST.	POUGHKEEPSIE	12603	SAND AND GRAVEL		0	**/**/91	N
TOWN OF WASHINGTON	DUTCHESS	P.O. BOX 1404	MILLBROOK	12545	SAND AND GRAVEL		0	**/**/91	N
NOVAK EQUIPMENT CO.	DUTCHESS	RD 3 BOX 131	LAGRANGEVILLE	12540	SAND AND GRAVEL		0	**/**/91	N
BIRCHWOOD DEVELOPMENT CO.	DUTCHESS	COMMERCE ST	POUGHKEEPSIE	12603	SAND AND GRAVEL	914-471-8700	0	**/**/91	N
CEDAR MEADOW CO INC	DUTCHESS	COMMERCE STREET	POUGHKEEPSIE	12603	SAND AND GRAVEL	914-471-8700	0	06/15/85	R
JOHN G LOBOSKY JR	DUTCHESS	R D #3 BOX 82	RHINEBECK	12572	SAND AND GRAVEL	914-876-2812	2	03/23/86	R
BREWSTER SAND & STONE CORP	DUTCHESS	FIELDS LANE	BREWSTER	10509	SAND AND GRAVEL	914-279-4270	12	03/14/88	R
FRANCIS RYAN	DUTCHESS	WATERBURY HILL ROAD	BILLINGS	12510	SAND AND GRAVEL	914-223-3746	0	04/29/85	R
JOHN DENTER SAND AND DRAVEL	DUTCHESS	P O BOX 158	RED HOOK	12571	SAND AND GRAVEL	914-758-9831	10	04/30/87	R
BEST SAND AND GRAVEL INC	DUTCHESS	PLEASANT RIDGE RD	WINGDALE	12594	SAND AND GRAVEL	914-241-1393	26	05/02/87	R
A COLARUSSO AND SON INC	DUTCHESS	P O BOX 302	HUDSON	12534	SAND AND GRAVEL	518-828-3218	2	**/**/91	R
O & G INDUSTRIES	DUTCHESS	112 WALL ST.	TORRINGTON	06790	SAND AND GRAVEL	914-232-3151	12	04/15/84	R
NYSDEC - DIV OF LANDS & FORESTS	DUTCHESS	BOX C	MILLBROOK	12545	SAND AND GRAVEL	914-677-8268	8	03/21/88	R
LLOYD L ARCHER	DUTCHESS	200 TURKEY HILL ROAD	RED HOOK	12571	SAND AND GRAVEL	914-758-8339	0	01/01/01	R
BREWSTER SAND AND STONE CORPORATION	DUTCHESS	P O BOX J	BREWSTER	10509	SAND AND GRAVEL	914-279-4270	19	04/17/84	R
RALPH BIERCE INC	DUTCHESS	BOX 302	PAWLING	12564	SAND AND GRAVEL	914-855-3140	0	01/05/83	R
DOVER STONE & SAND CORP	DUTCHESS	PO BOX 464	DOVER PLAINS	12522	SAND AND GRAVEL	914-832-6541	0	12/11/91	R
SWAMP RIVER SAND AND GRAVEL INC	DUTCHESS	BOX 366	PAWLING	12564	SAND AND GRAVEL	914-855-9026	17	01/01/01	R
O&G COLPROVIA INC.	DUTCHESS		PURDYS	10578	SAND AND GRAVEL	914-832-6541	0	10/26/91	R
KENNETH BYRNE	DUTCHESS	P.O. BOX 1176	HOPEWELL JUNCTION	12533	SAND AND GRAVEL	914-226-6400	0	05/01/91	R
HALMAR CONSTRUCTION CORPORATION	DUTCHESS	100 STEVENS AVENUE	MOUNT VERNON	10550	SHALE	914-668-9500	5	**/**/91	R
ANDERSON PEAT-ORGANIC COMPOST CORP-	DUTCHESS	PLEASANT RIDGE ROAD	WINGDALE	12594	PEAT	914-832-6594	0	01/01/01	R
PINE HILL CONCRETE MIX CORP	ERIE	P.O. BOX 11120 STATION E.	BUFFALO	14211	SAND AND GRAVEL	716-894-2255	64	04/26/92	
DAN GERNATT ASPHALT PRODUCTS, INC.	ERIE	P.O. BOX 400	COLLINS	14034	SAND AND GRAVEL	716-532-3371	28	07/31/92	
A AND R GRAVEL, INC.,	ERIE	7967 ALLEN DRIVE	HAMBURG	14075	SAND AND GRAVEL	716-627-2055	10	09/30/92	
MCEWAN TRUCKING	ERIE	19782 SHARP STREET	EAST CONCORD	14055	SAND AND GRAVEL	716-941-5148	7	12/01/91	
UNION CONCRETE AND CONSTRUCTION CORP	ERIE	105 CENTER ROAD	WEST SENECA	14224	SAND AND GRAVEL	716-822-5755	30	06/04/90	
10,001 GRAND CORP.	ERIE	6375 GENESEE ST	LANCASTER	14086	SAND AND GRAVEL	716-683-6582	11	05/05/93	
ARTHUR H MAUL SON	ERIE	6885 POWERS RD	ORCHARD PARK		SAND AND GRAVEL	716-662-5708	4	**/**/91	
DAN GERNATT GRAVEL PRODUCTS INC	ERIE	TAYLOR HOLLOW RD	COLLINS	14034	SAND AND GRAVEL	716-532-3371	50	05/07/93	
PINE HILL CONCRETE MIX CORP	ERIE	2255 BAILEY AVE	BUFFALO	14211	SAND AND GRAVEL	716-894-2255	39	02/11/92	
PINE HILL CONCRETE MIX CORP	ERIE	2255 BAILEY AVE	BUFFALO	14211	SAND AND GRAVEL	716-894-2255	94	**/**/91	
OLIVIERI & SONS INC	ERIE	4337 SOWLES ROAD	HAMBURG	14075	SAND AND GRAVEL	716-649-2707	35	06/06/93	
GERNATT ASPHALT PRODUCTS INC	ERIE	PO BOX 400	COLLINS	14034	SAND AND GRAVEL	716-532-3372	7	**/**/91	
GERNATT ASPHALT PRODUCTS INC	ERIE	P.O. BOX 400	COLLINS	14034	SAND AND GRAVEL	716-532-3371	172	04/15/94	
O ROURKE CONSTRUCTION	ERIE	S 6058 DOVER ROAD	LAKEVIEW	14085	SAND AND GRAVEL	716-627-2055	14	06/16/86	
HOLMES & MURPHY INC	ERIE	BANK ST	ORCHARD PARK	14127	SAND AND GRAVEL	716-662-9303	40	01/26/91	
PINE HILL CONCRETE MIX CORP.	ERIE	2255 BAILEY AVE.	BUFFALO	14211	SAND AND GRAVEL	716-894-2255	30	04/30/92	
CHARLES DAVID WOODRUFF	ERIE	HAND ROAD	CHAFFEE	14030	SAND AND GRAVEL	716-496-7252	5	03/24/92	
GERNATT ASPHALT PRODUCTS INC	ERIE	TAYLOR HOLLOW RD	COLLINS	14034	SAND AND GRAVEL	716-532-3371	37	11/13/91	
GERNATT ASPHALT PRODUCTS, INC.	ERIE	TAYLOR HOLLOW ROAD	COLLINS	14034	SAND AND GRAVEL	716-532-3371	12	03/31/92	
CHARLES DAVID WOODRUFF	ERIE	HAND ROAD	CHAFFEE	14030	SAND AND GRAVEL	716-496-7252	9	11/28/92	
ALFRED F KAEFER	ERIE	7524 WOHLHEUWER ROAD	COLDEN	14033	SAND AND GRAVEL	716-941-5958	9	12/31/92	
GERNATT ASPHALT PRODUCTS, INC.	ERIE	P.O. BOX 400	COLLINS	14034	SAND AND GRAVEL	716-496-5244	14	09/01/92	
WALTER F & JANET SCHIENER	ERIE	12400 SPRINGVILLE RD	SARDINIA	14134	SAND AND GRAVEL	716-496-7207	10	05/01/89	
GERNATT ASPHALT PRODUCTS INC	ERIE	TAYLOR HOLLOW RD	COLLINS	14034	SAND AND GRAVEL	716-532-3371	2	**/**/91	
BROOK GARDENS INC	ERIE	3625 EGGERT RD	ORCHARD PARK	14127	SAND AND GRAVEL	716-662-9510	42	10/31/88	
GERNATT ASPHALT PRODUCTS, INC.	ERIE	P.O. BOX 400	COLLINS	14034	SAND AND GRAVEL	716-492-3962	37	02/28/92	
EDWIN W. HEARY	ERIE	11128 MOORE ROAD	SPRINGVILLE	14141	SAND AND GRAVEL	716-941-6141	7	12/02/91	

RECEIVED

June 17, 1993

Mr. George B. Minervini
Chazen Environmental Services, Inc.
P.O. Box 3479
Poughkeepsie, New York 12603

RE: Beacon Terminal Buildings
South Avenue
Beacon, New York

Dear Mr. Minervini:

This will acknowledge receipt of your letter dated June 11, 1993,
requesting information on the above site.

This Department has no files on that subject.

Very truly yours,

Richard C. Sewell

Richard C. Sewell
Freedom of Information Officer
Ass't. Commissioner for Administration

RCS:ds

cc: Environmental Health

Dutchess
County
Department
of
Health

William R. Steinhaus
County Executive

Commissioner of Health

387-391 Main Mall
Poughkeepsie
New York
12601
(914) 431-1500
Fax (914) 431-1537



CHAZEN ENVIRONMENTAL SERVICES, INC.

Dutchess County Office:

PO Box 3479, 229B Page Park, Manchester Road
Poughkeepsie, NY 12603
Phone: (914) 454-3980 Fax: (914) 454-4026

Orange County Office:

Suite G, 201 Ward Street
Montgomery, NY 12549
Phone: (914) 457-1521 Fax: (914) 457-1523

June 11, 1993

Richard C. Sewell
Freedom of Information Officer
Dutchess County Department of Health
387-391 Main Mall
Poughkeepsie, New York 12601

*Re: Beacon Terminal Buildings
South Avenue, Beacon, New York*

Dear Mr. Sewell:


I am conducting an Environmental Site Assessment of the above mentioned property. The assessment includes a request for information from County agencies under the Freedom of Information Law.

Could you please provide me with, or inform me of the presence of, files in your department concerning the above mentioned site. Pertinent data might include:

1. Reported violations of drinking water, well water or groundwater standards
2. Well permits
3. Water testing results
4. Reported incidents of dumping or landfilling

Thank you for your assistance.

Very truly yours,



George B. Minervini
Environmental Consultant

GBM:mga

(Untitled)

CHAZEN ENVIRONMENTAL SERVICES, INC.

Dutchess County Office:

PO Box 3479, 229B Page Park, Manchester Road
Poughkeepsie, NY 12603
Phone: (914) 454-3980 Fax: (914) 454-4026

Orange County Office:

Suite G, 201 Ward Street
Montgomery, NY 12549
Phone: (914) 457-1521 Fax: (914) 457-1523

June 23, 1993

Richard C. Sewell
Freedom of Information Officer
Dutchess County Department of Health
387-391 Main Street
Poughkeepsie, New York 12601

*Re: Atlas Fibre Company, Inc.
BASF Colors and Chemicals, Inc.
Chemical Rubber Products, Inc.
Located at South Avenue
Beacon, New York*

Dear Mr. Sewell:

I am conducting an Environmental Site Assessment of the above mentioned property. The Assessment includes a request for information from County Agencies under the Freedom of Information Law.

Could you please provide me with, or inform me of the presence of, files in your department concerning the above mentioned site. Pertinent data might include:

1. Reported violations of drinking water, well water or groundwater standards
2. Well permits
3. Water testing results
4. Reported incidents of dumping or landfilling

Thank you for your assistance.

Very truly yours,



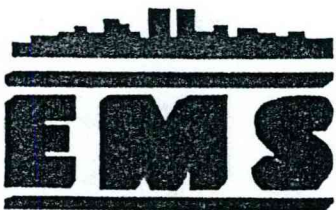
George B. Minervini
Environmental Consultant

GBM:rmb

FOILATLSAM

APPENDIX C

Asbestos Sampling Results



ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

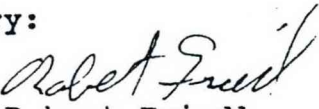
June 21, 1992

ANALYTICAL TEST REPORT FOR ASBESTOS
(POLARIZED LIGHT MICROSCOPY/DISPERSION STAINING)

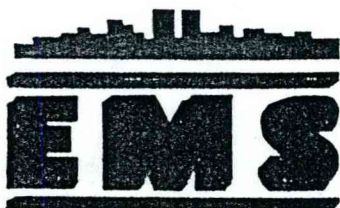
1. Test report code: CZ62193
2. Chazen Environmental Services, Inc.
Page Park Manchester Road
P.O. box 3479
Poughkeepsie, New York 12603
Attn: George Minervini

RE: Beacon Terminal Buildings
South Avenue.
Beacon, N.Y.
3. Miscellaneous building materials: Elbow and pipe insulation, floor tile, ceiling tile, and cementitious wall board.
4. Analysis of bulk samples for asbestos using Polarized Light Microscopy (PLM) and Dispersion Staining (DS).
5. Sampling procedures:
Field: Unknown.
Laboratory: as per NVLAP procedures and following ELAP requirements.
6. Deviations from sampling procedures:
Field: Unknown.
Laboratory: None along with dissolution and disaggregation of samples with asphalt matrix.
7. Analytical Results: Reported on attached data sheet(s). Asbestos WAS detected in the insulation, and the cementitious wallboard samples submitted.
8. Data to support interpretations: Attached.
9. Analytical uncertainty: Estimated @ 5-10% for PLM. Finest fibers which may be present in some samples may be resolvable only with electron microscopy. No evidence in examination to warrant this.

10. This analytical report may not be reproduced in full or in part without express written permission by EMS. Insofar as Chazen Environmental Services, Inc. needs to reproduce these materials for internal use, permission is granted.
11. This report does not represent an endorsement by the National Institute of Standards and Testing insofar that the data are correct. The NIST methodology refers to the fact that EMS has previously met or exceeded the required analytical procedures and methodologies required by Federal legislation and continues to use those methods.
12. The bulk sample data reported within this report pertain to only those bulk samples submitted and analyzed for this report.
13. Signature of analyst or agent of Laboratory:


Robert Friedl
Laboratory Director

14. Laboratory code/identification number: NYS ELAP #10891
NVLAP/NIST #1140



ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

BULK SAMPLE ANALYSIS SUMMARY SHEET

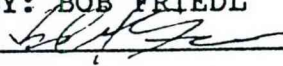
SAMPLE #	MATERIAL/LOCATION	RESULTS
2-3-1	PIPE WRAP/BUILDING #2, 3RD FLOOR.	CELLULOSE 100%
2-3-2	PIPE WRAP/BUILDING #2, 3RD FLOOR.	CHRYSTILE 25% BINDER 75%
2-3-3	PIPE WRAP/BUILDING #2, 3RD FLOOR.	CHRYSTILE 80% CELLULOSE 15% BINDER 5%
2-3-4	FLOOR TILE/BUILDING #2, 3RD FLOOR, OFFICE AREA.	CARBONATE 3% ASPHALT 97%
2-3-5	CEILING TILE/BUILDING #2, 3RD FLOOR, OFFICE AREA.	CELLULOSE 100%
4-3-1	FLOOR TILE/BUILDING #4, 3RD FLOOR, WEST END.	CARBONATE 8% ASPHALT 92%
4-3-2	WALL BOARD/BUILDING #4, 3RD FLOOR, WEST END, NORTH WALL.	CHRYSTILE 30% CEMENT 70%
4-1-1	CEMENTITIOUS MATERIAL/ON WATER HEATER ASSOCIATED WITH WATER SOFTENER EQUIP.	CHRYSTILE 45% CEMENT 55%
1-1-1	PIPE WRAP/BOILER CONTROL ROOM.	FIBERGLASS 82% PERLITE 8% BINDER 10%
6-2-1	FLOOR TILE/BUILDING #6, SECOND LEVEL, EAST SIDE.	CARBONATE 20% ASPHALT 80%

SALIENT AREA: BEACON TERMINAL BUILDINGS.

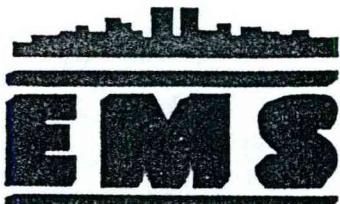
CLIENT: CES, INC.

DATE COLLECTED: 6/16/93 COLLECTED BY: GEORGE MINERVINI

DATE RECEIVED: 6/18/93 DATE ANALYZED: 6/21/93

ANALYZED BY: BOB FRIEDL
SIGNATURE: 

NVLAP ACCREDITATION #1140



ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

BULK SAMPLE ANALYSIS SUMMARY SHEET


SAMPLE #	MATERIAL/LOCATION	RESULTS
6-2-2	FLOOR TILE/BUILDING #6, SECOND LEVEL, EAST SIDE.	CARBONATE 3% ASPHALT 97%
6-2-3	FLOOR TILE/BUILDING #6, SECOND LEVEL, EAST SIDE.	CARBONATE 2% ASPHALT 98%

SALIENT AREA: BEACON TERMINAL BUILDINGS.

CLIENT: CES, INC.

DATE COLLECTED: 6/16/93 COLLECTED BY: GEORGE MINERVINI

DATE RECEIVED: 6/18/93 DATE ANALYZED: 6/21/93

ANALYZED BY: BOB FRIEDL
SIGNATURE: 

NVLAP ACCREDITATION #1140



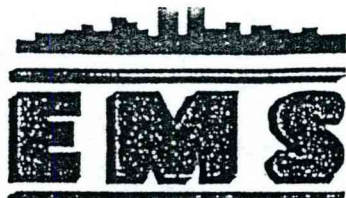
ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

ANALYSES FOR FIBERS - PLM/PLM+DS

Lab # Client #	<u>2-3-1</u>	<u>2-3-2</u>	<u>2-3-3</u>
GROSS APPEARANCE building mat'l. homogeneous layered fibrous color Log-in Analyst	<u>Pipe</u> <u>Insulation</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>	<u>Pipe</u> <u>Insulation</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>	<u>Pipe</u> <u>Insulation</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>
TREATMENT none homogenized* *reptd sep. columns	<u>✓</u>	<u>✓</u>	<u>✓</u>
ASBESTOS/TYPE PRESENT-PLM DS CONFIRMED	<u>N.D. /</u> <u>/</u>	<u>Chrysotile /</u> <u>/</u>	<u>Chrysotile /</u> <u>/</u>
PROPERTIES morphology color/birefr. R.I. <u> </u> <u> </u> <u> </u> pleochroism ext. ang./sign	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u> <u>/</u>	<u>Fibers</u> <u>Bundles</u> <u>Clear</u> <u>Low</u> <u>/</u> <u>1.55G</u> <u>None</u> <u>/</u> <u>wavy</u> <u>+</u> <u>/</u>	<u>Fibers</u> <u>Bundles</u> <u>Clear</u> <u>Low</u> <u>/</u> <u>1.55G</u> <u>None</u> <u>/</u> <u>wavy</u> <u>+</u> <u>/</u>
ASBESTOS type(s) amount - est. strat. pt. ct. <u> </u> or point count <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>Chrysotile</u> <u>25%</u> <u> </u> <u> </u> <u> </u>	<u>Chrysotile</u> <u>80%</u> <u> </u> <u> </u> <u> </u>
OTHER FIBROUS MATERIALS-EST. % glass cellulose other	<u>100%</u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u>	<u>15%</u> <u> </u> <u> </u>
MAJOR NON-FIBROUS MATERIALS-EST. %	<u> </u> <u> </u> <u> </u>	<u>Binder 75%</u> <u> </u> <u> </u>	<u>Binder 5%</u> <u> </u> <u> </u>
ANALYST/DATE	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>



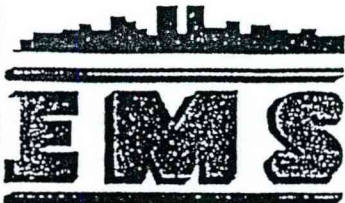
ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

ANALYSES FOR FIBERS - PLM/PLM+DS

Lab # Client #	<u>2-3-4</u>	<u>2-3-5</u>	<u>4-3-1</u>
GROSS APPEARANCE building mat'l. homogeneous layered fibrous color	<u>Floor</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>no</u> <u>green</u>	<u>Ceiling</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u>	<u>Floor</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>no</u> <u>green</u>
Log-in Analyst	<u>RM</u>	<u>RM</u>	<u>RM</u>
TREATMENT none homogenized* *reptd sep. columns	<u>✓</u>	<u>✓</u>	<u>✓</u>
ASBESTOS/TYPE PRESENT-PLM	<u>N.D. /</u>	<u>N.D. /</u>	<u>N.D. /</u>
DS CONFIRMED	<u>/</u>	<u>/</u>	<u>/</u>
PROPERTIES morphology color/birefr. R.I. | | pleochroism ext. ang./sign	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u> <u>/</u>	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u> <u>/</u>	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u> <u>/</u>
ASBESTOS type(s) amount - est. strat. pt. ct. ____ or point count ____	<u>—</u> _____ _____ _____ _____ _____	<u>—</u> _____ _____ _____ _____ _____	<u>—</u> _____ _____ _____ _____ _____
OTHER FIBROUS MATERIALS-EST. % glass cellulose other	_____ _____ _____	<u>100 %</u> _____ _____	_____ _____ _____
MAJOR NON-FIBROUS MATERIALS-EST. %	<u>Carbonate 3 %</u> <u>Asphalt 97 %</u>	_____ _____ _____	<u>Carbonate 8 %</u> <u>Asphalt 92 %</u>
ANALYST/DATE	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>



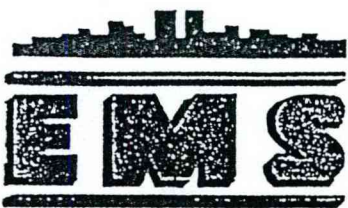
ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

ANALYSES FOR FIBERS - PLM/PLM+DS

Lab # Client #	<u>4-3-2</u>	<u>4-1-1</u>	<u>1-1-1</u>
GROSS APPEARANCE building mat'l. homogeneous layered fibrous color Log-in Analyst	<u>Wall</u> <u>Board</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>	<u>Water Heater</u> <u>Insulation</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>	<u>Pipe</u> <u>Insulation</u> <u>yes</u> <u>no</u> <u>yes</u> <u>gray</u> <u>RM</u>
TREATMENT none homogenized* *reptd sep. columns	<u>✓</u>	<u>✓</u>	<u>✓</u>
ASBESTOS/TYPE PRESENT-PLM DS CONFIRMED	<u>Chrysotile</u> <u>1</u>	<u>Chrysotile</u> <u>1</u>	<u>N.D.</u> <u>1</u>
PROPERTIES morphology color/birefr. R.I. <u> </u> <u> </u> <u> </u> pleochroism ext. ang./sign	<u>Fibers/</u> <u>Bundles</u> <u>clear</u> <u>Low</u> <u>1</u> <u>1.556</u> <u>None</u> <u>wavy</u> <u>+</u> <u>1</u>	<u>Fibers/</u> <u>Bundles</u> <u>clear</u> <u>Low</u> <u>1</u> <u>1.556</u> <u>None</u> <u>wavy</u> <u>+</u> <u>1</u>	<u>N/A</u> <u>1</u> <u>1</u> <u>1</u>
ASBESTOS type(s) amount - est. strat. pt. ct. <u> </u> or point count <u> </u>	<u>Chrysotile</u> <u>30%</u>	<u>Chrysotile</u> <u>45%</u>	<u> </u>
OTHER FIBROUS MATERIALS-EST. % glass cellulose other	<u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u>	<u>82%</u> <u> </u> <u> </u>
MAJOR NON-FIBROUS MATERIALS-EST. %	<u>Cement 70%</u>	<u>Cement 55%</u>	<u>Perlite 8%</u> <u>Binder 10%</u>
ANALYST/DATE	<u>Robert G. Gualt 6/22/93</u>	<u>Robert G. Gualt 6/22/93</u>	<u>Robert G. Gualt 6/22/93</u>



ENVIRONMENTAL
MANAGEMENT
SYSTEMS, INC.

10 Filmont Drive, New City, N.Y. 10956

(914) 638-9024 Fax (914) 638-9025

ANALYSES FOR FIBERS - PLM/PLM+DS

Lab # Client #	<u>6-2-1</u>	<u>6-2-2</u>	<u>6-2-3</u>
GROSS APPEARANCE building mat'l. homogeneous layered fibrous color Log-in Analyst	<u>Floor</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>no</u> <u>gray</u> <u>KM</u>	<u>Floor</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>no</u> <u>gray</u> <u>KM</u>	<u>Floor</u> <u>Tile</u> <u>yes</u> <u>no</u> <u>no</u> <u>gray</u> <u>KM</u>
TREATMENT none homogenized* *reptd sep. columns	<u>✓</u>	<u>✓</u>	<u>✓</u>
ASBESTOS/TYPE PRESENT-PLM DS CONFIRMED	<u>N.D. /</u> <u>/</u>	<u>N.D. /</u> <u>/</u>	<u>N.D. /</u> <u>/</u>
PROPERTIES morphology color/birefr. R.I. <u>/</u> <u>/</u> pleochroism ext. ang./sign	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u>	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u>	<u>N/A /</u> <u>/</u> <u>/</u> <u>/</u>
ASBESTOS type(s) amount - est. strat. pt. ct. or point count	<u>—</u> <u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u> <u>—</u>
OTHER FIBROUS MATERIALS-EST. % glass cellulose other	<u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u>
MAJOR NON-FIBROUS MATERIALS-EST. %	<u>Carbonate 20%</u> <u>Asphalt 80%</u>	<u>Carbonate 3%</u> <u>Asphalt 97%</u>	<u>Carbonate 2%</u> <u>Asphalt 98%</u>
ANALYST/DATE	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>	<u>Robert Gruell 6/22/93</u>

AHERA INSPECTION LOG

Post-It brand fax transmittal memo 7671

No of pages >

To BOB FRIEDL	From G. MINIX
Co. EMS	Co. CEI
Dept.	Phone # 484-6910
Fax # 638-9025	Fax #

DOCUMENT INFORMATION

DOCUMENT NUMBER _____ PAGE _____ OF _____
DATE: 6/16/93
INSPECTOR SIGNATURE: [Signature]
INSPECTOR I.D. # AH 92-15498

BUILDING NUMBER/NAME

BZDGS ²⁻⁴⁻¹ ~~2-4-1~~

SALIENT SAMPLE AREA

~~BZDGS~~. STALKED TSI

SKETCH NUMBER & NAME

SAMPLE NUMBER	TYPE OF MATERIAL SAMPLED	CONDITION	SAMPLE LOCATION AND COMMENTS	RESULTS
2-3-1	PIPE WRAP TSI	FAIR-GOOD	THIRD FLR. - BRDG 2 PAPER-LIKE MTL. ≈ 4.50 LIN. FT.	YES / NO ASBESTOS CE 100%
2-3-2	"	"	CONCRETE-LIKE MTL. ≈ 300 LIN. FT.	YES / NO ASBESTOS CH 25 D: 75
2-3-3	"	"	AIR CELL ≈	YES / NO ASBESTOS CH 80 CE 15 D: 5
2-3-4	FLOOR TILE	POOR-GOOD	BRDG. 2 - THIRD FLR. - OFFICE AREA ≈ 2100 S.F.	YES / NO ASBESTOS CARB 3 HJ/47
2-3-5	CERAMIC TILE	POOR-GOOD	AS ABOVE	YES / NO ASBESTOS CE 100%
4-3-1	FLOOR TILE	POOR-FAIR	BRDG. 4 - WEST END, THIRD? FLR. 20' x 45' S.F. = 900	YES / NO ASBESTOS CARB 8 HJ/92
4-3-2	CONCRETE WALL BOARD	FAIR-GOOD	BRDG. 4. WEST END NORTH WALL ≈ 150 S.F.	YES / NO ASBESTOS CH 30 CM 70
4-1-1	CONCRETE	GOOD	ON WTR HTR - ASSE. W/ WTR SOFTENING EQUIP	YES / NO ASBESTOS CH 45 CM 55
1-1-1	TSI PIPE WRAP	GOOD	BOILER CONTROL RM ≈ 500 LIN. FT.	YES / NO ASBESTOS FG 82 PC 8 D: 10

AHERA INSPECTION LOG

DOCUMENT INFORMATION

DOCUMENT NUMBER _____ PAGE _____ OF _____

DATE: 6/16/93

INSPECTOR SIGNATURE: [Signature]

INSPECTOR I.D. # AH 92-15498

BUILDING NUMBER/NAME

BUILDING 6

SALIENT SAMPLE AREA

SECOND FLOOR EAST

SKETCH NUMBER & NAME

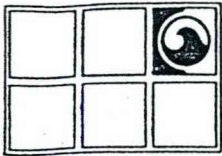
SAMPLE NUMBER	TYPE OF MATERIAL SAMPLED	CONDITION	SAMPLE LOCATION AND COMMENTS	RESULTS
6-2-1	FLOOR TILE	FAIR-GD	EAST SIDE - SECOND LEVEL SIDE-6.	YES / <input checked="" type="radio"/> NO ASBESTOS carb 20 4/8
6-2-2	"	FAIR-GD	"	YES / <input checked="" type="radio"/> NO ASBESTOS carb 3 4/97
6-2-3	"	FAIR-GD	"	YES / <input checked="" type="radio"/> NO ASBESTOS carb 2 1/5/98
				YES / NO ASBESTOS
				YES / NO ASBESTOS
				YES / NO ASBESTOS
				YES / NO ASBESTOS
				YES / NO ASBESTOS
				YES / NO ASBESTOS

ATTACHMENT 2

Phase II Environmental Site Assessment Report

(Groundwater Technology, Inc., 12/93)

12/17/93



GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.

1245 Kings Road, Schenectady, NY 12303

Fax: (518) 370-5864

PHASE II - ENVIRONMENTAL SITE ASSESSMENT REPORT BEACON TERMINAL BUILDINGS BEACON, NEW YORK

December 17, 1993

Submitted To:

Ms. Tami Ganeles
Kurzman and Eisenburg
1 North Broadway
White Plains, New York, 10601

GROUNDWATER TECHNOLOGY

Written/Submitted By:

Wendy C. Leonard, CPG
Senior Hydrogeologist

GROUNDWATER TECHNOLOGY

Reviewed/Approved By:

Todd G. Schwendeman, CHMM
Northeast District Manager

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Objectives	1
2.0	SCOPE OF WORK	2
3.0	METHODS OF INVESTIGATION	3
3.1	Soil Boring Installation	3
3.2	Soil Sampling	3
3.3	Groundwater Sampling	3
4.0	RESULTS OF INVESTIGATION	4
4.1	Soil Boring Program	4
4.2	Soil Sampling Results	4
4.3	Groundwater Sampling Results	6

LIST OF APPENDICES

A	Site Map
B	Drilling Logs
C	Portable Gas Chromatograph Results
D	Laboratory Analytical Results

1.0 INTRODUCTION

1.1 Background

The Beacon Terminal Associates, L.P. (BTA) are the property owners of the Beacon Terminal Buildings located at 579 South Avenue in Beacon, New York. In preparation in transferring the property to a prospective buyer, Eran Lighting - Plastics Ind. LTD a Phase I - Environmental Site Assessment was conducted in June-July 1993 by Chazen Environmental Services Inc. (report dated July 9, 1993). This investigation identified several issues of concern.

At the request of BTA, Groundwater Technology, Inc. (Groundwater Technology) was hired to perform a Phase II - Environmental Site Assessment which was focused specifically on the underground (UST) and above ground (AST) storage tanks (proposal dated October 5, 1993) located at the site. The USTs are located at two areas; the Building No. 5 area and immediately across South Avenue from the Beacon Terminal Buildings while the ASTs are located in the Building No. 4 area (see Appendix A - Site Map).

The Phase II - Environmental Site Assessment field work was performed on October 26, 1993 and consisted of five (5) soil borings with both soil and groundwater analytical testing.

This report presents the objectives of the assessment, the scope of work which was performed, the methodology utilized for the assessment and the results of the testing.

1.2 Objectives

The objectives of the Phase II - Environmental Site Assessment soil boring program completed on site were as follows:

- Determine the presence or absence of subsurface impacts from the historic liquid storage and handling practices in the vicinity of two underground (UST) and one aboveground (AST) storage tank areas based upon the locations identified in the Phase I - Environmental Site Assessment prepared by Chazen Environmental Services, Inc. dated July 9, 1993.

2.0 SCOPE OF WORK

The work scope implemented to meet the above stated objective consisted of the following worksteps:

- Advancement of 5 soil borings to an average depth of eleven (11) feet at selected locations adjacent to the USTs and ASTs, (Appendix A - Site Map).
- Field screening of all collected soil samples utilizing a Photoionization Detector (PID) and field testing for pH.
- Analysis of select soil samples for total volatile organic compounds (VOCs) and semi-volatile organic compounds using a Portable Gas Chromatograph (PGC).
- Confirmatory laboratory analysis of one water and two soil samples exhibiting the highest PGC readings.

3.0 METHODS OF INVESTIGATION

3.1 Soil Boring Installation

A vehicle mounted Geoprobe soil sampling unit was utilized to advance three (3) soil borings to depths of twelve (12) feet, (GP-2 and GP-3) and seven and one-half (7.5 feet) (GP-4). A hand auger was utilized for two areas, GP-1 and GP-5, which were not accessible by the Geoprobe unit. GP-1 was advanced to ten (10) feet and GP-5 was advanced to eleven (11) feet. Soil samples were collected continuously at four (4) foot intervals to a maximum depth of twelve feet below grade. The borings were installed in the following areas:

GP-1	.....	Building 4 Area AST's
GP-2	.....	Building 5 Area UST Lines
GP-3	.....	Building 5 Area UST's
GP-4	.....	Building 5 Area UST's
GP-5	.....	South Ave. No. 6 Fuel Oil UST

All of the Geoprobe soil sampling equipment was decontaminated between sampling intervals according to the following procedures: Alconox wash, followed by a distilled water rinse, followed by a second distilled water rinse.

3.2 Soil Sampling

Each of the collected soil samples was screened in the field using a PID. Select soil samples were analyzed for VOCs and semi-volatiles with a PGC. The two samples exhibiting the highest PGC readings were submitted for laboratory analysis by EPA Methods 8240 (volatiles) and 8270 (semi-volatiles) at Groundwater Technology Environmental Laboratories (GTEL) in Milford, New Hampshire.

3.3 Groundwater Sampling

Upon completion of the borehole, a sample of overburden groundwater was collected. The groundwater samples were secured through the use of a temporary well screen. Groundwater samples were obtained at all locations. The groundwater samples were field screened with the PGC for VOCs and semi-volatiles. The sample exhibiting the highest PGC reading was submitted for confirmatory laboratory analysis to GTEL for EPA Method 8240.

4.0 RESULTS OF INVESTIGATION

4.1 Soil Boring Program

The soils encountered during this investigation were predominantly fine grained silty clay. The pH of all samples was slightly above neutral (7.4). The results of the soil descriptions, PID screening and pH tests are presented in Appendix B - Drilling Logs.

4.2 Soil Sampling Results

The results of the PID soil screening performed during soil boring sampling are summarized in Table 1 - PID Soil Screening Results. A strong solvent smell and a sheen were observed during soil sampling in the Building 5 UST area (GP-2, GP-3 and GP-4).

Table 1
PID Soil Screening Results
(total VOCs in parts per million)

Depth	GP-1	GP-2	GP-3	GP-4	GP-5
0'- 4'	6	430	141	9	8
4'- 8'	8	1,635	163	5	5
8'- 12'	23	41	2,500 *	NS	13

KEY:

* - Sample showed evidence of liquid-phase material

NS - Not Sampled

GP - Geoprobe Point

The results of the PGC analyses on select soil samples are summarized in Table 2 - PGC and Laboratory Soil Sampling Results. The laboratory results of total detected compounds are also shown on Table 2 in order to provide a comparison. Table 4 shows the individual compounds detected by the laboratory analyses.

Table 2
PGC and Laboratory Soil Sampling Results
(total detected compounds in parts per million)

Depth	GP-1		GP-2	GP-3		GP-4	GP-5
	PGC	LAB		PGC	LAB		
0'- 4'	>3		NA	NA		<3	NA
4'- 8'	2,600	1.2*	210*	95*		NA	<3
8'- 12'	130		NA	2,900*	2,925*	NS	<3

KEY:

NA - Not Analyzed

GP - Geoprobe point

* - Toluene identified as major detected compound

The soil sampling results indicated that no compounds were detected above the PGC instrument detection limit at GP-4 and GP-5. Low level readings had been detected at these locations with the PID; however the PGC is considered a much more accurate analytical instrument.

The PID and PGC detected concentrations of VOCs in all samples collected from GP-2 and GP-3. The PGC identified the VOC as toluene. The laboratory sample at GP-3 (8-12 feet) confirmed toluene at a very similar concentration. The laboratory analysis also detected seven other compounds at estimated concentrations, meaning that the compounds were detected but cannot be accurately quantified.

A hydrocarbon screen was additionally performed on the GP-3 (8-12 foot) sample. This analysis identified the presence of lubricating oil at 25 ppm. This material was not detected by the PGC because of the very high toluene concentrations which required dilution and increased the detection limit to 300 ppm.

The PGC sampling results from GP-1 detected 2,600 ppm of what was identified as lubricating oil. The laboratory analytical results from this sample, which included volatiles and semi-volatiles by EPA Methods 8240 and 8270, also detected 1.2 ppm of toluene.

Bldg 2/4
Area

Due to the high concentrations of lubricating oil and/or toluene, which required dilution of samples, comparison of analyte-specific NYS DEC recommended clean-up levels (other than toluene) is not possible (i.e. the detection limits for most analytes are higher than the clean-up levels). The toluene recommended soil clean-up objective to protect groundwater quality is 1.5 ppm (NYS DEC TAGM MWR-92-4046, 1992).

4.3 Groundwater Sampling Results

Groundwater samples were secured at all five locations. Liquid-phase organic material was noted in the GP-2 and GP-3 groundwater samples. The sample exhibiting the highest PGC reading was GP-3 at 460 ppm. The results of the groundwater PGC and laboratory analysis are summarized below in Table 3 - PGC and Laboratory Groundwater Sampling Results. Table 4 shows the individual compounds detected by the laboratory analysis.

Table 3
PGC and Laboratory Groundwater Sampling Results
(total detected compounds in parts per million)

Method	GP-1	GP-2	GP-3	GP-4	GP-5
PGC	<1	69*	460*	<1	NA
8240	NA	NA	490*	NA	NA

KEY:

NA - Not Analyzed

GP - Geoprobe Point

*- Toluene identified as detected compound

The PGC detected concentrations of toluene at 69 and 460 ppm in GP-2 and GP-3, respectively. The laboratory results from GP-3 confirmed the presence of toluene at similar concentrations, 490 ppm. The NYS DEC groundwater standard for toluene is 0.005 ppm. The PGC did not detect any compounds above the detection limit in GP-1. GP-5 was not analyzed because the soil results did not indicate any compounds.

Table 4
Soil & Groundwater Laboratory Analytical Results
 (results in parts per million)

Analyte	GP-3 Soil 8'- 12'	GP-1 Soil 4'- 8'	GP-3 Water
Toluene	2,900	1.2	490
Methylene Chloride	23J	<0.730	<5
2-Methylphenol	0.460J	<4	NA
4- Methylphenol	620J	<4	NA
Phenanthrene	0.170J	<4	NA
Fluoranthene	0.140J	<4	NA
Pyrene	0.120J	<4	NA
Bis (2-Ethylhexyl) phthalate	0.540J	<4	NA

KEY:

NA - Not Analyzed

J - Estimated Value

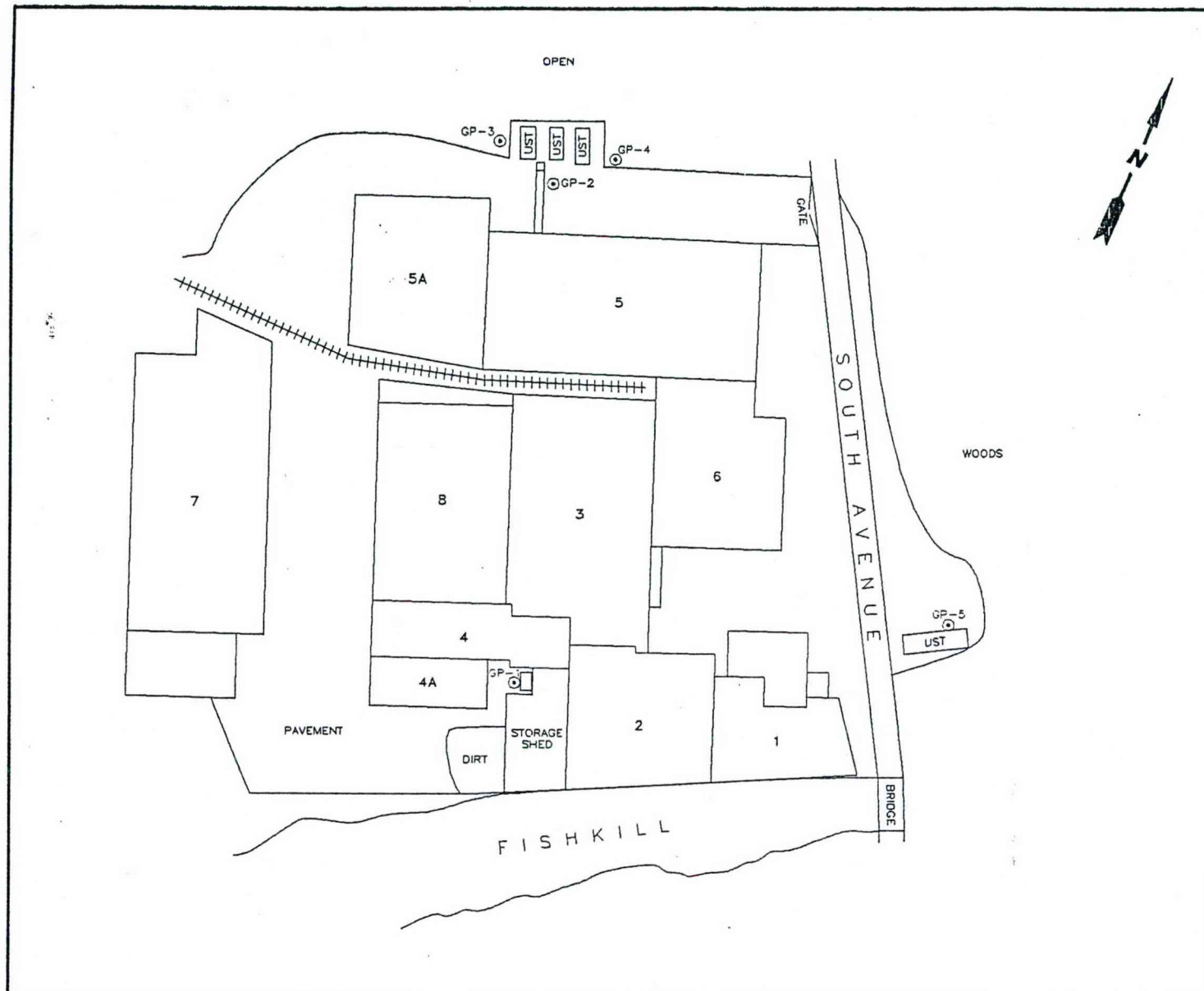
A



GROUNDWATER
TECHNOLOGY

APPENDIX A

SITE MAP



LEGEND

⊙ GEOPROBE SAMPLING POINT

NOTE: LOCATIONS OF TANKS ARE APPROXIMATE.

BASE MAP SOURCE:
"SITE MAP" DATED JUNE 1993 BY CHAZEN
ENVIRONMENTAL SERVICES, INC.



**GROUNDWATER
TECHNOLOGY**

1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE: 11/8/93	ACAD FILE: 5503-SITE
-----------	--------------------------	----------------------

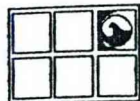
SITE SKETCH

CLIENT:	BEACON TERMINAL ASSOCIATION	PM:	WCL
LOCATION:	SOUTH AVENUE BEACON, NEW YORK	SM:	DMO
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
DMO	DEO	01110-5503	1



GROUNDWATER
TECHNOLOGY

APPENDIX B
DRILLING LOGS



GROUNDWATER
TECHNOLOGY

Drilling Log

Soil Boring GP-1

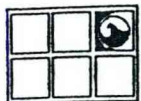
Project Beacon Terminal Assn. Owner Beacon Terminal Assn.
Location Beacon, NY Proj. No. 01110-5503
Surface Elev. _____ Total Hole Depth 10 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. ZEBRA Method Geoprobe
Driller Alex & Mike Log By D. Osterhoudt Date 10/26/93 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Refusal at 10 feet.

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0	8.2			SP	0'-4': Moist, dark brown to dark grey medium-coarse SAND, some fine gravel (fill) to approx. 1', then moist to wet light brown clayey SAND to 2'. Light brown clayey fine sand, trace fine gravel, saturated to approx. 3.6'. pH reading = 7.5
2				SC	
4	8.0				4'-8': Light brown saturated clayey fine SAND with trace fine gravel to 6.6', then silty sand with some clay and fine gravel to 8'. 7.6'-7.10'. Gray color with sheen. pH reading = 7.4
6					
8	23			SM	8'-10': Saturated, light brown silty SAND with some fine gravel, faint sheen. pH reading = 7.5
10					
12					
14					
16					
18					
20					
22					
24					



GROUNDWATER
TECHNOLOGY

Drilling Log

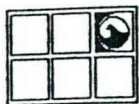
Soil Boring GP-2

Project Beacon Terminal Assn. Owner Beacon Terminal Assn.
Location Beacon, NY Proj. No. 01110-5503
Surface Elev. _____ Total Hole Depth 12 ft. Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. ZEBRA Method Geoprobe
Driller Alex & Mike Log By D. Osterhoudt Date 10/26/93 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0	430				0'-4': Dry fill material to approx. 2', olive gray moist silty CLAY with gray clay, trace fine sand laminations to approx. 3'. Brown clay with trace fine sand and silt to 4'. pH reading = 7.4
2					
4	1635				4'-8': Wet, olive-gray silty CLAY with laminations to 4.8', then fine gravel with some sand and silt (fill), black to 5'. Wet, olive gray silty CLAY with trace fine sand to 8', sheen on gray clay, strong solvent smell. pH reading = 7.3
6				CL	
8	41.3				8'-12': Same as above to 9', then saturated, olive gray to gray CLAY, trace sand, solvent odor and sheen to 12'. pH = 7.4
10					
12					
14					
16					
18					
20					
22					
24					



GROUNDWATER
TECHNOLOGY




Drilling Log

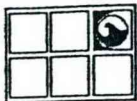
Soil Boring GP-3

Project Beacon Terminal Assn. Owner Beacon Terminal Assn.
Location Beacon, NY Proj. No. 01110-5503
Surface Elev. _____ Total Hole Depth 12 ft. Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. ZEBRA Method Geoprobe
Driller Alex & Mike Log By D. Osterhoudt Date 10/26/93 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0	141			CL	0'-4': Fill to 2', moist olive brown silty CLAY with some fine gravel to 3.6', then brown moist silty clay to 4'. pH reading = 7.4
2					
4	183			SM	4'-8': As above with 2 - 2" silty sand laminations at approx. 6.6'. Gold metallic color to clay. pH reading = 7.5
6					
8	2500+			CL	8'-12': Saturated, olive gray CLAY with some fine sand, completely saturated with product. Heavy odor and sheen and product. Gray clay at bottom to 12'. pH reading = 7.5
10					
12					
14					
16					
18					
20					
22					
24					



GROUNDWATER
TECHNOLOGY

Drilling Log

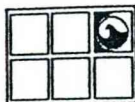
Soil Boring GP-4

Project Beacon Terminal Assn. Owner Beacon Terminal Assn.
Location Beacon, NY Proj. No. 01110-5503
Surface Elev. _____ Total Hole Depth 8 ft. Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. ZEBRA Method Geoprobe
Driller Alex & Mike Log By D. Osterhoudt Date 10/26/93 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Depth (ft.)	PTD (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0	8.0					0'-4': Fill material to 3', then olive gray silty CLAY with some fine to coarse gravel (fill) to 4'. pH reading = 7.5
2						
4	5.1				CL	4'-8': Wet olive gray CLAY with fine gravel and shale fragments to 6'. Saturated as above to 7.6' (refusal at 7.6'). pH reading = 7.5
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						



GROUNDWATER
TECHNOLOGY




Drilling Log

Soil Boring GP-5

Project Beacon Terminal Assn. Owner Beacon Terminal Assn.
Location Beacon, NY Proj. No. 01110-5503
Surface Elev. _____ Total Hole Depth 11 ft. Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. ZEBRA Method Geoprobe
Driller Alex & Mike Log By D. Osterhoudt Date 10/26/93 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description
					(Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0	8.0				0'-4': Moist, brown fine to medium SAND to 2.6'. Moist brown well sorted fine grained trace medium SAND to 4'. pH reading = 7.4
2					
4	5.0			SP	4'-12': As above to 8.6', then brown wet clayey SAND with fine gravel and shale to 10'. Saturated as above to 11'. (refusal at 11') pH reading = 7.5
6					
8	13.0			SC	
10					
12					
14					
16					
18					
20					
22					
24					

C

APPENDIX C
PORTABLE GAS CHROMATOGRAPH RESULTS



ECT

Environmental Control Technologies, Inc.
9 Cedarwood Drive, Suite 10, Bedford, NH 03110
(603) 668-0707 • 800-962-3755 • Fax (603) 668-0767

FIELD GAS CHROMATOGRAPHY PROJECT

October 29, 1993

SITE:

**Beacon Terminal Associates
Beacon, New York**

ECT Job #01086.L3

Prepared for:

**Ms. Wendy Leonard
Groundwater Technology, Inc.
1245 King's Road
Schenectady, New York 12303**



ECT

Environmental Control Technologies, Inc.
9 Cedarwood Drive, Suite 10, Bedford, NH 03110
(603) 668-0707 • 800-962-3755 Fax (603) 668-0767

FIELD GAS CHROMATOGRAPHY PROJECT Beacon Terminal Associates Beacon, New York

INTRODUCTION

Environmental Control Technologies, Inc. ("ECT") has completed a Field Gas Chromatography Project at the above-referenced property ("SITE") at the request of Ms. Wendy Leonard of Groundwater Technology, Inc. This report is subject to the limitations attached in Exhibit A.

EXECUTIVE SUMMARY

This Field Gas Chromatography Project was conducted to identify petroleum and/or chemical contamination in soil and groundwater at the SITE. ECT tested nine soil samples and four groundwater samples (see TABLE 1 for results).

Sample results ranged from below instrument detection limits to a maximum concentration of 2,600 parts-per-million ("ppm") of total petroleum hydrocarbons ("TPH") resembling a lube oil in soil sample GP1 (4-8 ft), 2,900 ppm of toluene in soil sample GP3 (8-12 ft), and 460 ppm of toluene in groundwater sample GP3.

METHODOLOGY

An SRI Model 8610 gas chromatograph ("GC"), equipped with a 30-meter capillary column and flame ionization detector ("FID"), was used to analyze samples on SITE. Data was acquired with an SRI Peak Simple computer-based system.

Method blanks and standards were analyzed to maintain quality control. The detection limits were 3.0 parts-per-million ("ppm") for soil samples and 1.0 ppm for water samples.

Calibrations were established based upon standards prepared using neat benzene and toluene compounds and also fresh distillates of gasoline, kerosene, and diesel from local vendors in New Hampshire.

The identification and quantification of each sample were based upon the retention time that an individual compound is detected or a boiling point distribution for a particular hydrocarbon distribution.

Page 2

Beacon Terminal Associates

Beacon, New York

ECT Job #01086.L3

Soil Samples

Prior to GC analysis, an extraction was performed to transfer the petroleum hydrocarbons from the soil to a solvent (methylene chloride). Approximately 20 grams of soil were placed into 20.0 milliliters ("ml") of methylene chloride for extraction. The extract was stored on ice until GC analysis. A 2.0 microliter ("ul") aliquot of the extract was injected into the GC for analysis. Dilutions were made as needed. Sample concentrations were calculated based upon the amount of soil used, and reported in milligrams-per-kilogram ("mg/kg").

Groundwater and Field Blank Samples

The groundwater samples were stored on ice prior to performing the GC analysis. A 2.0 ul aliquot was injected into the GC for analysis. For samples that had a petroleum sheen, the needle of the injection syringe was thoroughly cleaned with methylene chloride to help prevent introduction of free phase petroleum hydrocarbons into the GC.

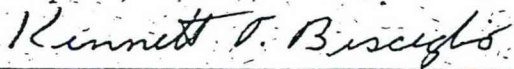
DISCUSSION

Hydrocarbon contamination detected in soil samples GP1 (4-8 ft) and GP1 (8-10 ft) had a heavier molecular carbon range than the diesel/#2 heating oil standard used for calibration. Since the sample contained a petroleum distillate other than the distillates used in the calibration, only speculation can be offered regarding the identity of the distillate. Comparing chromatograms with our reference library indicated the distillate exhibited a similar boiling-point distribution as a lube oil.

The level of toluene in the groundwater at GP3 (460 ppm) is near to the maximum aqueous solubility of toluene (500 ppm) as reported in C.W. Fetter, Applied Hydrogeology.

Supporting materials follow.

ENVIRONMENTAL CONTROL TECHNOLOGIES, INC.



Kenneth J. Bisceglia
Environmental Scientist



David Woodhouse, P.G.
Senior Vice President

TABLE 1
FIELD GAS CHROMATOGRAPHY RESULTS

Sample ID	GP1 0-4 FT	GP1 4-8 FT	GP1 8-10 FT	GP2 4-8 FT
Matrix	soil	soil	soil	soil
Date Sampled/Analyzed	10/27/93	10/27/93	10/27/93	10/27/93
Analysis	Concentration (ppm)			
Toluene	<3.0	<3.0	<3.0	210
TPH	<3.0	2,600*	130*	<3.0
DLM	1	1	1	2

Sample ID	GP3 4-8 FT	GP3 8-12 FT	GP4 0-4 FT	GP5 4-8 FT
Matrix	soil	soil	soil	soil
Date Sampled/Analyzed	10/27/93	10/27/93	10/27/93	10/27/93
Analysis	Concentration (ppm)			
Toluene	95	2,900	<3.0	<3.0
TPH	<3.0	<3.0	<3.0	<3.0
DLM	1	100	1	1

Soil samples - concentration; parts-per-million as mg/kg.

Water samples - concentration: parts-per-million as mg/l.

DLM = Detection limit multiplier - is applied to the detection limit if a dilution was necessary.

* Resembles a lube oil.

TABLE 1

FIELD GAS CHROMATOGRAPHY RESULTS

Sample ID	GP5 8-12 FT	GP1	GP2	GP3
Matrix	soil	water	water	water
Date Sampled/Analyzed	10/27/93	10/27/93	10/27/93	10/27/93
Analysis	Concentration (ppm)			
Toluene	<3.0	<1.0	69	460
TPH	<3.0	<1.0	<1.0	<1.0
DLM	1	1	1	2

Sample ID	GP4			
Matrix	water			
Date Sampled/Analyzed	10/27/93			
Analysis	Concentration (ppm)			
Toluene	<1.0			
TPH	<1.0			
DLM	1			

Soil samples - concentration; parts-per-million as mg/kg.

Water samples - concentration: parts-per-million as mg/l.

DLM = Detection limit multiplier - is applied to the detection limit if a dilution was necessary.

EXHIBIT A

LIMITATIONS

1. The conclusions and recommendations contained in this report are based solely on conditions that existed at the time of the survey and on the services provided, and are not based on scientific tasks or procedures beyond those described or beyond the budgetary and time constraints imposed by Groundwater Technology, Inc. ("client"). The stated conclusions and recommendations represent the best professional judgement of Environmental Control Technologies, Inc. ("ECT") and should not be construed as statements of scientific certainty. Specifically, ECT does not and cannot represent that the SITE contains no asbestos containing materials; solid waste; hazardous materials, substances or wastes; petroleum products or other latent conditions beyond those observed during this report. No other warranty, expressed or implied, is made.
2. This report approximates environmental conditions at the SITE. Moreover, contamination and sources of contamination may not yet have manifested themselves at the time of the survey. In addition, ECT can not predict which potential issues will become actual problems, legal or otherwise, because laws and enforcement priorities may change and environmental conditions at the SITE may also change over time.
3. The analyses and conclusions in this report may be based in part upon chemical test data provided by other sources referenced herein and are contingent upon their validity. ECT did not attempt to independently verify the truthfulness, accuracy or completeness of all information reviewed or received during this study, and ECT disclaims any liability that may arise from its reliance on such information.
4. Observations were made of the SITE as indicated in this report. Where access to portions of the SITE was unavailable or limited, ECT renders no opinion as to the presence or potential presence of hazardous materials, substances or wastes; or petroleum products in those portions of the SITE.
5. This study did not include an investigation as to whether any and all activities performed on the SITE have been granted all required environmental permits or licenses, or are or have been conducted in compliance with any or all applicable environmental laws and regulations. Accordingly, ECT makes no representations and offers no opinions as to whether any and all activities performed thereon are, or have been, conducted in compliance with all applicable environmental laws and regulations.

6. Inspections for asbestos containing materials ("ACM"), airborne radon and lead paint are outside of the scope of this investigation, however, to the extent that ECT becomes aware of the potential presence of one or more of these materials as a consequence of our visual inspection or record review, ECT will report this information to client.
7. This study was prepared solely for the exclusive use of client in accordance with generally accepted scientific practices, and no other party may rely upon the information contained herein. ECT acknowledges and agrees that client may convey this report to the seller, Title Insurer or others directly associated with the transaction of the SITE. No warranty, expressed or implied, is made, or extended to any such third parties, all of whom may rely upon the information in this report at their own risk and without any legal recourse against ECT, its officers, directors, employees or agents, regardless of the legal basis for their claims; provided, however, that no third party may rely upon this report unless it agrees to be bound by these terms. To the extent that any warranty is made in this report, it may not be assigned by client to any other party.

D

APPENDIX D

LABORATORY ANALYTICAL RESULTS



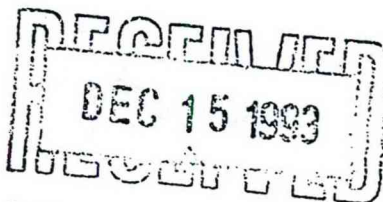
ENVIRONMENTAL
LABORATORIES, INC.

Northeast Region

Meadowbrook Industrial Park
Milford, NH 03055
(603) 672-4835
(603) 673-8105 (FAX)

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

December 14, 1993



Wendy Leonard
Groundwater Technology, Inc.
1245 Kings Road
Schenectady, NY 12303

Dear Mr. Leonard:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 10/28/93 under chain-of-custody record 55346.

A formal Quality Assurance / Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified (approved) by the State of New York under number 10599.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.



Susan C. Uhler
Laboratory Director

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Volatile Organics in Soil
Modified EPA Method 8240

Analyte	CAS #	Method Detection Limit (MDL) ug/kg
Chloromethane	74-87-3	140
Bromomethane	74-83-9	190
Vinyl Chloride	75-01-4	140
Chloroethane	75-00-3	200
Methylene Chloride	75-09-2	100
Acetone	67-64-1	550
Carbon Disulfide	75-15-0	220
1,1-Dichloroethene	75-35-4	190
1,1-Dichloroethane	75-35-3	120
cis-1,2-Dichloroethene	—	140
trans-1,2-Dichloroethene	156-60-5	160
Chloroform	67-66-2	120
1,2-Dichloroethane	107-06-2	100
2-Butanone	78-93-3	740
1,1,1-Trichloroethane	71-55-6	200
Carbon Tetrachloride	56-23-5	250
Vinyl Acetate	108-05-4	140
Bromodichloromethane	75-27-4	200
1,2-Dichloropropane	78-87-5	160
cis-1,3-Dichloropropene	10061-01-5	180
Trichloroethene	79-01-6	180
Dibromochloromethane	124-48-1	190

Updated March 1993.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Volatile Organics in Soil
Modified EPA Method 8240

Analyte	CAS #	Method Detection Limit (MDL) ug/kg
1,1,2-Trichloroethane	79-00-5	220
Benzene	71-43-2	140
2-Chloroethyl Vinyl Ether	110-75-8	300
<i>trans</i> -1,3-Dichloropropene	10061-02-6	260
Bromoform	75-25-2	240
4-Methyl-2-Pentanone	108-10-1	320
2-Hexanone	591-78-6	380
Tetrachloroethene	127-18-4	220
1,1,2,2-Tetrachloroethane	79-34-5	180
Toluene	108-88-3	160
Chlorobenzene	108-90-7	120
Ethylbenzene	100-41-4	250
Styrene	100-42-5	150
<i>meta</i> - and <i>para</i> -Xylene	108-38-3 106-42-3	460
<i>ortho</i> -Xylene	95-47-6	250
1,2-Dichlorobenzene	95-50-1	220
1,3-Dichlorobenzene	541-73-1	190
1,4-Dichlorobenzene	106-46-7	180

Updated March 1993.

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Soil
 Modified EPA Method 8240a

GTEL Sample Number		100586-01	100856-03	--	--
Client Identification		GP3 8-12	GP1 4-8*	--	--
Date Sampled		10/26/93	10/26/93	--	--
Date Analyzed		11/09/93	11/08/93	--	--
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c			
Chloromethane	1200	160000 U	1400 U	--	--
Bromomethane	1200	160000 U	1400 U	--	--
Vinyl Chloride	1200	160000 U	1400 U	--	--
Chloroethane	1200	160000 U	1400 U	--	--
Methylene Chloride	620	23000 J	730 U	--	--
Acetone	1200	160000 U	1400 U	--	--
Carbon Disulfide	620	82000 U	730 U	--	--
1,1-Dichloroethene	620	82000 U	730 U	--	--
1,1-Dichloroethane	620	82000 U	730 U	--	--
1,2-Dichloroethene (total) ^d	620	82000 U	730 U	--	--
Chloroform	620	82000 U	730 U	--	--
1,2-Dichloroethane	620	82000 U	730 U	--	--
2-Butanone	1200	160000 U	1400 U	--	--
1,1,1-Trichloroethane	620	82000 U	730 U	--	--
Carbon Tetrachloride	620	82000 U	730 U	--	--
Vinyl Acetate	1200	160000 U	1400 U	--	--
Bromodichloromethane	620	82000 U	730 U	--	--
1,2-Dichloropropane	620	82000 U	730 U	--	--
c/s-1,3-Dichloropropene	620	82000 U	730 U	--	--
Trichloroethene	620	82000 U	730 U	--	--
Dibromochloromethane	620	82000 U	730 U	--	--
Practical Quantitation Limit Multiplier ^e		132	1.18	--	--

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Soil
 Modified EPA Method 8240a

GTEL Sample Number		100586-01	100856-03	--	--
Client Identification		GP3 8-12	GP1 4-8*	--	--
Date Sampled		10/26/93	10/26/93	--	--
Date Analyzed		11/09/93	11/08/93	--	--
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c			
1,1,2-Trichloroethane	620	82000 U	730 U	--	--
Benzene	620	82000 U	730 U	--	--
2-Chloroethyl Vinyl Ether	1200	160000 U	1400 U	--	--
<i>trans</i> -1,3-Dichloropropene	620	82000 U	730 U	--	--
Bromoform	620	82000 U	730 U	--	--
4-Methyl-2-Pentanone	1200	160000 U	1400 U	--	--
2-Hexanone	1200	160000 U	1400 U	--	--
Tetrachloroethene	620	82000 U	730 U	--	--
1,1,2,2-Tetrachloroethane	620	82000 U	730 U	--	--
Toluene	620	2900000	1200	--	--
Chlorobenzene	620	82000 U	730 U	--	--
Ethylbenzene	620	82000 U	730 U	--	--
Styrene	620	82000 U	730 U	--	--
Xylenes (total)	620	82000 U	730 U	--	--
1,2-Dichlorobenzene	1200	160000 U	1400 U	--	--
1,3-Dichlorobenzene	1200	160000 U	1400 U	--	--
1,4-Dichlorobenzene	1200	160000 U	1400 U	--	--
Practical Quantitation Limit Multiplier ^e		132	1.18	--	--
Percent Solids, %		74.5	82.3	--	--

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Soil Modified EPA Method 8240a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; sample prepared by high level solvent extraction and purge and trap. Method modified to include additional compounds. Results are reported on a dry weight basis.
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
 - B Indicates that the analyte was found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- d Total 1,2-dichloroethene is the sum of the cis- and trans- isomers.
- e The practical quantitation limit multiplier indicates the adjustments made to the data and PQLs for sample dilutions and percent solids.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Soil
Modified EPA Method 8240a

GTEL File ID		BS102993	
Date Analyzed		11/01/93	
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c	
Chloromethane	1200	1200	U
Bromomethane	1200	1200	U
Vinyl Chloride	1200	1200	U
Chloroethane	1200	1200	U
Methylene Chloride	620	620	U
Acetone	1200	1200	U
Carbon Disulfide	620	620	U
1,1-Dichloroethene	620	620	U
1,1-Dichloroethane	620	620	U
1,2-Dichloroethene (total) ^d	620	620	U
Chloroform	620	620	U
1,2-Dichloroethane	620	620	U
2-Butanone	1200	1200	U
1,1,1-Trichloroethane	620	620	U
Carbon Tetrachloride	620	620	U
Vinyl Acetate	1200	1200	U
Bromodichloromethane	620	620	U
1,2-Dichloropropane	620	620	U
cis-1,3-Dichloropropene	620	620	U
Trichloroethene	620	620	U
Dibromochloromethane	620	620	U

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Soil
Modified EPA Method 8240a

GTEL File ID		BS102993	
Date Analyzed		11/01/93	
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c	
1,1,2-Trichloroethane	620	620	U
Benzene	620	620	U
2-Chloroethyl Vinyl Ether	1200	1200	U
<i>trans</i> -1,3-Dichloropropene	620	620	U
Bromoform	620	620	U
4-Methyl-2-Pentanone	1200	1200	U
2-Hexanone	1200	1200	U
Tetrachloroethene	620	620	U
1,1,2,2-Tetrachloroethane	620	620	U
Toluene	620	620	U
Chlorobenzene	620	620	U
Ethylbenzene	620	620	U
Styrene	620	620	U
Xylenes (total)	620	620	U
1,2-Dichlorobenzene	1200	1200	U
1,3-Dichlorobenzene	1200	1200	U
1,4-Dichlorobenzene	1200	1200	U

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Soil Modified EPA Method 8240a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; sample prepared by high level solvent extraction and purge and trap. Method modified to include additional compounds.
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
- d Total 1,2-dichloroethene is the sum of the cis- and trans- isomers.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Volatile Organics in Water
Modified EPA Method 8240

Analyte	CAS #	Method Detection Limit (MDL) ug/L
Chloromethane	74-87-3	1.1
Bromomethane	74-83-9	1.5
Vinyl Chloride	75-01-4	1.1
Chloroethane	75-00-3	1.6
Methylene Chloride	75-09-2	0.8
Acetone	67-64-1	4.4
Carbon Disulfide	75-15-0	1.8
1,1-Dichloroethene	75-35-4	1.5
1,1-Dichloroethane	75-34-3	1.0
<i>cis</i> -1,2-Dichloroethene	--	1.1
<i>trans</i> -1,2-Dichloroethene	156-60-5	1.3
Chloroform	67-66-2	1.0
1,2-Dichloroethane	107-06-2	0.8
2-Butanone	78-93-3	5.9
1,1,1-Trichloroethane	71-55-6	1.6
Carbon Tetrachloride	56-23-5	2.0
Vinyl Acetate	108-05-4	1.1
Bromodichloromethane	75-27-4	1.6
1,2-Dichloropropane	78-87-5	1.3
<i>cis</i> -1,3-Dichloropropene	10061-01-5	1.4
Trichloroethene	79-01-6	1.4
Dibromochloromethane	124-48-1	1.5

Updated March 1993.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Volatile Organics in Water
Modified EPA Method 8240

Analyte	CAS #	Method Detection Limit (MDL) ug/L
1,1,2-Trichloroethane	79-00-5	1.8
Benzene	71-43-2	1.1
2-Chloroethyl Vinyl Ether	110-75-8	2.4
<i>trans</i> -1,3-Dichloropropene	10061-02-6	2.1
Bromoform	75-25-2	1.9
4-Methyl-2-pentanone	108-10-1	2.6
2-Hexanone	591-78-6	3.0
Tetrachloroethene	127-18-4	1.8
1,1,2,2-Tetrachloroethane	79-34-5	1.4
Toluene	108-88-3	1.3
Chlorobenzene	108-90-7	1.0
Ethylbenzene	100-41-4	2.0
Styrene	100-42-5	1.2
<i>meta</i> - and <i>para</i> -Xylene	108-38-3 106-42-3	3.7
<i>ortho</i> -Xylene	95-47-6	2.0
1,2-Dichlorobenzene	95-50-1	1.8
1,3-Dichlorobenzene	541-73-1	1.5
1,4-Dichlorobenzene	106-46-7	1.4

Updated March 1993.

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Water
 Modified EPA Method 8240^a

GTEL Sample Number		100856-02	--	--	--
Client Identification		GP3	--	--	--
Date Sampled		10/26/93	--	--	--
Date Analyzed		11/01/93	--	--	--
Analyte	PQL ug/L ^b	Concentration, ug/L ^c			
Chloromethane	10	10000 U	--	--	--
Bromomethane	10	10000 U	--	--	--
Vinyl Chloride	10	10000 U	--	--	--
Chloroethane	10	10000 U	--	--	--
Methylene Chloride	5	5000 U	--	--	--
Acetone	10	10000 U	--	--	--
Carbon Disulfide	5	5000 U	--	--	--
1,1-Dichloroethene	5	5000 U	--	--	--
1,1-Dichloroethane	5	5000 U	--	--	--
1,2-Dichloroethene (total) ^d	5	5000 U	--	--	--
Chloroform	5	5000 U	--	--	--
1,2-Dichloroethane	5	5000 U	--	--	--
2-Butanone	10	10000 U	--	--	--
1,1,1-Trichloroethane	5	5000 U	--	--	--
Carbon Tetrachloride	5	5000 U	--	--	--
Vinyl Acetate	10	10000 U	--	--	--
Bromodichloromethane	5	5000 U	--	--	--
1,2-Dichloropropane	5	5000 U	--	--	--
cis-1,3-Dichloropropene	5	5000 U	--	--	--
Trichloroethene	5	5000 U	--	--	--
Dibromochloromethane	5	5000 U	--	--	--
Practical Quantitation Limit Multiplier ^e		1000 ^f	--	--	--

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Water
 Modified EPA Method 8240^a

GTEL Sample Number		100856-02	--	--	--
Client Identification		GP3	--	--	--
Date Sampled		10/26/93	--	--	--
Date Analyzed		11/01/93	--	--	--
Analyte	PQL ug/L ^b	Concentration, ug/L ^c			
1,1,2-Trichloroethane	5	5000 U	--	--	--
Benzene	5	5000 U	--	--	--
2-Chloroethyl Vinyl Ether	10	10000 U	--	--	--
<i>trans</i> -1,3-Dichloropropene	5	5000 U	--	--	--
Bromoform	5	5000 U	--	--	--
4-Methyl-2-Pentanone	10	10000 U	--	--	--
2-Hexanone	10	10000 U	--	--	--
Tetrachloroethene	5	5000 U	--	--	--
1,1,2,2-Tetrachloroethane	5	5000 U	--	--	--
Toluene	5	490000	--	--	--
Chlorobenzene	5	5000 U	--	--	--
Ethylbenzene	5	5000 U	--	--	--
Styrene	5	5000 U	--	--	--
Xylenes (total)	5	5000 U	--	--	--
1,2-Dichlorobenzene	10	10000 U	--	--	--
1,3-Dichlorobenzene	10	10000 U	--	--	--
1,4-Dichlorobenzene	10	10000 U	--	--	--
Practical Quantitation Limit Multiplier ^e		1000 ^f	--	--	--

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

ANALYTICAL RESULTS

Volatile Organics in Water Modified EPA Method 8240^a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; sample preparation by purge and trap. Method modified to include additional compounds.
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
 - B Indicates that the analyte was found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- d Total 1,2-dichloroethene is the sum of the cis- and trans- isomers.
- e The practical quantitation limit multiplier indicates the adjustments made to the data and PQLs for sample dilutions.
- f This sample contained LNAPL. The LNAPL was removed from the sample prior to analysis and only the dissolved phase was analyzed. Due to the nature of this sample type reproducible results cannot be assured.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Water
Modified EPA Method 8240^a

GTEL File ID		BW110193JA	
Date Analyzed		11/01/93	
Analyte	PQL, ug/L ^b	Concentration, ug/L ^c	
Chloromethane	10	10	U
Bromomethane	10	10	U
Vinyl Chloride	10	10	U
Chloroethane	10	10	U
Methylene Chloride	5	5	U
Acetone	10	10	U
Carbon Disulfide	5	5	U
1,1-Dichloroethene	5	5	U
1,1-Dichloroethane	5	5	U
1,2-Dichloroethene (total) ^d	5	5	U
Chloroform	5	5	U
1,2-Dichloroethane	5	5	U
2-Butanone	10	10	U
1,1,1-Trichloroethane	5	5	U
Carbon Tetrachloride	5	5	U
Vinyl Acetate	10	10	U
Bromodichloromethane	5	5	U
1,2-Dichloropropane	5	5	U
cis-1,3-Dichloropropene	5	5	U
Trichloroethene	5	5	U
Dibromochloromethane	5	5	U

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Water
Modified EPA Method 8240^a

GTEL File ID		BW110193JA	
Date Analyzed		11/01/93	
Analyte	PQL, ug/L ^b	Concentration, ug/L ^c	
1,1,2-Trichloroethane	5	5	U
Benzene	5	5	U
2-Chloroethyl Vinyl Ether	10	10	U
<i>trans</i> -1,3-Dichloropropene	5	5	U
Bromoform	5	5	U
4-Methyl-2-Pentanone	10	10	U
2-Hexanone	10	10	U
Tetrachloroethene	5	5	U
1,1,2,2-Tetrachloroethane	5	5	U
Toluene	5	5	U
Chlorobenzene	5	5	U
Ethylbenzene	5	5	U
Styrene	5	5	U
Xylenes (total)	5	5	U
1,2-Dichlorobenzene	10	10	U
1,3-Dichlorobenzene	10	10	U
1,4-Dichlorobenzene	10	10	U

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Volatile Organics in Water
Modified EPA Method 8240^a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; sample preparation by purge and trap. Method modified to include additional compounds.
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
- d Total 1,2-dichloroethene is the sum of the cis- and trans- isomers.

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Base/Neutrals and Acids in Soil
EPA Method 8270

Analyte	CAS #	Method Detection Limit (MDL) ug/kg
N-Nitrosodimethylamine	62-75-9	330
Phenol	108-95-2	50
<i>bis</i> (2-Chloroethyl) Ether	11-44-4	190
2-Chlorophenol	95-57-8	110
1,3-Dichlorobenzene	541-73-1	63
1,4-Dichlorobenzene	106-46-7	150
Benzyl Alcohol	100-51-6	170
1,2-Dichlorobenzene	95-50-1	63
2-Methylphenol	95-48-7	170
<i>bis</i> (2-Chloroisopropyl) Ether	39638-32-9	190
4-Methylphenol	106-44-5	170
N-Nitroso-di-n-propylamine	621-64-7	170
Hexachloroethane	67-72-1	53
Nitrobenzene	98-95-3	63
Isophorone	78-59-1	73
2-Nitrophenol	88-75-5	120
2,4-Dimethylphenol	105-67-9	170
Benzoic Acid	65-85-0	830
<i>bis</i> (2-Chloroethoxy)methane	111-91-1	180
2,4-Dichlorophenol	120-83-2	90
1,2,4-Trichlorobenzene	120-82-1	170
Naphthalene	91-20-3	53
4-Chloroaniline	106-47-8	170
Hexachlorobutadiene	87-68-3	30

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Base/Neutrals and Acids in Soil
EPA Method 8270

Analyte	CAS #	Method Detection Limit (MDL) ug/kg
4-Chloro-3-methylphenol	59-50-7	100
2-Methylnaphthalene	91-57-6	170
Hexachlorocyclopentadiene	77-47-4	170
2,4,6-Trichlorophenol	88-06-2	90
2,4,5-Trichlorophenol	95-95-4	830
2-Chloronaphthalene	91-58-7	63
2-Nitroaniline	88-74-4	830
Dimethylphthalate	131-11-3	53
Acenaphthylene	208-96-8	120
2,6-Dinitrotoluene	606-20-2	170
3-Nitroaniline	99-09-2	830
Acenaphthene	83-32-9	63
2,4-Dinitrophenol	51-28-5	1400
4-Nitrophenol	100-02-7	830
Dibenzofuran	132-64-9	170
2,4-Dinitrotoluene	121-14-2	190
Diethylphthalate	84-66-2	63
4-Chlorophenyl Phenyl Ether	7005-72-3	140
Fluorene	86-73-7	63
4-Nitroaniline	100-01-6	830
4,6-Dinitro-2-methylphenol	534-52-1	170
N-Nitrosodiphenylamine	86-30-6	63
4-Bromophenyl Phenyl Ether	101-55-3	63

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

CAS NUMBERS AND DETECTION LIMITS

Base/Neutrals and Acids in Soil
EPA Method 8270

Analyte	CAS #	Method Detection Limit (MDL) ug/kg
Hexachlorobenzene	118-74-1	63
Pentachlorophenol	87-86-5	120
Phenanthrene	85-01-8	180
Anthracene	120-12-7	63
Di-n-butylphthalate	84-74-2	83
Fluoranthene	206-44-0	73
Pyrene	129-00-0	63
Butylbenzylphthalate	85-68-7	83
3,3'-Dichlorobenzidine	91-94-1	570
Benz[a]anthracene	56-55-3	260
Chrysene	218-01-9	83
bis(2-Ethylhexyl)phthalate	117-81-7	83
Di-n-octylphthalate	117-84-0	83
Benzo[b]fluoranthene	205-99-2	160
Benzo[k]fluoranthene	207-08-9	83
Benzo[a]pyrene	50-32-8	83
Indeno[1,2,3-c,d]pyrene	193-39-5	120
Dibenz[a,h]anthracene	53-70-3	83
Benzo[g,h,i]perylene	191-24-2	140

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270a

GTEL Sample Number		100856-01	100856-03 ^f	--	--
Client Identification		GP3 8-12	GP1 4-8*	--	--
Date Sampled		10/26/93	10/26/93	--	--
Date Extracted		11/04/93	11/04/93	--	--
Date Analyzed		11/27/93	11/27/93	--	--
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c			
N-Nitrosodimethylamine	330	880 U	4000 U	--	--
Phenol	330	880 U	4000 U	--	--
bis(2-Chloroethyl) Ether	330	880 U	4000 U	--	--
2-Chlorophenol	330	880 U	4000 U	--	--
1,3-Dichlorobenzene	330	880 U	4000 U	--	--
1,4-Dichlorobenzene	330	880 U	4000 U	--	--
Benzyl Alcohol	660	1800 U	8000 U	--	--
1,2-Dichlorobenzene	330	880 U	4000 U	--	--
2-Methylphenol	330	460 J	4000 U	--	--
bis(2-Chloroisopropyl) Ether	330	880 U	4000 U	--	--
4-Methylphenol	330	620 J	4000 U	--	--
N-Nitroso-di-n-propylamine	330	880 U	4000 U	--	--
Hexachloroethane	330	880 U	4000 U	--	--
Nitrobenzene	330	880 U	4000 U	--	--
Isophorone	330	880 U	4000 U	--	--
2-Nitrophenol	330	880 U	4000 U	--	--
2,4-Dimethylphenol	330	880 U	4000 U	--	--
Benzoic Acid	1600	4300 U	19000 U	--	--
bis(2-Chloroethoxy)methane	330	880 U	4000 U	--	--
2,4-Dichlorophenol	330	880 U	4000 U	--	--
1,2,4-Trichlorobenzene	330	880 U	4000 U	--	--
Naphthalene	330	880 U	4000 U	--	--
4-Chloroaniline	660	1800 U	8000 U	--	--
Hexachlorobutadiene	330	880 U	4000 U	--	--
Practical Quantitation Limit Multiplier ^d		2.68	12.1	--	--

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270^a

GTEL Sample Number		100856-01	100856-03 ^f	--	--
Client Identification		GP3 8-12	GP1 4-8*	--	--
Date Sampled		10/26/93	10/26/93	--	--
Date Extracted		11/04/93	11/04/93	--	--
Date Analyzed		11/27/93	11/27/93	--	--
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c			
4-Chloro-3-methylphenol	660	1800 U	8000 U	--	--
2-Methylnaphthalene	330	880 U	4000 U	--	--
Hexachlorocyclopentadiene	330	880 U	4000 U	--	--
2,4,6-Trichlorophenol	330	880 U	4000 U	--	--
2,4,5-Trichlorophenol	330	880 U	4000 U	--	--
2-Chloronaphthalene	330	880 U	4000 U	--	--
2-Nitroaniline	1600	4300 U	19000 U	--	--
Dimethylphthalate	330	880 U	4000 U	--	--
Acenaphthylene	330	880 U	4000 U	--	--
2,6-Dinitrotoluene	330	880 U	4000 U	--	--
3-Nitroaniline	1600	4300 U	19000 U	--	--
Acenaphthene	330	880 U	4000 U	--	--
2,4-Dinitrophenol	1600	4300 U	19000 U	--	--
4-Nitrophenol	1600	4300 U	19000 U	--	--
Dibenzofuran	330	880 U	4000 U	--	--
2,4-Dinitrotoluene	330	880 U	4000 U	--	--
Diethylphthalate	330	880 U	4000 U	--	--
4-Chlorophenyl Phenyl Ether	330	880 U	4000 U	--	--
Fluorene	330	880 U	4000 U	--	--
4-Nitroaniline	1600	4300 U	19000 U	--	--
4,6-Dinitro-2-methylphenol	1600	4300 U	19000 U	--	--
N-Nitrosodiphenylamine ^e	330	880 U	4000 U	--	--
4-Bromophenyl Phenyl Ether	330	880 U	4000 U	--	--
Practical Quantitation Limit Multiplier ^d		2.68	12.1	--	--

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

ANALYTICAL RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270^a

GTEL Sample Number		100856-01	100856-03 ^f	--	--
Client Identification		GP3 8-12	GP1 4-8*	--	--
Date Sampled		10/26/93	10/26/93	--	--
Date Extracted		11/04/93	11/04/93	--	--
Date Analyzed		11/27/93	11/27/93	--	--
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c			
Hexachlorobenzene	330	880 U	4000 U	--	--
Pentachlorophenol	1600	4300 UX	19000 UX	--	--
Phenanthrene	330	170 J	4000 U	--	--
Anthracene	330	880 U	4000 U	--	--
Di-n-butylphthalate	330	880 U	4000 U	--	--
Fluoranthene	330	140 J	4000 U	--	--
Pyrene	330	120 J	4000 U	--	--
Butylbenzylphthalate	330	880 U	4000 U	--	--
3,3'-Dichlorobenzidine	660	1800 U	8000 U	--	--
Benz[a]anthracene	330	880 U	4000 U	--	--
Chrysene	330	880 U	4000 U	--	--
bis(2-Ethylhexyl)phthalate	330	540 J	4000 U	--	--
Di-n-octylphthalate	330	880 U	4000 U	--	--
Benzo[b]fluoranthene	330	880 U	4000 U	--	--
Benzo[k]fluoranthene	330	880 U	4000 U	--	--
Benzo[a]pyrene	330	880 U	4000 U	--	--
Indeno[1,2,3-c,d]pyrene	330	880 U	4000 U	--	--
Dibenz[a,h]anthracene	330	880 U	4000 U	--	--
Benzo[g,h,i]perylene	330	880 U	4000 U	--	--
Practical Quantitation Limit Multiplier ^d		2.68	12.1	--	--
Percent Solids, %		74.5	82.3	--	--

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

ANALYTICAL RESULTS

Base/Neutrals and Acids in Soil EPA Method 8270a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; extraction by EPA Method 3550 (low level sonication). Results are reported on a dry weight basis.
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
 - B Indicates that the analyte was found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
 - X Estimated concentration. Instrument did not demonstrate sensitivity for this analyte.
- d The practical quantitation limit multiplier indicates the adjustments made to the data and PQLs for sample dilutions, percent solids and gel permeation chromatography cleanup.
- e Cannot be separated from diphenylamine.
- f Sample was analyzed diluted due to the presence of non-target compounds.

Client Number: 011105503
 Project ID: Beacon Terminal .
 Assoc.
 Login Number: M3-10-0856

METHOD BLANK RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270^a

GTEL ID		BS110493A	
Date Extracted		11/04/93	
Date Analyzed		11/27/93	
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c	
N-Nitrosodimethylamine	330	660	U
Phenol	330	660	U
bis(2-Chloroethyl) Ether	330	660	U
2-Chlorophenol	330	660	U
1,3-Dichlorobenzene	330	660	U
1,4-Dichlorobenzene	330	660	U
Benzyl Alcohol	660	1300	U
1,2-Dichlorobenzene	330	660	U
2-Methylphenol	330	660	U
bis(2-Chloroisopropyl) Ether	330	660	U
4-Methylphenol	330	660	U
N-Nitroso-di-n-propylamine	330	660	U
Hexachloroethane	330	660	U
Nitrobenzene	330	660	U
Isophorone	330	660	U
2-Nitrophenol	330	660	U
2,4-Dimethylphenol	330	330	U
Benzoic Acid	1600	3200	U
bis(2-Chloroethoxy)methane	330	660	U
2,4-Dichlorophenol	330	660	U
1,2,4-Trichlorobenzene	330	660	U
Naphthalene	330	660	U
4-Chloroaniline	660	1300	U
Hexachlorobutadiene	330	660	U
Practical Quantitation Limit Multiplier ^e		2.00	

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

METHOD BLANK RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270a

GTEL ID		BS110493A	
Date Extracted		11/04/93	
Date Analyzed		11/27/93	
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c	
4-Chloro-3-methylphenol	660	1300	U
2-Methylnaphthalene	330	660	U
Hexachlorocyclopentadiene	330	660	U
2,4,6-Trichlorophenol	330	660	U
2,4,5-Trichlorophenol	330	660	U
2-Chloronaphthalene	330	660	U
2-Nitroaniline	1600	3200	U
Dimethylphthalate	330	660	U
Acenaphthylene	330	660	U
2,6-Dinitrotoluene	330	660	U
3-Nitroaniline	1600	3200	U
Acenaphthene	330	660	U
2,4-Dinitrophenol	1600	3200	U
4-Nitrophenol	1600	3200	U
Dibenzofuran	330	660	U
2,4-Dinitrotoluene	330	660	U
Diethylphthalate	330	660	U
4-Chlorophenyl Phenyl Ether	330	660	U
Fluorene	330	660	U
4-Nitroaniline	1600	3200	U
4,6-Dinitro-2-methylphenol	1600	3200	U
N-Nitrosodiphenylamine ^d	330	660	U
4-Bromophenyl Phenyl Ether	330	660	U
Practical Quantitation Limit Multiplier ^e			2.00

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

METHOD BLANK RESULTS

Base/Neutrals and Acids in Soil
 EPA Method 8270^a

GTEL ID		BS110493A	
Date Extracted		11/04/93	
Date Analyzed		11/27/93	
Analyte	PQL, ug/kg ^b	Concentration, ug/kg ^c	
Hexachlorobenzene	330	660	U
Pentachlorophenol	1600	3200	U
Phenanthrene	330	660	U
Anthracene	330	660	U
Di-n-butylphthalate	330	660	U
Fluoranthene	330	660	U
Pyrene	330	660	U
Butylbenzylphthalate	330	660	U
3,3'-Dichlorobenzidine	660	3200	U
Benz[a]anthracene	330	660	U
Chrysene	330	660	U
bis(2-Ethylhexyl)phthalate	330	660	U
Di-n-octylphthalate	330	660	U
Benzo[b]fluoranthene	330	660	U
Benzo[k]fluoranthene	330	660	U
Benzo[a]pyrene	330	660	U
Indeno[1,2,3-c,d]pyrene	330	660	U
Dibenz[a,h]anthracene	330	660	U
Benzo[g,h,i]perylene	330	660	U
Practical Quantitation Limit Multiplier ^e			2.00

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

METHOD BLANK RESULTS

Base/Neutrals and Acids in Soil
EPA Method 8270^a

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, Table 2, US EPA November 1986; extraction by EPA Method 3550 (low level sonication).
- b Practical quantitation limit.
- c Data Flag Definitions
 - U Indicates compound was analyzed for but not detected.
 - J Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the quantitation limit, but greater than zero, or when reporting an estimated concentration for a tentatively identified compound.
- d Cannot be separated from diphenylamine.
- e The practical quantitation limit multiplier indicates the adjustments made to the data and PQLs for sample dilutions, percent solids and gel permeation chromatography cleanup.

Company Name: **ROUNDWATER TECHNOLOGY** Phone #: **518-370-5631**
 Company Address: **475 KINGS RD** Site location: **011105503 36**
BEACON TERMINAL ASSOC
 Contact: **WENDY LEONARD** Client Project ID: (#)
 (NAME) **BEACON TERMINAL ASSOC**
 Procedures used during the collection: **Debby Osterhout**
 State that the proper field sampling procedures were used during the collection of these samples.

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix						Method Preserved						Sampling	
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE	TIME
GP3 8-12	1		✓													
3	2		✓													
P14-0*	3		✓													

<input type="checkbox"/> BTEX/602 <input type="checkbox"/> with MTBE <input type="checkbox"/>	<input type="checkbox"/> BTEX/Gas Hydrocarbons PID/FID <input type="checkbox"/> with MTBE <input type="checkbox"/>	<input checked="" type="checkbox"/> Hydrocarbons GC/FID Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Screen <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Hydrocarbon Profile (SIMDIS) <input checked="" type="checkbox"/>	<input type="checkbox"/> Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/> SM 503 <input type="checkbox"/>	<input type="checkbox"/> TPH/IR 418.1 <input type="checkbox"/> SM 503 <input type="checkbox"/>	<input type="checkbox"/> EDB by 504 <input type="checkbox"/> DBCP by 504 <input type="checkbox"/>	<input type="checkbox"/> EPA 503.1 <input type="checkbox"/> EPA 502.2 <input type="checkbox"/>	<input type="checkbox"/> EPA 601 <input type="checkbox"/> EPA 8010 <input type="checkbox"/>	<input type="checkbox"/> EPA 602 <input type="checkbox"/> EPA 8020 <input type="checkbox"/>	<input type="checkbox"/> EPA 608 <input type="checkbox"/> 8080 <input type="checkbox"/> PCB only <input type="checkbox"/>	<input type="checkbox"/> EPA 624/PPL <input type="checkbox"/> 8240/TAL <input checked="" type="checkbox"/> NBS (+15) <input type="checkbox"/>	<input type="checkbox"/> EPA 625/PPL <input type="checkbox"/> 8270/TAL <input checked="" type="checkbox"/> NBS (+25) <input type="checkbox"/>	<input type="checkbox"/> EPA 610 <input type="checkbox"/> 8310 <input type="checkbox"/>	<input type="checkbox"/> EP TOX Metals <input type="checkbox"/> Pesticides <input type="checkbox"/> Herbicides <input type="checkbox"/>	<input type="checkbox"/> TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-VOA <input type="checkbox"/> Pest <input type="checkbox"/> Herb <input type="checkbox"/>	<input type="checkbox"/> EPA Metals - Priority Pollutant <input type="checkbox"/> TAL <input type="checkbox"/> RCRA <input type="checkbox"/>	<input type="checkbox"/> CAM Metals TTLC <input type="checkbox"/> STLCL <input type="checkbox"/>	<input type="checkbox"/> Lead 239.2 <input type="checkbox"/> 200.7 <input type="checkbox"/> 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> 6010 <input type="checkbox"/>	<input type="checkbox"/> Organic Lead <input type="checkbox"/>	<input type="checkbox"/> Corrosivity <input type="checkbox"/> Flash Point <input type="checkbox"/> Reactivity <input type="checkbox"/>
---	--	---	--	---	--	---	--	---	---	---	---	---	---	---	--	--	--	---	--	--

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr
 Special Handling: ☐ CLP ☐ OTHER _____
 QA/QC LEVEL: ☐ OTHER _____
 GTEL Contact: Brian Wagner
 Quote/Contract #: _____
 Confirmation #: _____
 PO #: _____

SPECIAL DETECTION LIMITS
 SPECIAL REPORTING REQUIREMENTS
 FAX ☒

REMARKS: GP3 8-12 - Possible free product in the sample - run only if screening evaluation GP-3 do only if enough product - if not see Brian Wagner
 Lab Use Only Lot #: 8240
 Storage Location: 28-2-C
 GP3 - Tell me what it is -
 Hold til approved via telephone
 Work Order # 11-7-8
 Received by: Greg

JUSTODY RECORD

Relinquished by Sampler: <u>Wendy Leonard</u>	Date: <u>10/27</u> Time: <u>5:10 PM</u>	Received by:
Relinquished by:	Date: _____ Time: _____	Received by:
Relinquished by:	Date: <u>10-28-97</u> Time: <u>11:45 AM</u>	Received by Laboratory: <u>Ruth Raul</u>

Waybill # 0506 5686029



Northeast Region
Meadowbrook Industrial Park
Milford, NH 03055
(603) 672-4835
(603) 673-8105 (FAX)

Client Number: 011105503
Project ID: Beacon Terminal
Assoc.
Login Number: M3-10-0856

December 14, 1993

Wendy Leonard
Groundwater Technology, Inc.
1245 Kings Road
Schenectady, NY 12303

Dear Mr. Leonard:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 10/28/93 under chain-of-custody record 55346.

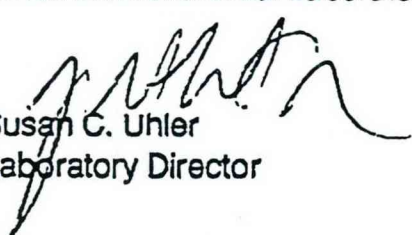
A formal Quality Assurance / Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified (approved) by the State of New York under number 10599.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.



Susan C. Uhler
Laboratory Director

Client Number: 011105503
 Project ID: Beacon Terminal
 Assoc.
 Login Number: M3-10-0856

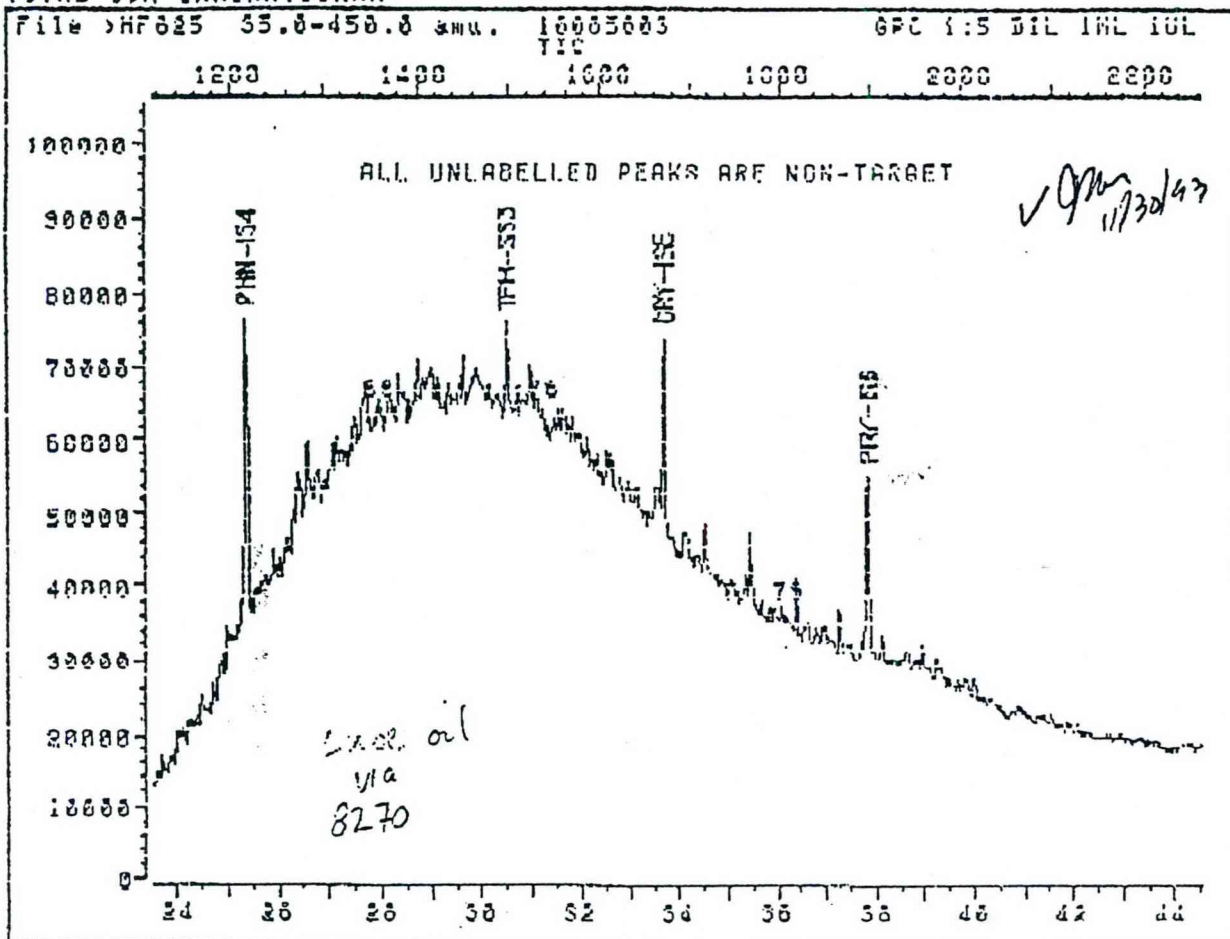
ANALYTICAL RESULTS

Hydrocarbon Screen in Soil
 by GC FID^a

GTEL Sample Number	100856-01	--	--	--
Client Identification	GP3 8-12	--	--	--
Date Sampled	10/26/93	--	--	--
Date Extracted	11/04/93	--	--	--
Date Analyzed	11/12/93	--	--	--
Analyte	Detection Limit, mg/kg	Concentration, mg/kg		
Gasoline	10	< 13 ^b	--	--
Mineral Spirits	10	< 13 ^b	--	--
Kerosine	10	< 13	--	--
Diesel	10	< 13	--	--
Fuel Oil #6	10	< 13	--	--
Lubricating Oil	10	25	--	--
Detection Limit Multiplier		1.33	--	--
Percent Solids, %		74.5	--	--

- a Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986; Methylene chloride extraction by modified EPA Method 3550; modification as per California State Water Resources Control Board LUFT Manual protocols. Concentration calculated on a dry weight basis.
- b The sample chromatogram shows the presence of hydrocarbon peaks in the boiling point range of C₈ to C₁₃ that appear to be petroleum in nature but do not match instrument standards. Identification of these compounds is beyond the scope of this analysis.

TOTAL ION CHROMATOGRAM



Data File: >HF625::D7

Quant Output File: >HF625::D2

Name: 10005603

Instrument ID: MSDH

Misc: GPC 1:5 DIL 1ML 10L INJ RUN F= GPC1 MILFORD, NH BIL#11

Id File: IDHBNA::D1

Title: GTEL MILFORD NH SYSTEM H

Last Calibration: 931123 09:00

Last Qual Time: 931127 13:19

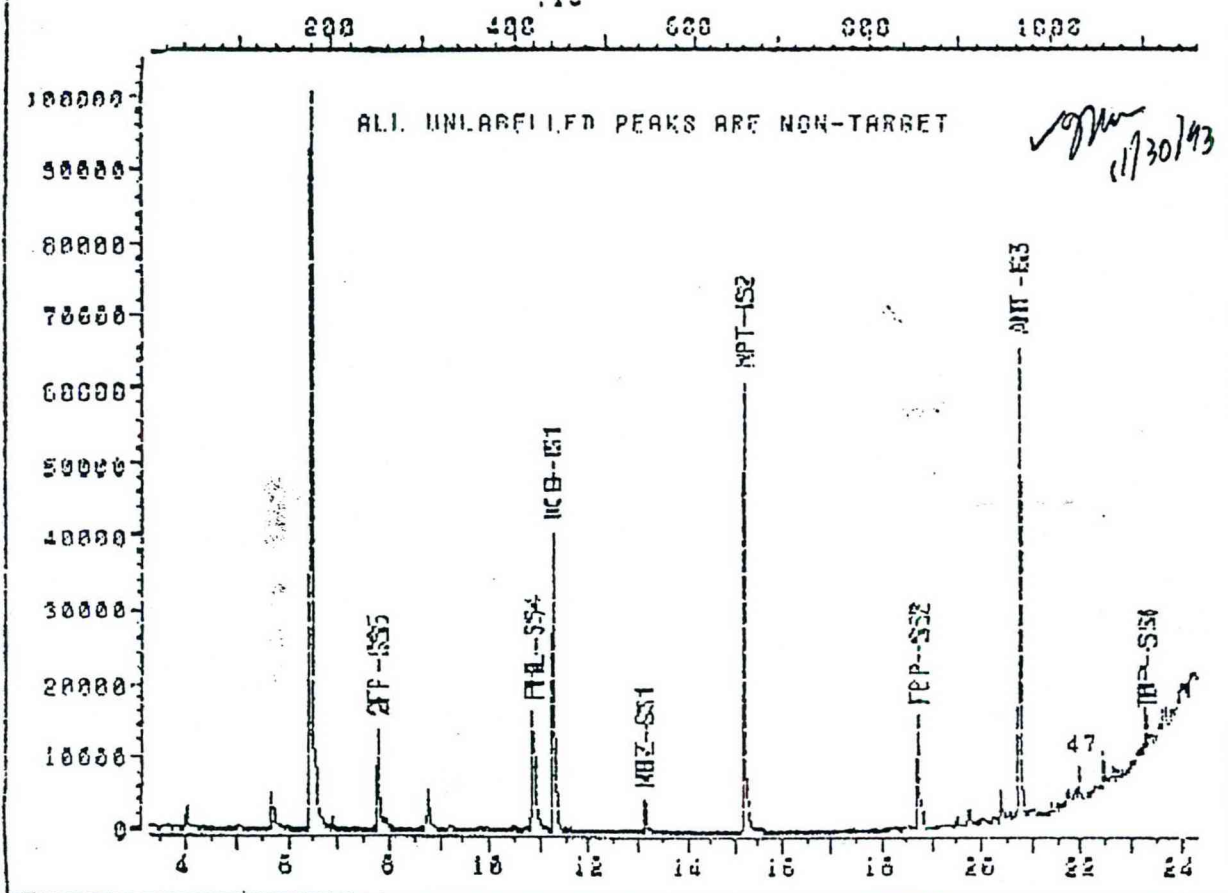
Operator ID: HUSER2

Quant Time : 931127 23:59

Injected at: 931127 23:15

Page 2 of 2

File >HF625 35.0-450.0 amu. 100056003 GPC 1:5 DIL INL IUL



Page 1 of 2

ATTACHMENT 3

Phase I Environmental Audit

(Ecosystems Strategies, Inc., 1/96)

ENVIRONMENTAL

AUDIT

PHASE I

January 11, 1996

Site Identification

**Beacon Terminal Property (Portion)
South Avenue
City of Beacon
Dutchess County, New York**

Tax Lot Identification

**Map 5954, Block 16, Lot 808256
Parcel C of Proposed Subdivision**

Property Description

**Approximate 4.7 acre property containing eight
structures**

ESI File Number: SB9548.11

Prepared By:

**Ecosystems Strategies, Inc.
60 Worrall Avenue
Poughkeepsie, NY 12603
(914) 452-1658**

ENVIRONMENTAL

AUDIT

PHASE I

January 11, 1996

ESI File Number: SB9548.11

Prepared By:

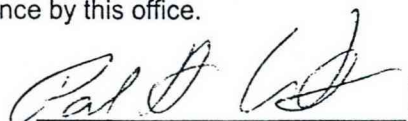
Ecosystems Strategies, Inc.
60 Worrall Avenue
Poughkeepsie, NY 12603

Prepared For:

Scenic Hudson, Inc.
Scenic Hudson Land Trust, Inc.
9 Vassar Street
Poughkeepsie, NY 12601

Services performed by Ecosystems Strategies, Inc. and summarized in this Environmental Audit Phase I have been conducted in accordance with Method E 1527-94 as approved by the American Society of Testing and Materials (ASTM).

The undersigned has reviewed this Environmental Audit Phase I and certifies to Scenic Hudson, Inc. and Scenic Hudson Land Trust, Inc. that the information provided in this document is accurate as of the date of issuance by this office.



Paul H. Ciminello
President

TABLE OF CONTENTS

SECTION 1.0 - INTRODUCTION	1
1.1 Purpose of the Investigation	
1.2 Methodology	
1.3 Limitations	
SECTION 2.0 - SITE LOCATION AND DESCRIPTION	2
2.1 Description of the Subject Property	
2.2.1 Site Topography	
2.1.2 Site Geology	
2.1.3 Site Hydrogeology	
2.1.4 Surface Hydrology	
2.2 Description of Surrounding Properties	
2.2.1 Surrounding Land Uses	
2.2.2 Nearby Sensitive Environmental Receptors	
SECTION 3.0 - INVESTIGATION	7
3.1 Ownership Records	
3.2 Site History	
3.2.1 Sanborn Fire Insurance Company Maps	
3.2.2 Aerial Photographs	
3.2.3 Local Records	
3.2.3 Client Information	
3.3 Review of Federal State Agency Records	
3.3.1 Methodology	
3.3.2 Findings of Regulatory Records Review	
3.4 Site Inspection	
3.4.1 Protocol	
3.4.2 Physical Characteristics of Subject Property	
3.4.3 Specific On-site Environmental Conditions	
3.4.4 Environmental Conditions on Adjoining Properties	
3.5 Previous Environmental Investigations	
3.5.1 Investigations Performed by Ecosystems Strategies, Inc.	
3.5.2 Investigations Performed by Groundwater Technology, Inc.	
SECTION 4.0 - CONCLUSIONS AND RECOMMENDATIONS	23
SECTION 5.0 - SOURCES OF INFORMATION	29
FIGURES	
Page 5	Site Location Map
Page 6	Parcel Identification Map
Page 22	Selected Site Features Map
TABLES	
Page 4	Table 1: Land Uses in the Vicinity of the Subject Property
Page 7	Table 2: Ownership Information
APPENDICES	
A	Site Photographs
B	USGS Topographic Map
C	Wetlands Maps

1.0 Introduction

1.1 Purpose of the Investigation

This Environmental Audit Phase I ("Audit") identifies environmental conditions which might represent a financial liability resulting from or associated with the storage, use, transport or disposal of hazardous or regulated materials on the approximate 4.7 acre portion of the Beacon Terminal property located on South Avenue in the City of Beacon, Dutchess County, New York. A full property description is provided in Section 2.1 below. A map showing the location of the subject property is provided on Page 5.

1.2 Methodology

This Audit has been prepared in conformance with guidelines set forth by the American Society of Testing and Materials (ASTM). The specific components of this Audit are as follows:

1. Investigation of the subject property's history through the analysis of Sanborn Fire Insurance Company Maps dated 1919, 1927, 1946 and 1962; aerial photographs dated 1935, 1959, 1967, 1970, 1980 and 1990; City and County road maps; USGS Topographic Map; state and federal wetlands maps; Dutchess County tax maps; City of Beacon records; information provided by the property owner; and documents provided by the Client. Complete references are provided in Section 5.0 of this Audit.
2. Review of federal and state computer databases and printed records for documentation of potential liabilities relevant to the subject property. Records reviewed and corresponding search radii are consistent with, or exceed, the requirements set forth by the ASTM.
3. Visual inspections of the property, including the interior of the on-site structures, conducted May 25 and June 9, 1995 by Ecosystems Strategies, Inc. personnel.

1.3 Limitations

This Audit is an assessment of the approximate 4.7 acre portion of the Beacon Terminal property located in the City of Beacon, Dutchess County, New York and is not valid for any other property or location. It is a representation of the property analyzed as of the date that services were provided. This Audit cannot be held accountable for activities or events resulting in environmental liability after the date of the site inspections or historic research.

This Audit is based in part on certain information provided in writing or verbally by federal, state and local officials (including public records) and other parties referenced herein. No attempt was made to independently verify the accuracy or completeness of this information. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgement.

This Audit is intended for the sole use of Scenic Hudson and Scenic Hudson Land Trust, Inc. and must be used in its entirety.

2.0 Site Location and Description

2.1 Description of the Subject Property

The subject property is defined as an approximate 4.7 acre portion of the Beacon Terminal property located on South Avenue in the City of Beacon, Dutchess County, New York (see the Site Location Map, Page 5). The subject property is comprised of a single tax lot; Dutchess County Tax Map Identification: Map 5954, Block 16, Lot 808256 (Parcel C). Dutchess County Tax Map Identification: Map 5954, Block 19, Lot 735246 (Parcel A) and Map 5954, Block 16, Lot 830270 (Parcel B) of the Beacon Terminal property are considered in this Audit to be adjoining parcels (see the Parcel Identification Map, Page 6).

The subject property is a squarely-shaped parcel located on the western side of South Avenue which is improved with eight structures with former industrial and/or manufacturing uses; this structure complex comprises almost the entirety of the subject property. All but two of the structures on the subject property are not actively used. The location of each structure, along with the Building number description referenced throughout this Audit, is provided on the Selected Site Features Map, Page 20 of this Audit. The remaining portions of the subject property are comprised of paved parking areas located immediately north, east and west of the subject property and strips of undeveloped woodland located along the western and southern property borders. The subject property is bounded on the north by a Con Rail Corporation railroad right-of-way (ROW), on the south by the Fishkill Creek, on the east by South Avenue and on the west by undeveloped land associated with the adjoining Parcel A portion of the Beacon Terminal property.

2.1.1 Site Topography

Information on the subject property's topography was obtained from a review of the 1957 United States Geological Survey (USGS) West Point, N.Y. quadrangle (photorevised 1981) and observations made during the June 9, and May 25, 1995 site inspection (see Section 3.4, below). A copy of the USGS topographic map with the subject property outlined is included in Appendix B.

The entirety of the subject property is characterized by generally level land. According to the USGS Map, the elevation proximal to the subject property's southern border with the Fishkill Creek is approximately 20 feet above mean sea level and the elevation proximal to the subject property's northern border with the Con Rail ROW is approximately 40 feet above mean sea level. The adjacent northern property is at a higher surface elevation than the subject property.

A review of the above-referenced topographic map did not indicate the presence of soil/gravel mining operations or unusual topographic patterns indicative of excavation or landfilling activities.

2.1.2 Site Geology

No site specific geologic investigation of the subsurface (e.g., test pits or borings) is known to have been performed on the subject property; therefore, the actual depth of bedrock on the subject property cannot be accurately documented at this time. Four borings were extended on the eastern portion of the subject property on October 26, 1993 (see Section 3.5, below). The logs for two of the borings indicate that auger refusal occurred at 7.5 and 10 feet below grade; no comment was made in either log whether this refusal was the result of the presence of shallow bedrock. Refusal did not occur at the other two boring locations (maximum depth of 12

feet below grade at both locations).

Information contained in the Dutchess County Soil Survey (dated September 1991) indicates that the subject property is characterized by the following soil types formed primarily in glacial till: the Udorthants, a well drained soil altered by cutting and filling, found on the western portion of the subject property; and the Nassau-Cardigan complex, a very rocky well drained loamy soil underlain by shale, found on the eastern portion of the subject property.

2.1.3 Site Hydrogeology

No site specific investigation of groundwater is known to have been performed on the subject property; therefore, the actual depth of groundwater and the direction of on-site flow cannot be accurately documented at this time. Four borings were extended on the eastern portion of the subject property on October 26, 1993 (see Section 3.5, below). The logs for these borings indicate that saturated subsurface soils were encountered between 6 and 9 feet below grade. The Fishkill Creek serves as the subject property's southern property border and surface water flow in the Creek is in a westerly direction towards the Hudson River, which is located less than 1,000 feet to the west of the subject property. This direction of surface water flow and the proximity of the Hudson River imply a southwesterly direction of groundwater flow on the subject property.

2.1.4 Surface Hydrology

No surface water bodies other than the Fishkill Creek which adjoins the subject property's southern border were noted on the subject property during the site inspections (see Section 3.4, below). The Hudson River is located less than 1,000 feet to the west of the subject property.

Wetlands

According to the above-referenced USGS map, no marsh lands are present on the subject property. According to the 1973 New York State Freshwater Wetlands Map of the West Point, N.Y. quadrangle, there are no NYSDEC designated wetland areas (areas greater than 12.7 acres in size) present on the subject property. According to the 1990 U.S. Department of the Interior National Wetlands Inventory Map, there are no federally designated wetland areas (areas greater than 1 acre in size) present on the subject property; however, the Fishkill Creek is a federally designated wetland area. A copy of these wetland maps with the subject property outlined are included in Appendix C of this Audit.

2.2 Description of Surrounding Properties

2.2.1 Surrounding Land Uses

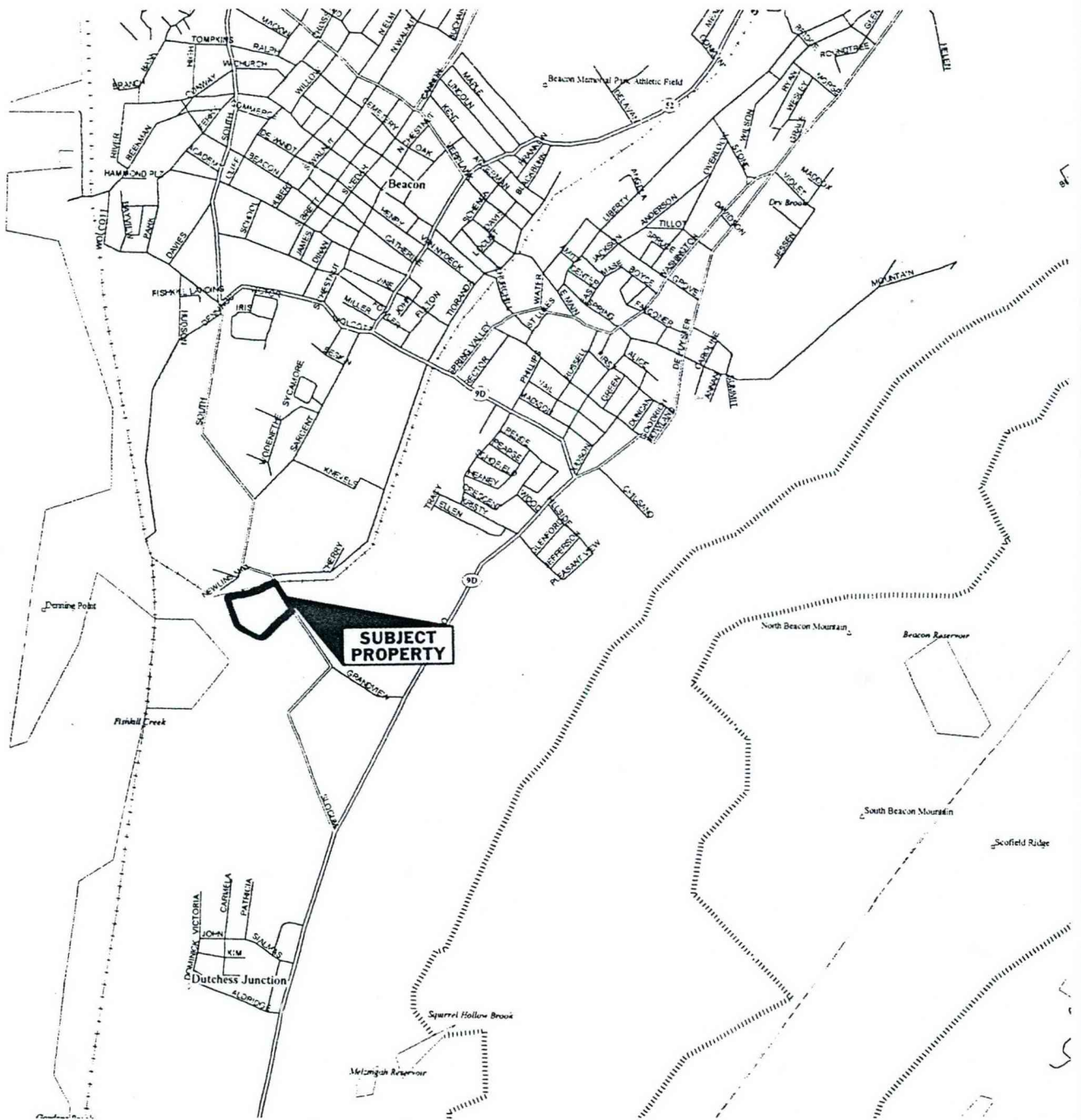
The subject property is located to the immediate south of an urban area. A description of the adjoining and nearby properties for the subject property is shown in Table 1, below.

Table 1: Land Uses in the Vicinity of the Subject Property

Direction	Adjoining Use(s)	Vicinity Use(s)
North	• Con Rail Corporation ROW	• Residential • Undeveloped Land
East	• Undeveloped Land (Parcel B)	• Undeveloped Land
South	• Residential • Undeveloped Land	• Hospital • Residential
West	• Undeveloped Land (Parcel A)	• Metro North ROW • Hudson River

2.2.2 Nearby Sensitive Environmental Receptors

The Fishkill Creek which serves as the subject property's southern property border is a federally designated wetland area described as a riverine upper perennial, unconsolidated bottom and permanently flooded wet area. No groundwater supply wells were noted on adjoining properties during the site inspection; however, nearby properties are likely connected to private wells.



MAP FROM DELORME'S MAP EXPERT, FREEPORT, ME.

Site Location Map

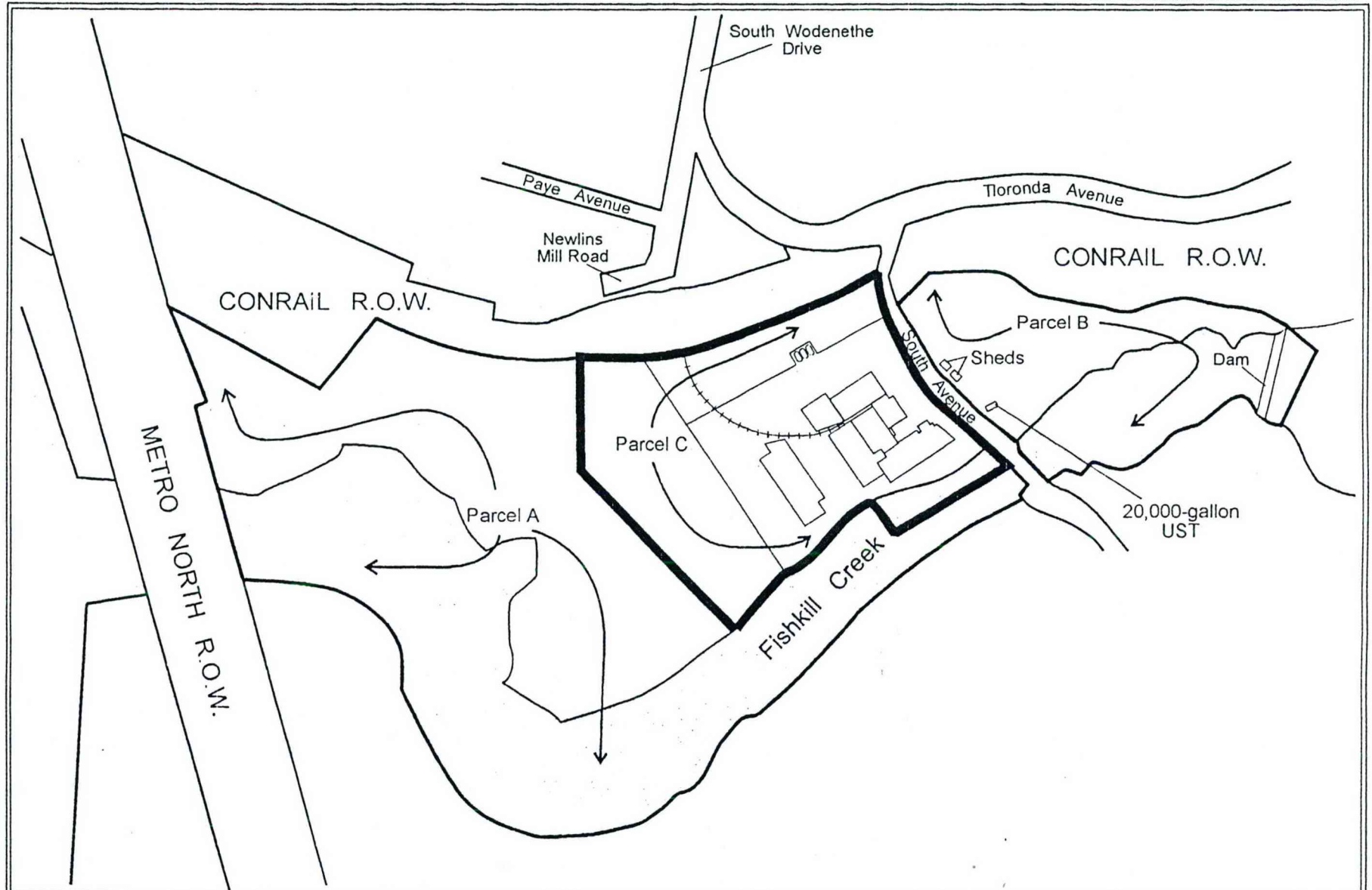
Ecosystems Strategies, Inc.



Job Number: SB9548.11

Date: January 1996

Page 5



Parcel Identification Map

Ecosystems Strategies, Inc.



ESI File Number: SB9548.11

January 1996

Not to Scale

Page 6

3.0 Investigation

3.1 Ownership Records

Title Search

A formal title search was not conducted as part of this Audit investigation.

Property Card Information

Information on current and former property ownership was obtained from a review of City of Beacon Assessor's Office property card records. Provided, below in Table 2 is a summary of the available information for Block 16, Lot 808256 (Parcel C).

Table 2: Ownership Information

Lot Designation	Current Owner (Date of Purchase)	Former Owners (Date of Purchase)
Lot 808256	Beacon Terminal Assoc., L.P. (12/31/91)	Beacon Terminal Corp. (Unknown)

3.2 Site History

The history of the subject property is reconstructed through the review of Sanborn Fire Insurance Company maps dated 1919, 1927, 1946 and 1962, aerial photographs dated 1935, 1959, 1967, 1970, 1980 and 1990, City of Beacon Assessors Office records, Client documents and information provided by the property owner.

3.2.1 Historic Maps

A summary of the Sanborn Fire Insurance Company Maps dated 1919, 1927, 1946 and 1962 is provided below. Properties located north, east and west of the subject property are not shown on the maps provided to this office by the Sanborn Mapping and Geographic Information Service. A copy of each referenced Map with the subject property outlined is provided in Appendix D of this Audit. Referenced building numbers are shown on the Selected Site Features Map, Page 20.

1919: Only Buildings #1, 2 and 4 are present on the subject property. The structures on this portion of the subject property are labeled as being occupied by "The Tioranda Hat Works". The eastern portion of Building #4 and the southwestern portion of Building #2 are occupied by dye houses. The entirety of Building #1 is occupied as a boiler house; a notation on the Map indicates that coal is used to fuel the boilers. A two-story outbuilding used for storage is present in the location currently occupied by Building #8. Central water is shown as being available to the subject property. No petroleum or chemical bulk storage tanks are noted on the subject property.

A one-story dwelling is present on the adjoining eastern portion of the Beacon Terminal property across South Avenue. Two residential structures are present on the southern side of the Fishkill Creek. No other adjacent property uses are noted on the Map. There are no indications of petroleum or chemical bulk storage tanks on adjoining or surrounding properties.

- 1927: The three main structures and a portion of the outbuilding noted on the 1919 Map are still present on the subject property and are occupied by the "Dutchess Hat Works". No changes in the usage of these structures are noted on the Map. There are no indications of petroleum or chemical bulk storage tanks on the subject property.

The dwelling structure is still present on the adjacent eastern portion of the Beacon Terminal property. An additional residential structure and two automobile garages are present on the southern side of the Fishkill Creek. No other adjacent property uses are noted on the Map. There are no indications of petroleum or chemical bulk storage tanks on adjoining or surrounding properties.

- 1946: The three main structures noted on the 1919 and 1927 Maps are present on the subject property and are still labeled as being occupied by Dutchess Hat Works. The outbuilding used for storage is still present. Three additional outbuildings have been built to the north and northwest of Building #4. One of the outbuildings is used for storage, one as an automobile garage and one as a machine shop. A 50,000-gallon aboveground water tank is now present to the immediate north of the eastern portion of Building #4 in the area currently occupied by Building #3. No petroleum or chemical bulk storage tanks are noted on the subject property. The on-site boilers are still labeled as being fueled with coal.

The dwelling structure is no longer present on the adjoining eastern portion of the Beacon Terminal property (Parcel B) and the portion of this adjoining property shown on the Map is depicted as being undeveloped. No other adjoining property uses are noted on the Map. There are no indications of petroleum or chemical bulk storage tanks on adjoining or surrounding properties.

- 1962: All of the structures currently present on the subject property have been constructed and are labeled as being "The Beacon Terminal". Both portions of Building #5 are labeled as being occupied by Chemical Rubber Products, Inc. Building #7 is occupied by BASF Colors and Chemicals, Inc. The remaining structures are occupied by Atlas Fibre Company. Railroad access is present on the southern side of Building #5. There are no indications of petroleum or chemical bulk storage tanks on the subject property.

The portion of the adjoining eastern portion of the Beacon Terminal property shown on the Map is depicted as being undeveloped. There are no indications of petroleum or chemical bulk storage tanks on adjoining or surrounding properties.

3.2.2 Aerial Photographs

The following is a summary of the information obtained from a review of aerial photographs dated 1935, 1959, 1967, 1970, 1980 and 1990. The small scale of some of the aerial photographs made distinguishing small details difficult.

ENVIRONMENTAL AUDIT
SB9548.11

PAGE 9 OF 31
JANUARY 11, 1996

- 1935: Buildings #1, 2 and 4 are present on the subject property. An additional structure may be present in the northeastern corner of the subject property proximal to the Con Rail ROW; however, the scale of the aerial photograph prohibits a definitive determination of this structure's existence.

A network of access roads is present leading from the subject property onto the adjoining western portion of the Beacon Terminal property (Parcel A), which appears to be in active use but the utility is not discernible from the aerial photograph. Areas of disturbed soils are present throughout this adjoining Parcel A. The adjoining eastern portion of the Beacon Terminal property is almost entirely undeveloped woodland; the scale of the aerial photograph prohibits a determination as to the presence or absence of the residential structure (noted in the 1927 Sanborn Map but not in the 1946 Map) on this parcel.

- 1959: All of the structures currently present are noted on the subject property. The western portion of the subject property proximal to the structures is characterized by areas of disturbance; the two most heavily disturbed areas are located to the northwest (proximal to the Con Rail ROW) and southwest of Building #7. An access road is noted extending from the parking lot on the western side of Building #7 to the disturbed area to the southwest. The 50,000-gallon water tank is present proximal to the structural complex.

The adjoining western portion of the Beacon Terminal property is now vegetated. No structures are present on the adjoining eastern portion of the Beacon Terminal property, which appears as undisturbed woodland.

- 1967: All of structures are present on the subject property and appear to be in active use. The westernmost portions of the subject property proximal to the structural development remain disturbed.

The adjoining western portion of the Beacon Terminal property is woodland with no areas of significant disturbance noted. One shed outbuilding is noted on the western portion of the adjoining eastern portion of the Beacon Terminal property; the remaining portions of this parcel are undisturbed woodland.

- 1970: The structures located on the subject property appear to be in active use. What appears to be a squarely-shaped concrete pad is located proximal to the Con Rail ROW to the north of Building #7. The land along the western border of the subject property is heavily disturbed and almost entirely cleared of vegetation; portions of this disturbed area show indications of intensive use (e.g., excavation).

The two outbuildings are located immediately east of the subject property; the land in the immediate vicinity and to the west of the outbuildings exhibits indications of disturbance. The remaining portions of this parcel are undeveloped woodland; no areas of unusual disturbance or intensive use are noted on these portions of the property. A "U"-shaped access road is present in the westernmost portion of the adjoining western portion of the Beacon Terminal property. This access road appears to extend north to the Con Rail ROW; the land on the northern side of the Con Rail ROW is also heavily disturbed.

ENVIRONMENTAL AUDIT
SB9548.11PAGE 10 OF 31
JANUARY 11, 1996

1980: The structures located on the subject property do not appear to be in active use. The 50,000-gallon water tank is no longer present on the subject property. Areas of disturbance are still noted along the western perimeter of the parking lot area located on the western side of Building #7 (the area of significant solid waste deposition noted during the June 9, 1995 site inspection) and to the northwest of Building #7 proximal to the Con Rail ROW.

The land in the vicinity of the two outbuildings on the adjoining eastern portion of the Beacon Terminal property does not appear as disturbed as it did in the 1970 aerial photograph. The remaining portion of this parcel remains undeveloped woodland. The access road is no longer visible in the western portion of the adjoining western portion of the Beacon Terminal property.

1990: No changes involving the on-site structures are noted from those depicted in the 1980 aerial photograph. Areas of disturbance are noted on the western portion of the subject property along the Con Rail ROW to the northwest of Building #7.

With the exception of the two outbuilding structures, the adjoining eastern portion of the Beacon Terminal property appears as undeveloped woodland; no areas of unusual disturbance or intensive land use are noted. The adjoining western portion of the Beacon Terminal property appears as undeveloped woodland with only a single area of unusual disturbance or intensive use noted (in the westernmost portion of the parcel proximal to the Metro North ROW).

3.2.3 Local Records

City of Beacon Assessor's Office property card records were reviewed for the subject property on May 25, 1995. No information pertinent to the environmental integrity or condition of the subject property was identified during this review.

3.2.4 Client Documents

Copies of a July 1993 Phase I Environmental Site Assessment ("Phase I") prepared by The Chazen Companies and a December 1993 Phase II Environmental Site Assessment Report ("Phase II") prepared by Groundwater Technology, Inc. for the subject property were forwarded to this office by the Client for review. Information from the July 1993 Phase I investigation relevant to this Audit investigation is referenced in the Sections below. Information from the December 1993 Phase II investigation is summarized in Section 3.5.2, below.

3.2.5 Property Owner Information

The following information relevant to the structures located on the subject property was obtained from the property owner during the May 25, 1995 site inspection.

According to the property owner, Atlas Fibers Company ceased active operations on the subject property in 1968. In 1972, the IBM Corporation leased a portion of Building #2 and all of Buildings #3 through #8 for the storage of IBM Corporation equipment. IBM Corporation ceased operations on the subject property in 1978. Between 1978 and 1980, New York State occupied both portions of Building #5 for the storage of equipment and supplies. In 1980, the Center for Humanities occupied Buildings #3, 4, 6 and a portion of #8 for operations associated with its literature distribution operations. The Center for Humanities ceased operations on the subject property in July 1992. Eran Lighting Company has occupied portions of Building #5 and #8 for the storage of products since late 1992 until 1995.

3.3 Review of Federal and State Agency Records

3.3.1 Methodology

Federal and state computer databases and printed records were reviewed for documentation of potential liabilities relevant to the subject property. Records reviewed and corresponding search radii are consistent with, or exceed, the requirements set forth by ASTM.

The following databases were searched at their specified radius, consistent with ASTM protocol:

- USEPA National Priority List (1.0 mile)
- USEPA CERCLIS List (0.5 mile)
- USEPA RCRIS Hazardous Waste Transfer, Storage and Disposal Facilities List (1.0 mile)
- USEPA RCRIS Hazardous Waste Generators Facilities List (subject/adjoining properties)
- USEPA Emergency Response Notification System (subject property)
- NYSDEC Registry of Inactive Hazardous Waste Disposal Sites (1.0 mile)
- NYSDEC Leaking USTs Records (0.5 mile)
- NYSDEC Registry of Active and Inactive State Landfills (0.5 mile)
- NYSDEC Petroleum Bulk Storage Tank Records (subject/adjoining properties)
- NYSDEC Chemical Bulk Storage Tank Records (subject/adjoining properties)

The following databases not required by ASTM protocol were also reviewed:

- NYSDEC Petroleum and Chemical Spill Records (0.5 mile)
- NYSDEC Major Oil Storage Facilities (0.5 mile)
- NYSDEC Resource Recovery Projects in New York State (0.5 mile)
- NYSDEC Listing of SPDES Permitted Facilities (subject property)
- NYSDOH Basement Radon Readings By County (Dutchess County)
- NYSDOH Basement Radon Readings By Gazetteer Code (City of Beacon)

A complete definition of each database, along with the date of the version used for this Audit investigation, is provided below in Section 5.1 of this Audit.

3.3.2 Findings of Regulatory Records Review

Federal Hazardous Waste Sites

The subject property is not listed with the United States Environmental Protection Agency (USEPA) as a National Priority Listing (NPL) site. There is no NPL site located within 1.0 mile of the subject property.

The subject property is not listed with the USEPA CERCLIS List. The Tuck Industries, Inc. site located between Tioranda Avenue and the Fishkill Creek approximately 1500 feet northeast of the subject property is listed with the USEPA as a CERCLIS site (USEPA ID: NYD001396894). Tuck Industries, Inc. operated as a tape manufacturing facility until 1989 when production was discontinued. During their periods of operation, the site was a temporary storage facility of drums of toluene, methyl ethyl ketone and isopropyl alcohol.

Although the probability for groundwater contamination with volatile organic compounds (VOCs) on this Tuck Industries, Inc. site exists, investigative work conducted on the Tuck site to date has not documented any off-site migration of contaminants. The subject property is located downstream of the Tuck site and has the potential to be impacted by contaminant migration via the surface waters of the Fishkill Creek. It is the opinion of this office that off-site migration of VOC contaminants from this Tuck site into the Fishkill Creek, if any, would not pose a threat to the environmental integrity of the subject property since any volatile organic compounds would be aerated during surface water flow.

Hazardous Waste Storage and Disposal

The subject property and the immediately adjoining properties are not registered with the USEPA as a generator (LQG/SQG) of hazardous waste.

The subject property is not registered with the USEPA as a treatment, storage, or disposal (TSD) facility for hazardous materials or waste. There are no hazardous waste TSD facilities located within 1.0 mile of the subject property.

State Hazardous Waste Sites

The subject property is not listed with the New York State Department of Environmental Conservation (NYSDEC) as an inactive hazardous waste disposal site. The Tuck Industries, Inc. site discussed above is listed with the NYSDEC as an inactive hazardous waste disposal site (NYSDEC ID: 314044).

Landfills and Solid Waste Disposal Facilities

The subject property is not listed with the NYSDEC as an active or inactive landfill, transfer station or solid waste disposal facility. The All-County facility located on Dennings Avenue on the northern side of the Con Rail ROW less than 0.2 mile northwest of the subject property is registered with the NYSDEC as a solid waste transfer station (Permit Number: 14R01).

The subject property is not listed with the NYSDEC as a resource recovery facility. There is no resource recovery facility located within 0.5 mile of the subject property.

Petroleum Bulk Storage

The subject property is not listed with the NYSDEC as a major oil storage facility (MOSF). There are no MOSFs located within 0.5 mile of the subject property.

No petroleum bulk storage tanks are registered with the NYSDEC for the subject property. Two (2) 275 gallon capacity aboveground diesel fuel storage tanks were noted on the subject property during the May 25, 1995 site inspection.

State Regulations - AST

Due to its total maximum storage capacity of less than 1,100 gallons, the subject property's two petroleum bulk storage tanks are not governed by NYSDEC petroleum bulk storage tank regulations (6 NYCRR Parts 612-614), which include registration and documented periodic inspection requirements.

No petroleum bulk storage tanks are registered with the NYSDEC for the adjoining properties. An underground 20,000 gallon capacity #6 fuel oil storage tank is located on the westernmost portion of the adjoining eastern portion of the Beacon Terminal property (Parcel B). This tank serves boiler units located on the subject property. A limited subsurface investigation was conducted in the vicinity of this underground tank (see Section 3.5.2, below).

Chemical Bulk Storage

No chemical bulk storage tanks are registered with the NYSDEC for the subject property. Eight (8) aboveground and three (3) underground former chemical bulk storage tanks were noted on the subject property during the May 25, 1995 site inspection (see Section 3.4.3, below). According to the property owner, the aboveground tanks have not been in active use since 1968 and the underground tanks have not been in active use since 1970-71. No tank closure documentation for any of the tanks is known to exist. A limited subsurface investigation was conducted in the vicinity of all three of the underground tanks and six of the eight aboveground tanks (see Section 3.5.2, below).

State Regulations

Each of the eleven (11) former chemical bulk storage tanks were installed, actively used and closed prior to the promulgation of applicable NYSDEC chemical bulk storage tank regulations (6 NYCRR Parts 595-599); these tanks are presently not registered with the NYSDEC. According to the NYSDEC, upon their closure, these tanks are required to be registered with the NYSDEC. Closure of these tanks should be consistent with applicable chemical bulk storage regulations (6 NYCRR Part 595).

Federal Chemical and Petroleum Spills

There are currently no chemical or petroleum spills on record with the USEPA's Emergency Response Notification System (ERNS) database for the subject property.

State Chemical and Petroleum Spills


There are currently no chemical or petroleum spills on record with the NYSDEC as having occurred on the subject property since at least 1986. A review of NYSDEC computerized spill records indicates that no spill events have occurred within 0.25 mile of the subject property since at least 1986 (records updated through January 31, 1995).

Air Discharges

No NYSDEC permits for air discharges are known to exist for the subject property. No operations considered by this office to require an air discharge permit were noted on the subject property during the site inspection.

Wastewater Discharges

The subject property's structures are connected to municipal sewer. According to NYSDEC records, no wastewater discharge permits (e.g. SPDES) exist for the subject property. No active operations considered by this office to require a wastewater discharge permit were noted on the subject property during the May 25, 1995 site inspection; however, at least three pipe outfalls were noted extending out of the southern exterior wall of Building #2 (see Section 3.4, below). Any historic liquid discharges into these pipe outfalls would have been released into the Fishkill Creek.



Sampling of the Fishkill Creek was performed by Ecosystems Strategies during August and September 1995. Sampling identified elevated levels of lead in the sediment along Building #2 of the subject property in the immediate vicinity of the pipe outfalls (see Section 3.5.1, below).

Radon

Information on radon levels was obtained from New York State Department of Health (NYSDOH) documents. No regulatory standards for radon levels currently exist in New York State. The USEPA has established a guidance value (the level where mitigation measures may be appropriate) for radon of 4.0 or greater picoCuries/liter.

According to NYSDOH documents, the average radon level in Dutchess County is 6.7 picoCuries/liter (pCi/liter); this level is based on radon sampling done in 2091 homes and has a standard deviation of 7.0 pCi/liter. The average radon level in the City of Beacon is 5.9 pCi/liter; this level is based on radon sampling done in 29 homes and has a standard deviation of 5.5 pCi/liter.

These average county and city levels suggest the probability of radon levels exceeding the USEPA guidance level on the subject property. No definitive statement can be made regarding on-site radon levels without the placement of radon sampling canisters in the on-site structures; however, due to the non-residential usage of the subject property, radon levels are not considered by this office to pose a threat to the utility of the subject property.

3.4 Site Inspection

3.4.1 Protocol

Site inspections were conducted on May 25 and June 9, 1995 in order to address any potential concerns raised during the historical research and regulatory review (above, Sections 3.1 through 3.3) and to identify any additional indications of contamination from the use, storage, or disposal of hazardous or regulated materials. To the extent possible, existing vegetation and topography were examined for any obvious indications of contamination (e.g., vegetative stress, soil stains, or the physical presence of contaminants) or any other unusual patterns.

Section 3.4.2 describes the physical characteristics of the subject property. Section 3.4.3 is divided into topics on specific environmental conditions or concerns, actual or potential, noted on the subject property during the site inspection. Section 3.4.4 describes the physical characteristics of adjacent properties as they concern the potential or actual environmental condition of the subject property.

Identified concerns and/or areas discussed specifically in this Section of the Audit are shown on the Selected Site Features Map, Page 20. Photographs referenced in this Section are included in Appendix A of the Audit.

3.4.2 Physical Characteristics of Subject Property

Property

The footprint of the on-site structures and associated site access/parking areas occupies approximately 70% of the subject property's total lot size. Vegetated areas are present along the northern property border with the Conrail ROW, in the southwestern corner of the subject property proximal to the Fishkill Creek and to the west of the parking lot area on the western side of Building #7.

Structures

The subject property is improved with a total of eight (8) structures, seven of which are interconnected. The single unconnected structure, Building #7, is a one-story concrete block structure which is located to the west of the other interconnected structures. The northern portion of the structure is a single-room. The southern portion of the structure is a former administrative area divided into ten rooms.

At the time of the May 25, 1995 site inspection, the interior of Building #5 and a portion of the second floor of Building #8 were being used for storage space by Eran Lighting Company; the interiors of Buildings #3, 4, 5, 6, 7 and 8 (first floor) were vacant and had no active use. Machinery, equipment and material storage associated with its prior industrial/manufacturing uses and current site maintenance use are located throughout the upper floors and basement area of Buildings #1 and 2. The basement of Building #2 houses two large boiler units.

3.4.3 Specific On-Site Environmental Conditions

Debris Areas

The interiors of Buildings #3, 5, 6 and 8 were free of any areas of significant solid waste deposition.

The interior of Buildings #4 and #7 were characterized by the presence of debris associated with the dilapidated condition of portions of the structure (e.g., ceiling and floor tiles, wallboard, significant quantities of chipping paint). In total, approximately 15 cubic yards of debris was present in the interior of these two structures. A limited asbestos survey (which included material sampling) performed as part of the Chazen Companies July 1993 Phase I investigation identified asbestos containing building materials in both of these structures; prior to its disposal some of the material present in the interior of these two structures may require testing (e.g., for asbestos content) to confirm that it does not require special handling.

The interiors of Buildings #1 and #2 were characterized by the presence of debris associated with the former uses of the structure (e.g., office equipment, machinery, material storage). Included in this debris was small volume storage of materials potentially requiring special handling (e.g., paints, thinners, cleaning chemicals).

An estimated 150 - 200 cubic yards of surface debris was noted to the immediate west of the parking area located on the western side of Building #7. At least three distinct debris mounds and a total of four separate areas of concentrated debris were noted in this area. Debris present in this area appeared to have been generated on-site and consisted of processed wood and metal, crushed drums, automotive parts, fibrous material, appliances, cloth debris and other material. Indications of this debris extending below the subsurface were also noted; no statement can be made by this office regarding the lateral and vertical extent or total quantity of debris deposition in this area.

Petroleum Bulk Storage Tanks

Two (2) 275-gallon capacity aboveground diesel storage tanks are located in the basement boiler room of Building #1. According to the property owner, these tanks service the fire pump machinery. Both of the tanks appeared to be structurally sound and no evidence was noted of any prior or on-going release of product associated with either tank.

What appeared to be the former location of a dispensing pump (e.g., diesel fuel or gasoline) was noted proximal to the northeastern corner of Building #5a. No indications of an existing or former underground tank (e.g., fill port, vent pipe, asphalt patch, area of subsidence) was noted proximal to this potential pump location. No statement can be made regarding the prior or continued presence of an underground storage tank in this location.

Chemical Bulk Storage

Aboveground/Underground Storage Tanks

A total of eleven (11) chemical bulk storage tanks were noted on the subject property during the site inspection; eight (8) of these tanks are located aboveground and three (3) of the tanks are located underground (see the Selected Site Features Map, Page 20 of this Audit for the locations of these eleven chemical tanks). According to the property owner, the eight aboveground tanks were emptied of product in 1968 and rendered inactive; the three underground tanks were filled with sand in 1970-71 by a former tenant (Chemprene) and rendered inactive. No statement can be made by this office regarding the presence or absence of residual product and/or sludges in any of these chemical bulk storage tanks and/or their associated internal piping networks.

Six (6) of the aboveground storage tanks (ASTs) were formerly used to store an oil product (alternately described by the property owner as mineral and lubricating oil) used in the manufacturing process of Atlas Fibre Reclamation Company (a tenant on the subject property until 1968). Four (4) of these six (6) tanks are located in an exterior space between the northeastern portion of Building #4 and the western portion of Building #2. These tanks are situated on brick cradles and are estimated by this office to be approximately 3,000 gallons each in capacity. The fifth tank, estimated to be 5,000 gallons in capacity, is situated above the four mineral/lubricating oil tanks located between Buildings #2 and #4; this tank formerly stored hydrochloric acid. The sixth tank, estimated to be 1,500 gallons in capacity, is situated above this hydrochloric acid storage tank alongside the exterior wall of Building #4; this tank formerly stored sulfuric acid. A limited subsurface investigation was performed on October 26, 1993 in the vicinity of these six aboveground tanks located between Buildings #2 and 4 (see Section 3.5.2, below).

An estimated 2,000 gallon capacity AST is located to the immediate east of the six ASTs in a covered area associated with Building #2; this tank is situated on brick cradles. Another AST also estimated by this office to be approximately 2,000 gallons in capacity is located in the basement area of Building #2.

The three (3) underground chemical storage tanks (USTs) were installed parallel to one another approximately 25 feet north of the central portion of Building #5a. No information was available on the date(s) of installation of these tanks or the type(s) of chemicals stored in the tanks during their period of active use. Information provided to this office by the property owner and Client documents indicates that two of these tanks are 2,000 gallons in capacity and one of the tanks is 4,000 gallons in capacity. A limited subsurface investigation was performed on October 26, 1993 in the vicinity of this underground tank field (see Section 3.5.2, below).

Drum Storage

Four (4) 55 gallon capacity drums storing chemical additives used in the boiler operation are present in the boiler room of Building #2. These drums appeared to be structurally sound and no indications of any prior release of product from these drums was noted.

Five (5) drums varying between 20 and 55 gallons in capacity are present in a basement room of Building #1. All of the drums appeared to be used for the storage of non-aqueous chemicals. The drums and the labels documenting their contents were in a deteriorated condition; labels that were readable indicated that at least three of the chemicals stored in these drums were sulfite, phosphate and sodium hydroxide. The bottoms of at least two of the drums had rusted allowing the contents of the drums to be released onto the poured concrete floor.

Asbestos Containing Materials

Floor tile and pipewrap material suspected of containing asbestos were noted in the interior of several of the on-site structures during the May 25, 1995 site inspection. Pipewrap suspected of containing asbestos was noted on the first and second floors of Building #6, the first floors of Building #4, Building #7, Buildings #5a and 5b and Building #2. Floor tile suspected of containing asbestos was noted on the second floor of Building #6 (less than 1000 square feet), the first floor of Building #7 (approximately 1,500 square feet) and the second floor of Building #1 (less than 1,000 square feet).

A room on the third floor of Building #1 is used for the storage of asbestos containing building materials. Included in this asbestos containing material is pipewrap insulation, roof patching and coating material.

A limited asbestos survey (which included material sampling) performed as part of the Chazen Companies July 1993 Phase I investigation indicated that pipewrap material stored on the third floor of Building #1, wallboard material collected from Building #4 and a cementitious material associated with a water heating unit located on the ground floor of Building #2 tested positive for asbestos content. Floor tile samples collected from Buildings #1, 4 and 6 did not contain asbestos. No testing of the pipewrap present throughout the interior of the structures is known to have been performed.

Lead-Based Paint

Paint likely to contain lead was noted throughout the interior portions of the on-site structures. A majority of the painted surfaces were in varying states of deteriorated condition. No prior assessment to document the presence or absence of lead-based paint on the interior and exterior surfaces of the on-site structures is known to have been performed on the subject property.

Topographic Irregularities

Evidence of the presence of subsurface debris was noted on the westernmost portion of the subject property to the immediate west of the parking lot associated with Building #7 in an area with an estimated 150 - 200 cubic yards of surface debris. No statement can be made at this time regarding the vertical or lateral extent of subsurface debris deposition in this area.

Vegetative Features

No overt areas of stressed or dying vegetation indicative of the presence of contaminants in surface soils were noted on the subject property during the site inspections.

Surface Waters

The Fishkill Creek runs adjacent to the southern border of the subject property. A visual inspection of the Fishkill Creek along its border with the subject property did not reveal the presence of any sheens or discoloration indicative of the presence of contaminants. At least three pipe outfalls were noted extending out of the southern exterior wall of Building #2. Any historic liquid discharges into these pipe outfalls would have been released into the Fishkill Creek.

Sampling of the Fishkill Creek was performed by Ecosystems Strategies during August and September 1995. Sampling identified elevated levels of lead in the sediment along Building #2 of the subject property in the immediate vicinity of the pipe outfalls (see Section 3.5.1, below).

Transformers

A pad-mounted transformer owned by the subject property is located on the northeastern side of Building #2 in an area enclosed by a chain link fence. This transformer appeared to be in good condition and no indications of a release of fluid (e.g., staining) from this transformer were noted on the transformer or around the base of the concrete pad. According to the property owner, the internal fluids of this transformer were tested by Central Hudson Gas & Electric and found to be free of PCBs.

A utility pole supporting three electrical transformers is located on the central-eastern portion of the subject property alongside South Avenue. The transformers appeared to be in good condition and no indications of a release of fluid (e.g., staining) from these transformers were noted on the transformer, the utility pole or on the ground around the base of the pole.


3.4.4 Environmental Conditions on Adjacent Properties


Approximately 20 - 40 cubic yards of processed wood and metal debris was noted around the perimeter of the two shed outbuilding structures located on the adjoining Parcel B of the Beacon Terminal property. A majority of the debris present in this location appears to have been generated on the subject property (e.g., machinery components, equipment parts). A potential for the presence of debris in the shallow subsurface was noted on the eastern side of the outbuildings. None of the debris noted in this location was considered by this office to require special handling or disposal or to pose a threat to the environmental integrity of the subject property. A limited subsurface investigation was performed on August 3, 1995 by Ecosystems Strategies in the immediate vicinity of these two shed outbuildings located on Parcel B (see Section 3.5.1, below).

A 20,000-gallon capacity underground #6 fuel oil storage tank is located on the adjoining Parcel B, across South Avenue from Building #1 and #2. The area around the fill and vent pipes for the tank were free of any staining indicative of improper transfer operations. A limited subsurface investigation was performed on October 26, 1993 in the vicinity of this tank (see Section 3.5.2, below).

3.5 Previous Environmental Investigations

3.5.1 Investigations Performed by Ecosystems Strategies, Inc.

A subsurface investigation was performed by Ecosystems Strategies, Inc. on the adjoining Parcels A and B of the Beacon Terminal property and in the Fishkill Creek. This subsurface investigation involved the extension of test pits in the immediate vicinity of the two shed outbuildings located on Parcel B and on the central and northwestern portions of Parcel A. Laboratory analyses for the most part did not document metal concentrations exceeding NYSDEC designated action levels in samples collected from Parcels A and B of the Beacon Terminal property. See the November 30, 1995 Subsurface Investigation Report ("Report") prepared by Ecosystems Strategies, Inc. on portions of the Beacon Terminal property for a complete description of the investigative work performed by Ecosystems Strategies, Inc. 

The November 30, 1995 Report further involved the sampling of the sediment along portions of the Fishkill Creek that serve as the Beacon Terminal's southern property border. Sediment sampling of the Fishkill Creek identified elevated levels of lead in the immediate vicinity of the outfalls located on Building #2 of the Beacon Terminal structure complex (400 to 3,400 ppm) and downstream of the structure complex along the northern bank of the Fishkill Creek (378 and 866 ppm). No samples could be collected from beneath Building #2 due to the high water level. See the November 30, 1995 Subsurface Investigation Report ("Report") prepared by Ecosystems Strategies, Inc. on portions of the Beacon Terminal property for a complete description of the investigative work performed by Ecosystems Strategies, Inc. 

3.5.2 Investigations Performed by Groundwater Technology, Inc.

A boring program including soil and groundwater sampling and analysis was conducted on the subject property and the adjoining Parcel B on October 26, 1993. In total four borings were extended on the subject property: 3 borings were extended proximal to the three underground former chemical bulk storage tanks to the north of Building #5a and 1 boring was extended proximal to the six aboveground storage tanks located between Buildings #1 and #4. One boring was extended on the adjoining Parcel B proximal to the 20,000-gallon underground #6 fuel oil storage tank. For clarity, the discussion on the findings of this subsurface investigation are summarized by boring location.

Underground Chemical Bulk Storage Tanks

Three borings were extended in the vicinity of the underground former chemical bulk storage tanks located north of Building #5a; the depth to these tanks are not known. One boring (GP-2) was extended to the south of the tank field proximal to the feed/return lines; this boring was extended to a depth of 12 feet. One boring (GP-3) was extended to a depth of 12 feet on the western side of the tank field. The third boring (GP-4) was extended to a depth of eight feet on the eastern side of the tank field.

Field screening with a photoionization detector (PID) of material encountered at each boring location documented the presence of volatile organic compounds (VOCs). Soil encountered at the 4-8 foot depth at GP-2 exhibited a maximum PID reading of 1,635 parts per million (ppm). Analysis of this sample with a portable gas chromatograph detected a total VOC concentration of 210 ppm; toluene was identified as the major VOC present. Soil encountered at the 8-12 foot depth at GP-3 exhibited a maximum PID reading of 2,500 ppm and evidence of the presence of free product was noted at this depth. Analysis of this sample with a portable gas chromatograph detected a total VOC concentration of 2,900 ppm and laboratory analysis of this sample detected a total VOC concentration of 2,925 ppm; both analyses identified toluene as the major VOC present. Additionally, a hydrocarbon screening of this sample also identified the presence of lubricating oil at 25 ppm. PID readings at GP-4 were 9 ppm (0-4 foot depth) and 5 ppm (4-8 foot depth).

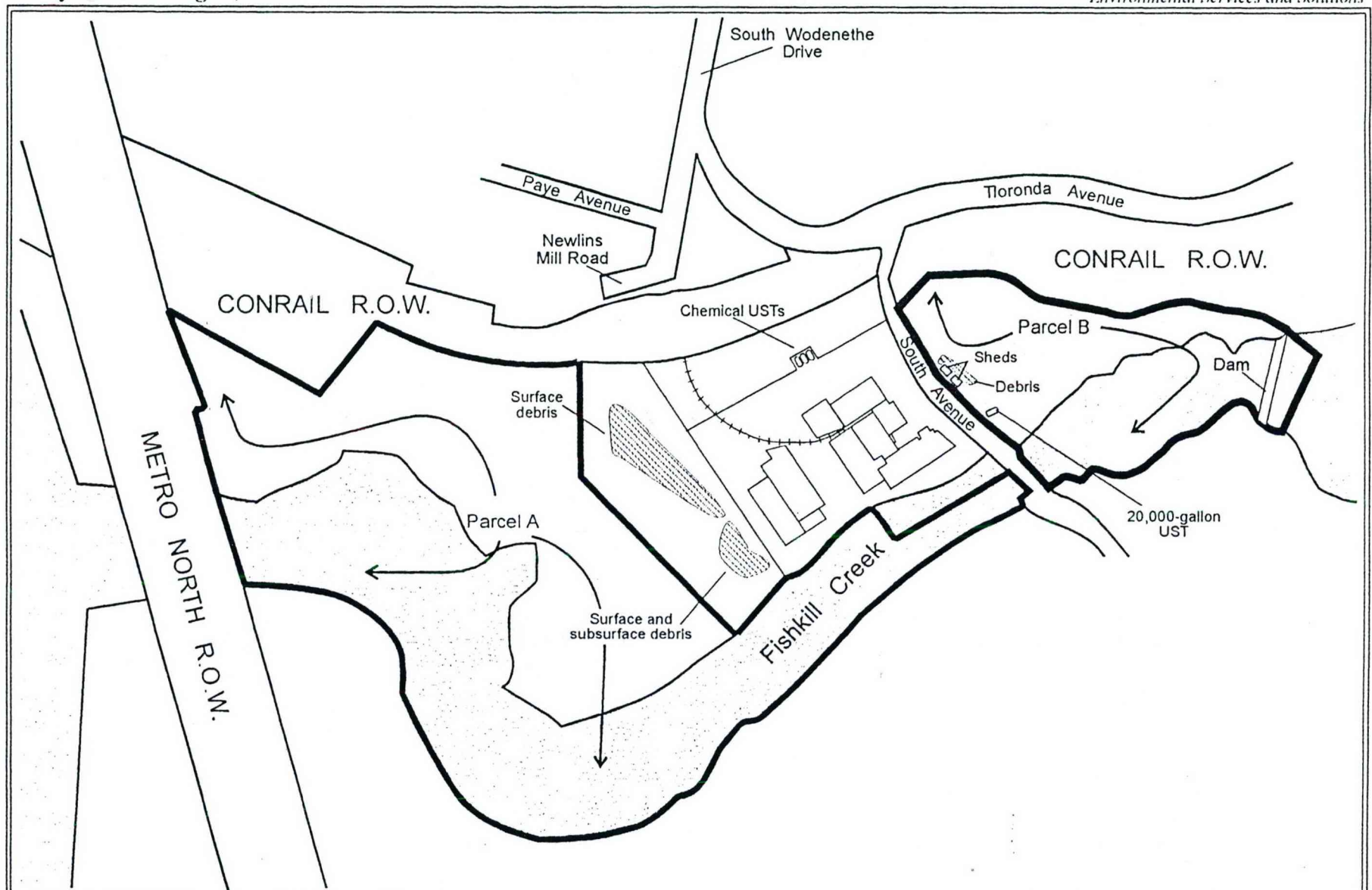
The groundwater samples collected at GP-2 and GP-3 contained free chemical product (toluene). Analysis of the groundwater sample at GP-2 with a portable gas chromatograph indicated the presence of 69 ppm of total VOCs. Laboratory analysis of the groundwater sample at GP-3 indicated the presence of 490 ppm of total VOCs. At both locations, toluene was the compound present in the greatest concentration. Analysis with a portable gas chromatograph of the groundwater sample at GP-4, considered by this office to be hydraulically upgradient of the tank field, indicated the presence of less than 1 ppm of total VOCs.

Aboveground Tank Locations

One boring (GP-1) was extended to a depth of 12 feet on the western side of the aboveground tank field located between Buildings #2 and #4. PID screening of the material encountered at all three sample depths noted the presence of low concentrations of VOCs: 6 ppm at the 0-4 foot depth, 8 ppm at the 4-8 foot depth and 23 ppm at the 8-12 foot depth. Analysis of the soil sample collected at the 4-8 foot depth with a portable gas chromatograph indicated the presence of 2,600 ppm of total VOCs; laboratory analysis of this sample indicated the presence of 1.2 ppm of total VOCs. A hydrocarbon screen performed on this soil sample identified the presence of lubricating oil; the presence of toluene was also identified by the laboratory analysis. Analysis of the groundwater sample with a portable gas chromatograph indicated the presence of less than 1 ppm of total VOCs.

Underground Fuel Oil Storage Tank

The depth to the 20,000 gallon #6 fuel oil storage tank located on the adjoining Parcel B is not known. A single boring was extended to a depth of 12 feet on the northern side of this storage tank. Screening with a photoionization detector (PID) of the material encountered at all three sample depths noted the presence of low concentrations of VOCs: 8 parts per million (ppm) at the 0-4 foot depth, 5 ppm at the 4-8 foot depth and 13 ppm at the 8-12 foot depth. Analysis of the soil samples collected at the 4-8 and 8-12 foot depths with a portable gas chromatograph documented the presence of less than 3 ppm of total volatile organic compounds (VOCs) at both locations. The groundwater sample collected from this location was not analyzed due to the documented low concentrations of VOCs in the soil samples. The presence of only low levels of VOCs, by itself, is not considered by this office to be an indication of the absence of significant subsurface contamination associated with this tank.



Selected Site Features Map

Ecosystems Strategies, Inc.



Job Number: SB9548.10

Date: September 1995

Not to Scale

Page 22

4.0 Conclusions and Recommendations

This Audit has been performed on the approximately 4.7 acre portion of the Beacon Terminal property (Parcel C) located in the City of Beacon, Dutchess County, New York as fully described in Section 2.0, above. Based on the work performed by this office to date, the following Conclusions and Recommendations (in **bold**) are made regarding the subject property. To the extent possible cost estimates associated with recommended investigative and/or remedial work are provided in *italics*.

Historic Investigation

1. A review of aerial photographs and historic maps indicates that the subject property has been used for industrial/manufacturing uses since at least 1919. During its period of industrial use, eleven chemical bulk storage tanks were installed and actively used on the subject property.

See the recommendation in Paragraphs #8 and #13, below.

Aerial photographs dating from 1959 to present note areas of disturbance and/or intensive use along the western property border.

See the recommendation in Paragraph #6, below.

Review of Regulatory Agency Records

2. No State or Federal wetlands are present on the subject property.

No further investigation is recommended.

3. The subject property was not identified on any of the state and federal regulatory agency databases reviewed. These include databases on hazardous waste sites, hazardous and solid waste storage, generation and/or disposal, air/wastewater discharges and chemical and/or petroleum spill events.

One regulatory non-compliance issue was identified for the subject property:

- Eleven (11) chemical bulk storage tanks are present on the subject property. Each of the eleven former chemical bulk storage tanks were installed, actively used and closed prior to the promulgation of applicable NYSDEC chemical bulk storage tank regulations (6 NYCRR Parts 595-599); these tanks presently are not registered with the NYSDEC.

See the recommendation in Paragraph #8, below.

4. A review of state and federal regulatory agency databases for vicinity properties indicates that:

- The Tuck Industries, Inc. site located approximately 0.5 mile northeast of the subject property is listed with the USEPA as a CERCLIS site and with the NYSDEC as an inactive hazardous waste disposal site. Investigative work conducted on the Tuck site to date has not documented any off-site migration of contaminants. Although the subject property is located downstream of the site, contaminant migration onto the subject property from this Tuck site via the Fishkill Creek is considered by this office to be unlikely.

No further investigation regarding this Tuck Industries, Inc. site is recommended.

ENVIRONMENTAL AUDIT
SB9548.11PAGE 24 OF 31
JANUARY 11, 1996

- The All-County solid waste transfer station facility located on Dennings Avenue on the northern side of the Con Rail ROW, approximately 1000 feet to the northwest of the subject property is registered with the NYSDEC as a solid waste transfer station. The inactive Dennings landfill is located on the northern side of the Con Rail ROW, approximately 1,000 feet to the northwest of the subject property.

No further investigation is recommended.

- One active, unregistered 20,000 gallon capacity underground #6 fuel oil storage tank is located on the adjoining Parcel B of the Beacon Terminal property.

See the recommendation in Paragraph #15, below.

5. According to NYSDOH documents, the average radon level in Dutchess County is 6.7 picoCuries/liter (pCi/liter) and the average radon level in the City of Beacon is 5.9 pCi/liter. These average county and city levels suggest the probability of radon levels exceeding the USEPA guidance level (4.0 or greater pCi/liter) on the subject property. Due to the non-residential usage of the subject property, radon levels are not considered by this office to pose a threat to the utility of the subject property.

No further investigation is recommended at this time.

Site Inspection

6. An estimated 150 - 200 cubic yards of surface debris was noted proximal to the western property border of the subject property. A majority of the debris present in this area appeared to have been generated on the subject property and consisted of processed wood and metal, crushed drums, automotive parts, cloth debris, appliances and other material. Indications of the debris extending into the subsurface were also noted. No definitive statement can be made by this office regarding the lateral and vertical extent of this debris area.

It is recommended that the lateral and vertical extent of debris deposition on the subject property be documented. All encountered surface and subsurface debris should be excavated, logged and segregated into appropriate waste streams for off-site disposal. The location(s) of all encountered debris presenting a potential threat to the environmental integrity of the subject property should be noted for consideration as future sample collection locations. At the completion of excavation activities, it is recommended that confirmatory samples of the soil in the excavation area be collected to document soil integrity. At this time, it is anticipated that analytes will include PCBs and selected metals (e.g., lead, mercury, chromium and cadmium).

The estimated cost to properly remove and dispose of the identified 150 - 200 cubic yards of debris is \$4,500 to \$6,000 based on a unit cost of \$30 per cubic yard. This estimate does not include any costs associated with the buried debris or post-remedial sampling.

The interior of Buildings #4 and #7 were characterized by the presence of approximately 15 cubic yards of debris associated with the dilapidated condition of portions of the structure. A limited asbestos survey performed as part of the previous Phase I investigation identified asbestos containing building materials in both of these structures.

See the recommendation in Paragraph #10, below. Alternately, it is recommended that a sample of each homogenous building material proposed for off-site disposal be tested for asbestos content.

The interiors of Buildings #1 and 2 were characterized by the presence of debris associated with the former uses of the structure (e.g., office equipment, machinery, material storage).

It is recommended that all residual solid waste material be removed from the subject property for proper off-site disposal.

7. Two (2) 275 gallon capacity diesel storage tanks servicing the fire pump machinery are located in the basement boiler room of Building #1. Both of the tanks appeared to be in good condition and no evidence was noted of any prior or on-going release of product associated with either tank.

No further investigation is recommended.

What appeared to be the former location of a dispensing pump (e.g., diesel fuel or gasoline) was noted alongside Building #5a. No indications of an existing or former underground tank (e.g., fill port, vent pipe, area of subsidence) was noted proximal to this potential pump location. No statement can be made regarding the prior or continued presence of an underground storage tank in this location.

It is recommended that a limited subsurface investigation be conducted in this area to document the presence or absence of an underground tank.

This recommended limited subsurface investigation, including laboratory analyses, is estimated to cost between \$2,000 and \$4,000.

8. A total of eleven (11) chemical bulk storage tanks were noted on the subject property during the site inspection; eight (8) of these tanks are located aboveground and three (3) of the tanks are located underground.
- Six (6) of the aboveground tanks were formerly used to store a mineral/lubricating oil product and two (2) of the aboveground tanks were used to store hydrochloric and sulfuric acid. The eight aboveground tanks were emptied of product in 1968 and have been inactive since. No statement can be made by this office regarding the presence of residual product and/or sludge in any of these chemical bulk storage tanks and/or their associated internal piping networks.

A limited subsurface investigation was performed in the vicinity of the six aboveground tanks in the exterior location. This investigation documented the presence of elevated concentrations of VOCs in the soils from the surface down to the 12 foot depth. The groundwater sample contained less than 1 ppm of total VOCs.

It is recommended that all unused aboveground storage tanks on the subject property be properly cleaned, removed from the site and disposed of in accordance with applicable state regulations (6 NYCRR, Part 595-597). In addition, it is recommended that all ancillary piping connected to these tanks, with particular concern for piping connected to the former acid tanks, be cleaned and removed from the site.

Prior to the removal of any on-site tanks, it is recommended that these tanks be registered with the NYSDEC and that proper notification be made to the NYSDEC regarding anticipated tank closure.

Proper closure of these eight aboveground tanks is estimated to cost between \$45,000 and \$80,000 depending on the volume of sludge present in all of the tanks present and the need to handle this material as a hazardous or nonhazardous waste stream.

- The three underground tanks are installed parallel to one another approximately 25 feet north of the central portion of Building #5a. No information was available as to the date(s) of installation of these tanks or the type(s) of chemicals stored in the tanks during their period of active use. The three underground tanks were filled with sand in 1970-71 by a former tenant (Chemprene) and rendered inactive. No tank closure documentation is known to have been generated. No statement can be made by this office regarding the presence of residual product and/or sludge in any of these chemical bulk storage tanks and/or their associated internal piping networks.

A limited subsurface investigation was performed in the vicinity of this underground tank field. This investigation documented the presence of elevated concentrations of VOCs in the soils from the surface down to the 12 foot depth. Groundwater samples collected at two locations contained free chemical product (toluene) and elevated concentrations of VOCs.

It is recommended that the property owner report the presence of toluene in the groundwater to the NYSDEC as evidence of a chemical release. Such reporting is required by NYSDEC regulations (6 NYCRR, Part 596).

It is further recommended that the three underground tanks previously closed be excavated, cleaned and removed from the site. The material within the tanks should be considered a regulated waste (unless laboratory analyses determines the material to be an unregulated material) and should be disposed of in accordance with applicable regulations. Upon completion of the removal of these tanks, it is recommended that an assessment of site conditions in the vicinity of these former tanks be conducted to determine the lateral and vertical extent of soil and/or groundwater contamination. The need for soil and/or groundwater remediation should be determined based on the findings of these investigations.

Prior to the initiation of any field work, it is recommended that these USTs be registered with the NYSDEC as required by NYSDEC regulations. Such registration can be conducted concurrent with the registration of on-site ASTs.

It is estimated that the costs associated with excavation and removal of the former toluene tanks will be \$15,000 to \$40,000 depending on the need to dispose of the material currently within the tanks as a hazardous or nonhazardous waste.

It is further estimated that the costs of conducting a soil and groundwater investigation with the intent of delineating the lateral and vertical extent of toluene contamination will be in the range of \$12,000 and \$20,000.

9. Four (4) 55 gallon capacity drums storing chemical additives used in the boiler operation are present in the boiler room of Building #2. The drums appeared to be in good condition and no indications of any prior release of product from these drums was noted.

No further investigation regarding these drums is recommended at this time.

ENVIRONMENTAL AUDIT
SB9548.11PAGE 27 OF 31
JANUARY 11, 1996

Five (5) drums varying between 20 and 55 gallons in capacity are present in a basement room of Building #1. All of the drums appeared to be used for the storage of non-aqueous chemicals. The drums were in a generally deteriorated condition and the bottoms of at least two of the drums had rusted allowing the contents of the drums to be released onto the poured concrete floor.

It is recommended that these five drums in poor condition be removed from the subject property for proper off-site disposal.

The off-site removal and disposal of these drums is estimated to cost under \$3,000.

10. Floor tile and pipewrap material suspected of containing asbestos were noted in the interior of several of the on-site structures during the site inspection. A limited asbestos survey performed as part of the previous Phase I investigation confirmed the presence of asbestos containing building materials. No testing of the pipewrap present throughout the interior of the structures and several areas of floor tile is known to have been performed.

It is recommended that an asbestos inspection including material sampling be completed on the on-site structures by a New York State certified asbestos inspector.

The asbestos inspection of the on-site structures is estimated to cost less than \$5,000. This cost estimate does not include any costs associated with the abatement of identified asbestos containing materials.

A room on the third floor of Building #2 is used for the storage of asbestos containing building materials.

It is recommended that this asbestos containing material be removed from the subject property for disposal in a properly permitted repository. This work can be coordinated with any future asbestos abatement work on the subject property.

11. Paint likely to contain lead was noted throughout the interior portions of the on-site structures. A majority of the painted surfaces were in varying states of deterioration. No prior assessment to document the presence or absence of lead-based paint on the interior and exterior surfaces of the on-site structures is known to have been performed on the subject property.

It is recommended that workers involved in any future development of the on-site structures be made aware of the potential presence of lead-based paint.

12. No overt areas of stressed or dying vegetation indicative of the presence of contaminants in surface soils were noted on the subject property.

No further investigation is recommended.

13. A visual inspection of the Fishkill Creek along its border with the subject property did not reveal the presence of any sheens or discoloration indicative of the presence of contaminants. At least three pipe outfalls were noted extending out of the southern exterior wall of Building #2. Any historic liquid discharges into these pipe outfalls would have been released into the Fishkill Creek. Due to the documented historic manufacturing and industrial uses on the subject property, the potential exists for the presence of heavy metal contaminants in the sediments beneath Building #2 and in the immediate vicinity of the outfalls. Sediment sampling conducted by Ecosystems Strategies, Inc. identified elevated levels of lead in the sediments along the northern bank of the Fishkill Creek adjoining Building #2 and Parcel A.

It is recommended that consideration be given to the collection and analysis of sediment samples from the Fishkill Creek under the building and in the immediate vicinity of the outfalls.

This recommended sediment sampling is estimated to cost less than \$3,000.

14. A pad-mounted transformer owned by the subject property is located on the northeastern side of Building #2 in an area enclosed by a chain link fence. The transformer appeared to be in good condition and no indications of a release of fluid from this transformer were noted. According to the property owner, the internal fluids of this transformer were tested and found to be free of PCBs.

A utility pole supporting three electrical transformers is located on the central-eastern portion of the subject property. The transformers appeared to be in good condition and no indications of a release of fluid from these transformers were noted.

No further investigation is recommended.

15. A 20,000-gallon capacity underground #6 fuel oil storage tank is located on the adjoining Parcel B of the Beacon Terminal property; the depth to this tank is not known. A single boring was extended to a depth of 12 feet on the northern side of the #6 fuel oil storage tank. Low concentrations of VOCs were found in the soil down to the 12 foot depth. The groundwater sample collected from this location was not analyzed due to the documented low concentrations of VOCs in the soil samples.

Since #6 fuel oil contains heavier semi-volatile organic compounds (SVOCs), the presence of only low levels of VOCs, by itself, is not considered by this office to be an indication of the absence of significant subsurface contamination associated with this tank.

It is recommended that this tank and its associated piping network, which is located on the subject property, be excavated. At the completion of excavation activities, it is recommended that a determination as to the presence or absence of subsurface contamination on the subject property be made.

ENVIRONMENTAL AUDIT
SB9548.11

PAGE 29 OF 31
JANUARY 11, 1996

5.0 Sources of Information

5.1 Regulatory Records Review

USEPA National Priorities List (NPL)

ASTM DATABASE
SEARCH: 1.0 MILE
UPDATED: DECEMBER 1994

LISTING OF SITES WHICH ARE CONSIDERED TO POSE AN IMMEDIATE
THREAT TO HUMAN HEALTH AND THE ENVIRONMENT AND HAVE BEEN
IDENTIFIED FOR PRIORITY CLEANUP UNDER SUPERFUND.

USEPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List

ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: MARCH 1995

LISTING OF ABANDONED, INACTIVE OR UNCONTROLLED HAZARDOUS
WASTE SITES WHICH THE USEPA HAS INVESTIGATED OR IS CURRENTLY
INVESTIGATING FOR INCLUSION ON THE NPL.

NYSDEC Registry of Inactive Hazardous Waste Disposal Sites

ASTM DATABASE
SEARCH: 1.0 MILE
UPDATED: JULY 1995

LISTING OF FACILITIES SUBJECT TO INVESTIGATIONS CONCERNING LIKELY
OR THREATENED RELEASES OF HAZARDOUS SUBSTANCES FROM THOSE
FACILITIES.

USEPA Emergency Response Notification System (ERNS)

ASTM DATABASE
SEARCH: TARGET PROPERTY
UPDATED: MAY 1995

LISTING OF RELEASES OF PETROLEUM, CHEMICAL AND/OR HAZARDOUS
SUBSTANCES INTO THE ENVIRONMENT AS REPORTED TO THE USEPA AND
COAST GUARD.

NYSDEC Leaking Underground Storage Tanks (LUSTs)

ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: AUGUST 1995

SUBSET OF NYSDEC CHEMICAL AND PETROLEUM SPILLS DATABASE
(SEE BELOW) LISTING ALL REPORTED LEAKING UNDERGROUND STORAGE
TANKS.

NYSDEC Petroleum and Chemical Spill Records

NON-ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: AUGUST 1995

LISTING OF ALL PETROLEUM, CHEMICAL OR HAZARDOUS SUBSTANCE
RELEASES REPORTED TO THE NYSDEC.

USEPA Resource Conservation and Recovery Information System (RCRIS) List of Hazardous Waste Generators (SQG/LQG)

ASTM DATABASE
SEARCH: TARGET/ADJOINING
PROPERTY
UPDATED: NOVEMBER 1994

LISTING OF FACILITIES REGULATED UNDER THE RESOURCE
CONSERVATION AND RECOVERY ACT (RCRA) THAT GENERATE
HAZARDOUS WASTE.

USEPA Resource Conservation and Recovery Information System (RCRIS) List of Hazardous Waste Transport, Storage and Disposal Facilities (TSDF)

ASTM DATABASE
SEARCH: 1.0 MILE
UPDATED: NOVEMBER 1994

LISTING OF FACILITIES REGULATED UNDER THE RESOURCE
CONSERVATION AND RECOVERY ACT (RCRA) THAT TRANSPORT, STORE
AND/OR DISPOSE OF HAZARDOUS WASTE.

ENVIRONMENTAL AUDIT
SB9548.11

PAGE 30 OF 31
JANUARY 11, 1996

NYSDEC Petroleum Bulk Storage Tank Records (PBS)

ASTM DATABASE
SEARCH: TARGET/ADJOINING
PROPERTY
UPDATED: SEPTEMBER 1995

LISTING OF FACILITIES WHICH TYPICALLY STORE MORE THAN 1100
GALLONS OF PETROLEUM PRODUCT IN BULK STORAGE TANKS.

NYSDEC Chemical Bulk Storage Tank Records (CBS)

ASTM DATABASE
SEARCH: TARGET/ADJOINING
PROPERTY
UPDATED: SEPTEMBER 1995

LISTING OF FACILITIES WHICH STORE ANY VOLUME OF CHEMICALS IN AN
UNDERGROUND STORAGE TANK AND/OR MORE THAN 185 GALLONS OF
CHEMICALS IN AN ABOVEGROUND STORAGE TANK.

NYSDEC Major Oil Storage Facility Records (MOSF)

NON-ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: SEPTEMBER 1995

LISTING OF FACILITIES STORING 500,000 GALLONS OR GREATER OF
PETROLEUM PRODUCT.

NYSDEC Registry of Active Landfills, Transfer Stations and Solid Waste Disposal Facilities

ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: SEPTEMBER 1994

LISTING OF ACTIVE LANDFILLS, TRANSFER STATIONS AND SOLID WASTE
DISPOSAL FACILITIES.

NYSDEC Registry of Inactive Landfills, Transfer Stations and Solid Waste Disposal Facilities

NON-ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: APRIL 1995

LISTING OF INACTIVE LANDFILLS, TRANSFER STATIONS AND SOLID WASTE
DISPOSAL FACILITIES.

NYSDEC Resource Recovery Projects in New York State

NON-ASTM DATABASE
SEARCH: 0.5 MILE
UPDATED: OCTOBER 1994

LISTING OF ACTIVE RESOURCE RECOVERY FACILITIES.

NYSDOH Basement Radon Readings

NON-ASTM DATABASE
UPDATED: JUNE 1995

LISTING OF RADON LEVELS BY ZIP CODE, MUNICIPALITY AND COUNTY.

5.2 Maps and Documents

Sanborn Fire Insurance Company Maps dated 1919, 1927, 1946 and 1962.

Aerial photograph dated 1935, 1959, 1967, 1970, 1980 and 1990.

United States Geological Survey topographic maps of the West Point, NY quadrangle, dated 1957 (photorevised 1981).

NYSDEC Freshwater Wetlands Maps of the West Point, NY quadrangle dated 1973.

ENVIRONMENTAL AUDIT
SB9548.111

PAGE 31 OF 31
JANUARY 11, 1996

US Department of the Interior National Wetlands Inventory map of the West Point, NY quadrangle, dated 1990.

Dutchess County Soil Survey (dated September 1991).

5.3 Local Agency Records

City of Beacon Assessor's Office records.

City of Beacon Building Department records.

5.4 Personal Communications

Joseph Braun, City of Beacon Manager June 29, 1995.

5.5. Client Documents

Phase I Environmental Site Assessment, dated July 1993, prepared by The Chazen Companies.

Phase II Environmental Site Assessment, dated December 1993, prepared by Groundwater Technology, Inc.

Subsurface Investigation Report, dated November 30, 1995, prepared by Ecosystems Strategies, Inc.

APPENDIX A
Site Photographs

PHOTOGRAPHS

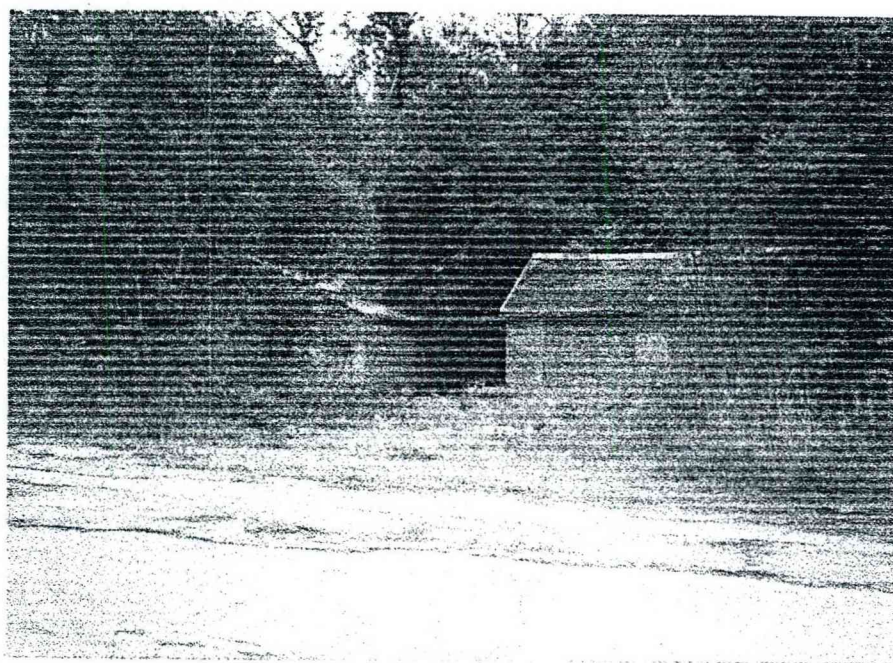


Photo #1: Representative view of the two shed outbuildings on Parcel B.

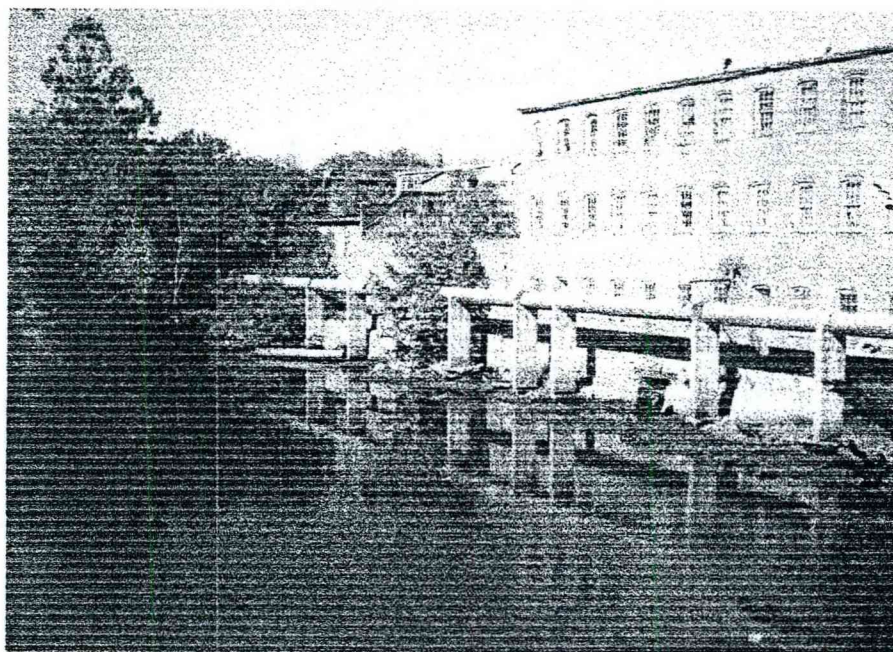
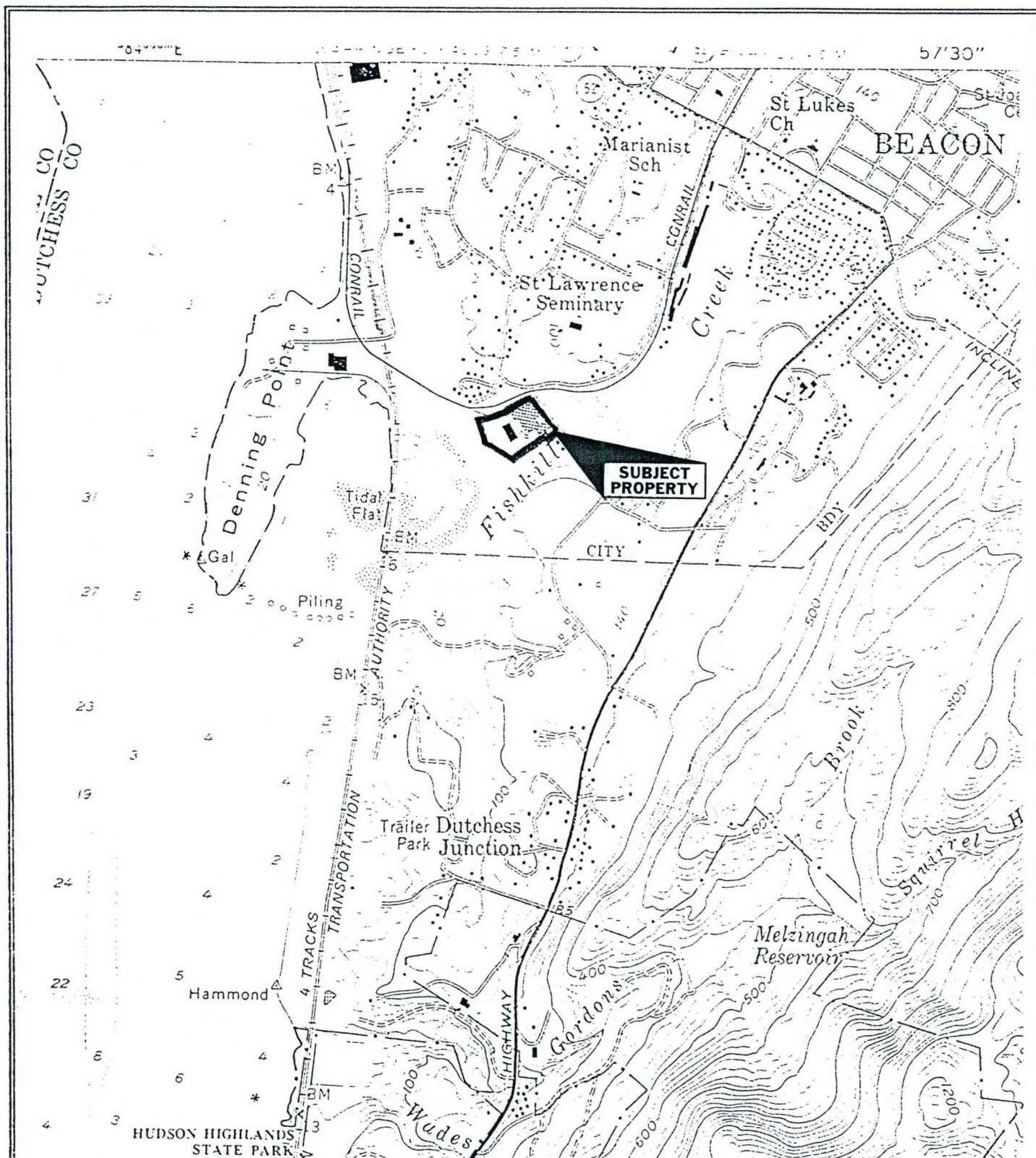


Photo #2: Representative view of the Fishkill Creek and Parcel C.

APPENDIX B
Topographic Map



Source: West Point, New York Quadrangle, 1957 (Photorevised 1981)

USGS Topographic Map

Ecosystems Strategies, Inc.

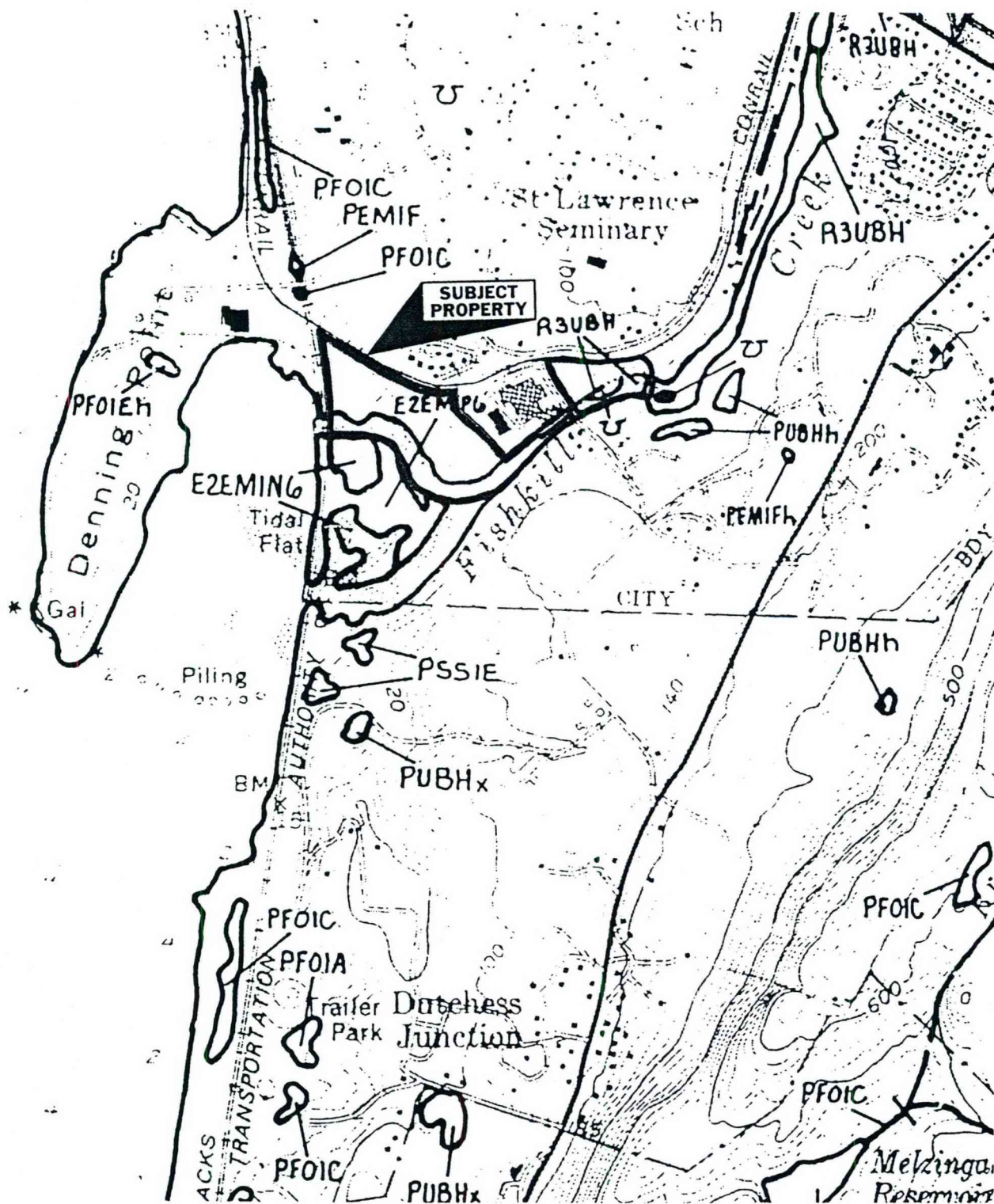


ESI File Number: SB9548.11

Date: January 1996

Scale: 1 : 24,000

APPENDIX C
Wetlands Maps



Source: West Point, New York Quadrangle. 1990

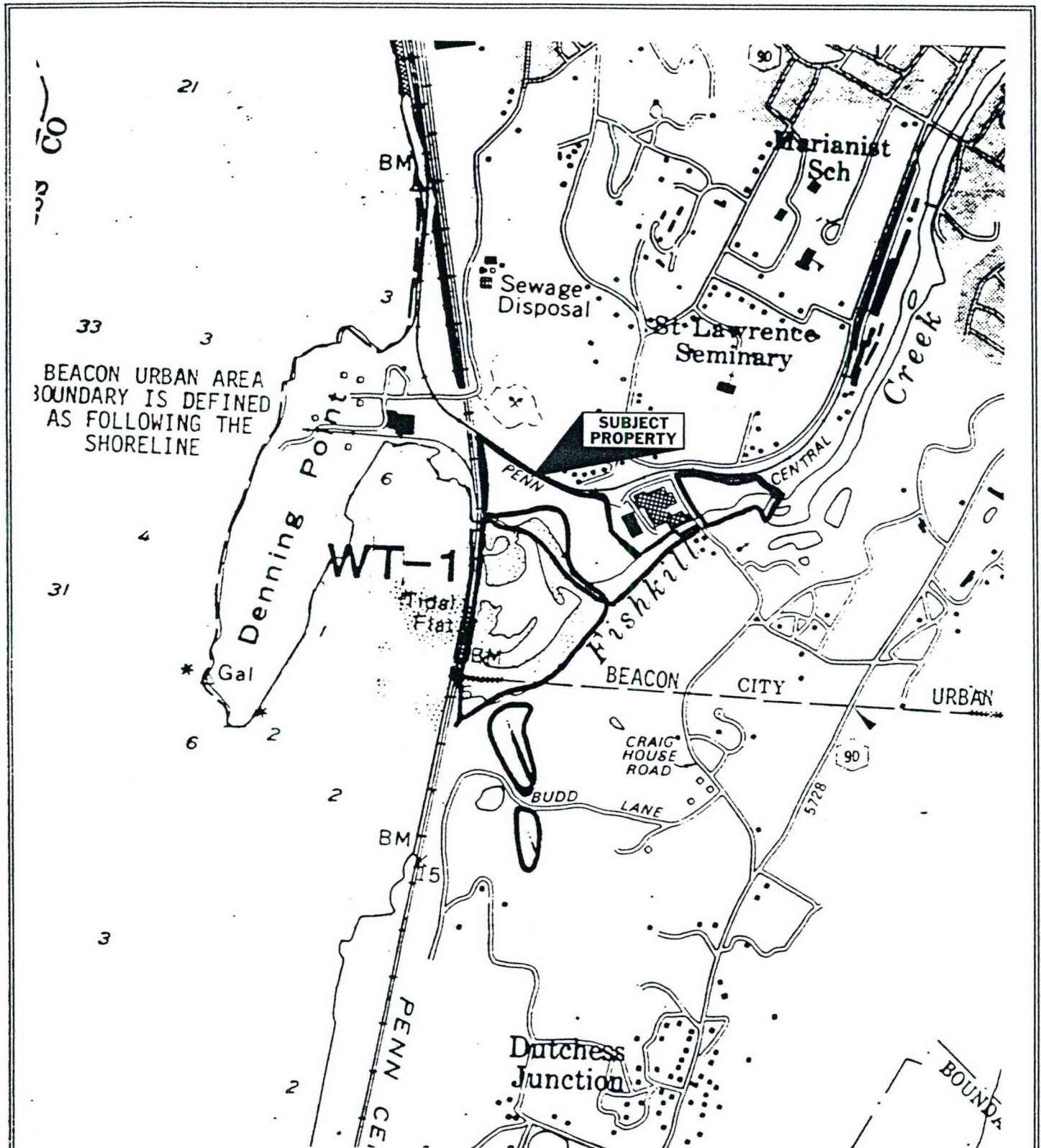
Federal Wetlands Map

Ecosystems Strategies, Inc.



ESI File Number: SB9548.11

Date: January 1996



Source: West Point, New York Quadrangle, 1973

NYSDEC Freshwater Wetlands Map

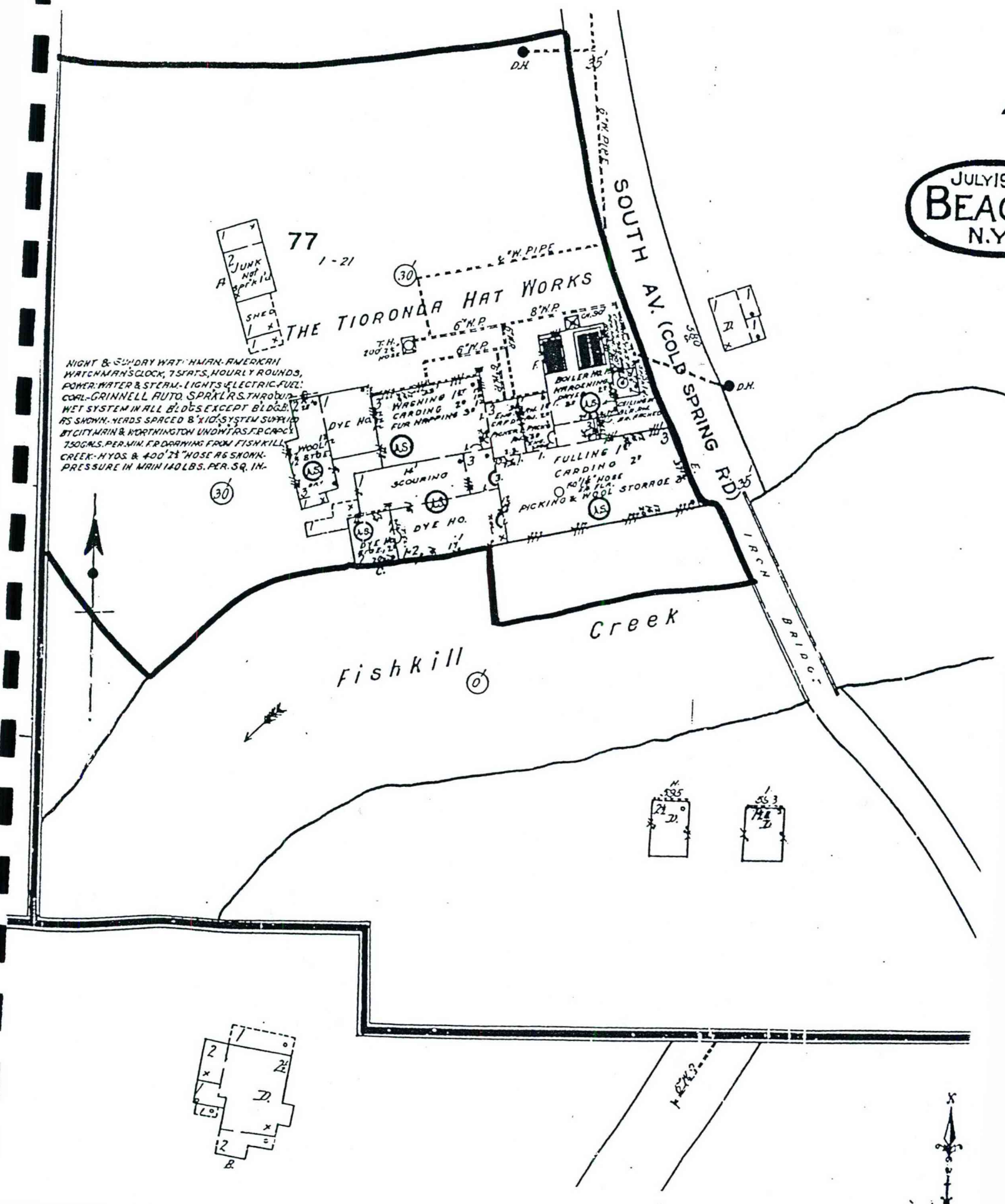
Ecosystems Strategies, Inc.



ESI File Number: SB9548.11

Date: January 1996

JULY 1919
BEAC
N.Y.



(3083)

2

58

APR. 1927
BEACON
N.Y.

DUTCHESS HAT WORKS

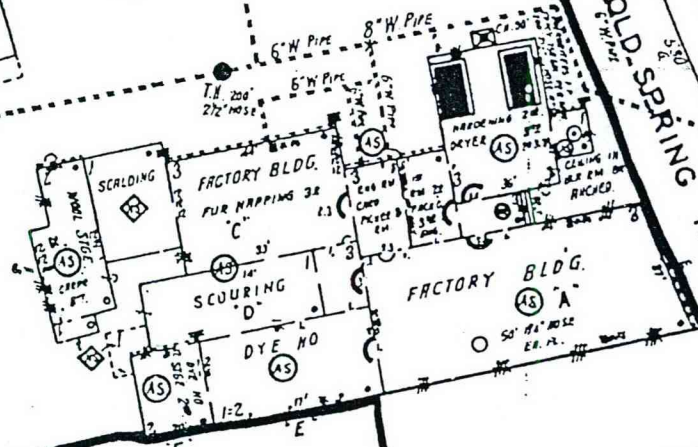
NIGHT & SUNDAY WATCHMAN WITH CLOCK POWER - WATER
STEAM - FUEL: COAL - LIGHTS - ELEC GRINNELL AUTO SPRINKLER SYSTEM
IN ALL BLDGS. EXCEPT BLDG. 8 AS SHOWN. HEADS SPACED 8' & 10' SYSTEM
SUPPLIED THRU 6" MAIN FROM CITY SYSTEM. 140 LBS PRESSURE. NYSD
& 400' 2 1/2" HOSE AS SHOWN.

77

30



30



N. (OLD SPRING RD.) 35

Fishkill Creek

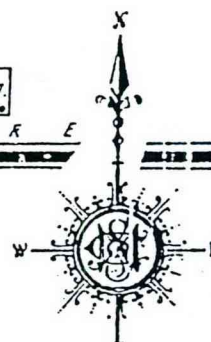
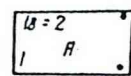
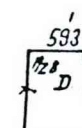
0

IRON BRIDGE

519

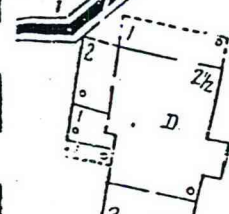
510

56



EXPOSURE

6" W PIPE



Sanborn Fire Insurance Company Map - 1946

(3083)

N. Y. 504

2

58

APR. 1927

BEACON
N.Y.

DUTCHESS HAT WORKS
TIOCONDA PLANT
MFG WOOL FELT HATS
WATCHMAN WITH CLOCK, HEAT STEAM POWER
STEAM & WATER FUEL COAL CHEM ESTG.
FIRE PAYS

77

STGE
STGE
STGE

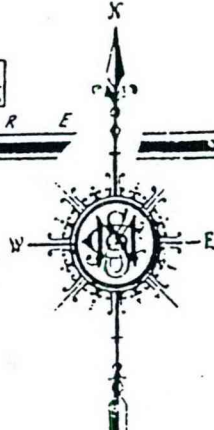
MACH. SHOP
C.B.
CONC. FL.
AUTO BRK.
AUTO BRK.

6" W PIPE
8" W PIPE
16" W PIPE
BOILER HO.
ENG. RM.
FACTORY BLDG
FACTORY BLDG
DYE HO.
STGE
FILT. LRM.
CARR. BKT.
30000 GALL.
WY. QU. AS.
SILIC. TRESTLE
IN 200
22' HIG.

Fishkill Creek

56

18 = 2
1 A.



EXPOSURE

EXPOSURE

6" W PIPE

IRON BRIDGE

RD. (COLD SPRING RD.)

SOUTH

DH.

DH.

519

595
2 1/2 D

593
1 1/2 D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

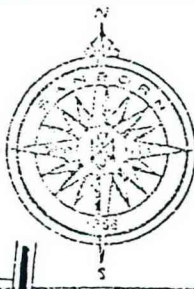
D

D

D

Sanborn Fire Insurance Company Map - 1962

COPYRIGHT © SANBORN
MAPPING & GEOGRAPHIC INFORMATION SERVICE



THIS SANBORN MAP IS A CERTIFIED COPY
PRODUCED BY SANBORN FROM ITS ARCHIVES.
INFORMATION ON THIS MAP IS DERIVED FROM
SANBORN FIELD SURVEYS CONDUCTED IN:

1962
(year)

BEACON, N. Y.
APR. 1927

2

THE BEACON TERMINAL
ATLAS FIBRE CO.-OWNERS

CHEMICAL RUBBER PRODUCTS
INC. - PLANT NO. 1
PRINT SPRAY
THRU-OUT

BASE COLORS
& CHEM'S INC.
CHEM. PANEL
MFG.
THRU-OUT
OFF.

ATLAS FIBRE CO.
COTTON BALING
& SIGE.
ATLAS FIBRE CO.
FIBRE RECLAMATION
MACH. SHOP
COTTON BALING

Fish Kill Creek

SCALE 100 FT TO ONE INCH

56

58

519

510

535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600



ATTACHMENT 4

Subsurface Investigation Report

(Ecosystems Strategies, Inc., 4/96)

**SUBSURFACE INVESTIGATION
REPORT**

performed on portions of the

Beacon Terminal property

located on

South Avenue, City of Beacon
Dutchess County, New York

April 19, 1996

Prepared By:

Ecosystems Strategies, Inc.
60 Worrall Avenue
Poughkeepsie, NY 12603
(914) 452-1658

ESI File Number: SB9548.31

SUBSURFACE INVESTIGATION REPORT

performed on a portion of the
Beacon Terminal property
located at

**South Avenue, City of Beacon
Dutchess County, New York**

April 19, 1996

Prepared By:

Ecosystems Strategies, Inc.
60 Worrall Avenue
Poughkeepsie, NY 12603

Prepared For:

Scenic Hudson, Inc.
Scenic Hudson Land Trust, Inc.
9 Vassar Street
Poughkeepsie, NY 12601

The undersigned has reviewed this Report and certifies to Scenic Hudson, Inc. and Scenic Hudson Land Trust, Inc. that the information provided in this document is accurate as of the date of issuance by this office.

Any and all questions or comments, including requests for additional information, should be submitted to the undersigned.


Paul H. Ciminello
President

TABLE OF CONTENTS

SECTION 1.0 - INTRODUCTION..... Page 1

- 1.1 Purpose of the Investigation
- 1.2 Objectives
- 1.3 Limitations
- 1.4 Site Location and Description
- 1.5 Findings of Previous Environmental Investigations

SECTION 2.0 - SUMMARY OF FIELD WORK..... Page 5

- 2.1 Overview of Services
- 2.2 Soil Borings
 - 2.2.1 Field Work Methodology
 - 2.2.2 Field Work Observations
 - 2.2.3 PID Screening of Encountered Soils
- 2.3 Laboratory Analyses of Soil and Groundwater
 - 2.3.1 Action Levels
 - 2.3.2 Laboratory Results

SECTION 3.0 - CONCLUSIONS AND RECOMMENDATIONS..... Page 15

FIGURES

- Page 3 Site Location Map
- Page 4 Beacon Terminal Structure Complex Layout Map
- Page 11 Field Work Map

TABLES

- Page 10 Table 1: Registered PID Readings in Soils
- Page 12 Table 2: Analytical Results of Soil Samples
- Page 14 Table 3: Analytical Results of Groundwater Samples

APPENDICES

- A Laboratory Results
- B Drilling Logs

1.0 Introduction

1.1 Purpose of the Investigation

This Subsurface Investigation Report ("Report") summarizes environmental investigative services performed by Ecosystems Strategies, Inc. on portions of the Beacon Terminal property located on South Avenue in the City of Beacon, Dutchess County, New York.

The specific purpose of this Report is to document the presence or absence of toluene-contaminated subsurface soils and/or groundwater in the vicinity of the previously identified on-site inactive underground chemical bulk storage tanks. The tank field is located along the northern property border of the proposed Parcel C of the Beacon Terminal property and immediately north of the on-site structure known as Building #5a of the Beacon Terminal structure complex.

1.2 Objectives

Based on the results of previous investigations and based on observations made during previous site inspections of the subject property by Ecosystems Strategies, Inc., the on-site tanks have a potential to represent an environmental and/or financial liability.

The objectives of the work summarized herein is to document the environmental conditions in the vicinity of the on-site USTs and estimate the liabilities and costs associated with recommended remedial actions. The stated objectives of this Report are as follows:

1. Document through field screening, sampling and laboratory analyses, the presence or absence of toluene-contaminated subsurface soils and/or groundwater in the vicinity of the inactive tanks located along the northern property border of the proposed Parcel C of the Beacon Terminal property.
2. Determine the vertical and lateral extent of identified contaminated subsurface soils and/or groundwater (if warranted).
3. Provide a summary of current site conditions, including recommendations for further investigative and/or remedial actions with regard to the presence or absence of on-site soil and/or groundwater contamination in the vicinity of the three on-site USTs.

Field work summarized in this Report was performed on April 11, 1996 by Żywia Wojnar and Bradley E. Fisher of Ecosystems Strategies, Inc. This Report describes the encountered site conditions and presents analytical laboratory data from collected soil and groundwater samples.

1.3 Limitations

This written analysis is an assessment of specified portions of the Beacon Terminal property located on South Avenue in the City of Beacon, Dutchess County, New York, and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of their respective dates of field work. This Report cannot be held accountable for activities or events resulting in contamination after the dates of field work.

Services summarized in this Report were performed in accordance with generally accepted practices. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgement.

This Report is intended for the sole use of Scenic Hudson, Inc. and Scenic Hudson Land Trust, Inc. and must be used in its entirety.

1.4 Site Location and Description

The subject property as defined in this Report is the approximate 11-acre Beacon Terminal property located on South Avenue in the City of Beacon, Dutchess County, New York (see the Site Location Map, Page 3). The subject property is comprised of a single tax lot; Dutchess County Tax Identification Map 5954, Block 16, Lot 830270.

The subject property is an irregularly-shaped property located on the western side of South Avenue. The entirety of the subject property is bounded on the north by a Conrail Corporation Railroad Right-Of-Way (ROW) and on the south by the Fishkill Creek; the westernmost portion of Parcel A is bounded by parkland owned by Scenic Hudson Land Trust, Inc. The subject property is a square-shaped parcel located on the western side of South Avenue. This parcel is occupied by eight structures with former industrial and/or manufacturing uses; this structure complex occupies almost 154,000 square feet (see the Beacon Terminal Structure Complex Layout Map, Page 4 of this Report for the locations of on-site structures present on Parcel C of the subject property).

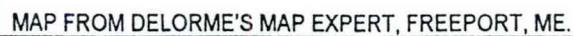
Previous investigations indicate the presence of three (3) inactive underground chemical bulk storage tanks located along the northern property border of this parcel immediately north of Building #5a (see the Field Work Map, Page 11 for the location of the tank field). According to available information, these three tanks were formerly operated by Chemical Rubber, Company and used for the storage of toluene. The number of tanks present in the tank field, the orientation and capacity of the tanks located beneath the concrete pad of the tank field has yet to be confirmed.

The topography in the vicinity of these tanks slopes steeply upwards to the north towards the Conrail Corporation Railroad ROW and gradually downwards south towards the Fishkill Creek located approximately 450 feet south of the tank locations.

The specific direction of on-site groundwater flow is unknown; however due to the proximity of the subject property to the Fishkill Creek and the Hudson River, it is likely that groundwater flows in a southwesterly direction towards these water bodies.

1.5 Findings of Previous Environmental Investigations

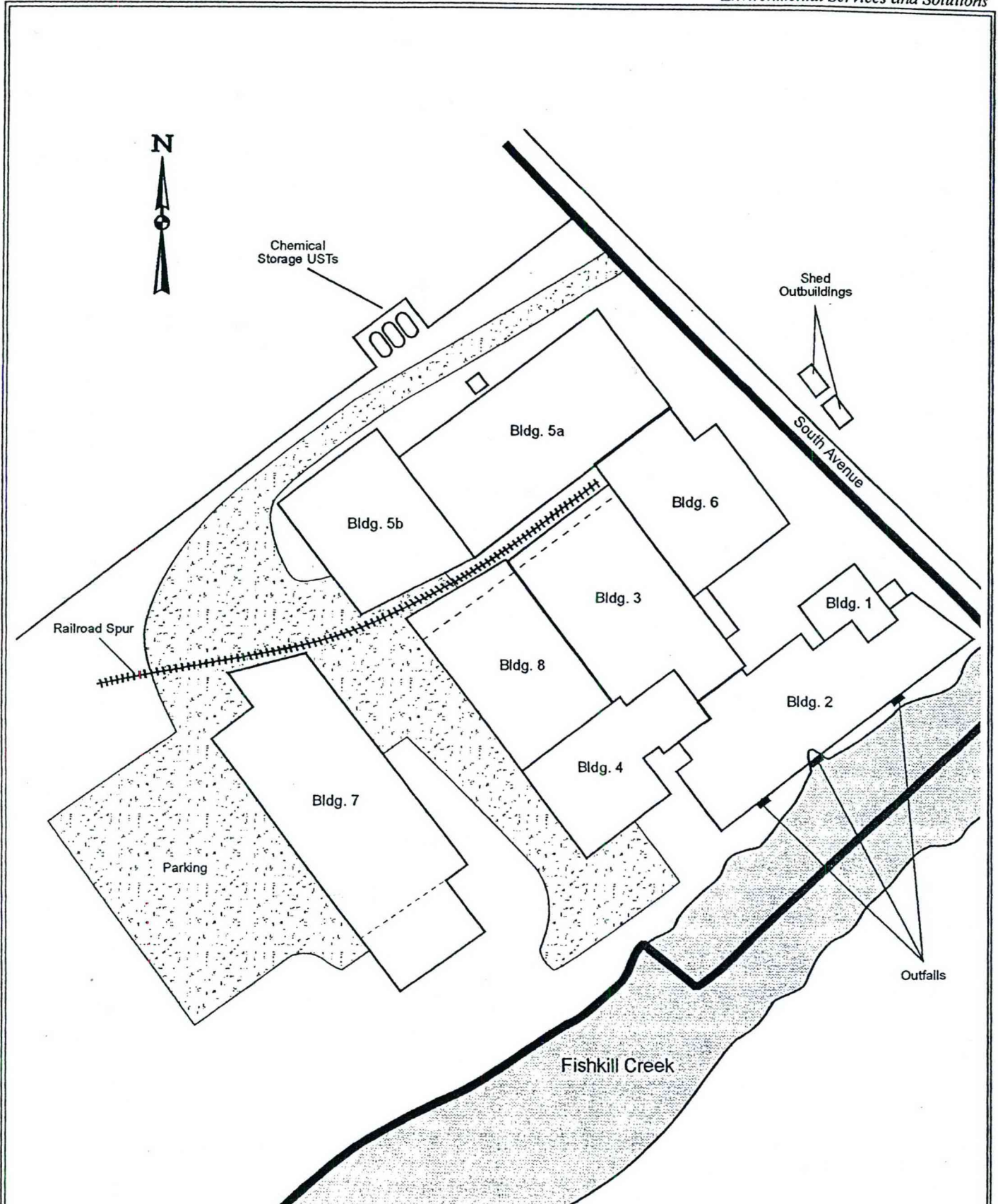
On July 9, 1993 a Phase I Environmental Site Assessment ("Phase I Assessment") was conducted on the Beacon Terminal property by Chazen Environmental Services, Inc. According to this Phase I Assessment, two (2) 2,000-gallon tanks and one (1) 4,000-gallon tank formerly operated by Chemical Rubber, Company and used for the storage of toluene are present within the tank field located along the northern border of the subject property immediately north of Building #5a. According to available information, these tanks reportedly were filled with sand when Chemical Rubber, Company vacated the site in 1978. This Phase I Assessment did not provide any information on subsurface soil conditions in the vicinity of these tanks.



BEACON TERMINAL
South Avenue
City of Beacon, Dutchess County, New York



Page 3



All feature locations are approximate.

Beacon Terminal Structure Complex Layout Map

Ecosystems Strategies, Inc.

ESI File Number: SB9548.31

April 1996

Not to Scale

Page 4

2.0 Summary of Field Work

2.1 Overview of Services

Investigative work documented in this Report was performed by Ecosystems Strategies, Inc. personnel and designated subcontractors (Site Environmental Services, L.L.C.) on April 11, 1996. Specifically the following work was conducted by this office:

- Coordinated and supervised the extension of ten (10) borings in the immediate vicinity of the former USTs located north of Building #5a to determine the presence or absence of subsurface soil and/or groundwater contamination with toluene;

The ten (10) borings were extended radially in a southerly, easterly and westerly direction from the tank field towards Buildings #5a and #5b to document the lateral and vertical extent of soil and/or groundwater contamination in the immediate vicinity of the tank field;
- Conducted split spoon sampling of encountered soils at each of the boring locations at depths ranging from 2 to 12 feet below grade;
- Conducted field screening of encountered soils using a Thermal Instruments 580B photoionization detector (PID) at depths ranging from 3 to 12 feet below grade in each of the boring locations;
- Collected one (1) groundwater sample from boring location B-1 at approximately 6 feet below grade (the depth of the groundwater interface) for laboratory analysis of volatile organic compounds (USEPA Method 8020). Geologic conditions precluded the collection of groundwater samples in the nine other boring locations;
- Collected five (5) soil samples from boring locations (B-3, B-4, B-5, B-6, and B-10) at depths ranging from 5 to 8 feet below grade for laboratory analysis of volatile organic compounds (USEPA Method 8020); and
- Prepared a Final Report documenting current site conditions in the vicinity of the three former toluene tanks; and provided recommendations for further investigative and/or remedial actions with regard to the presence or absence of on-site soil and/or groundwater contamination in the vicinity of the inactive chemical bulk storage tanks.

This Report is divided into individual sections that describe the extension of soil borings on the subject property, including soil and groundwater sampling (Section 2.2), results of laboratory analyses (Section 2.3) and conclusions and recommendations (Section 3.0). Each referenced Section, where applicable, includes discussions on field observations, field screening results, sample collection procedures, analytical data and conclusions drawn from the field work and analytical results.

2.2 Soil Borings

On April 11, 1996 Ecosystems Strategies, Inc. personnel coordinated and supervised the extension of ten (10) borings on that portion of the subject property in the vicinity of the former toluene tanks (see the Field Work Map, Page 11 for the approximate locations of each of the borings). Four (4) borings (B-2, B-4, B-5 and B-8) were extended radially in a southeasterly direction from the tank field towards Building #5a; three (3) borings (B-3, B-6 and B-7) were extended in a southwesterly direction from the tank field towards Building #5b; and three borings (B-1, B-9 and B-10) were extended in a easterly direction from the tank field and along the access road leading from South Avenue. These ten borings were extended to document the lateral and vertical extent of soil and/or groundwater contamination between the tank field and the Beacon Terminal structure complex. Due to the presence of the Conrail Corporation ROW, no borings could be extended to the north of the on-site tank field.

A description of each boring location is provided in the Sections below and on the Field Work Map, Page 11 of this Report.

2.2.1 Field Work Methodology

A request for a complete utility mark-out for the subject property was submitted by Ecosystems Strategies, Inc., as required by New York State Department of Labor regulations; confirmation of underground utility locations was secured and a field check of the utility mark-out was conducted prior to initiation of field work. Site and building plans were also reviewed by Ecosystems Strategies, Inc. personnel to determine property boundaries, building locations, and on-site utilities.

A Thermal Instruments 580B photoionization detector (PID) calibrated to read gas equivalents of isobutylene was utilized by Ecosystems Strategies, Inc. personnel to screen all material encountered during boring extension for the presence of volatile organic compounds (VOCs).

The extension of the ten (10) borings was performed by Site Environmental Services, L.L.C. of Seymour, Connecticut using a truck-mounted drilling rig equipped with both 4 and 1-inch inner diameter hollow-stem augers; extension was performed using either a standard 140 pound hammer (B-1 through B-4) or the direct push method (B-5 through B-10). Split spoon sampling was conducted at each of the boring locations at depths ranging from 3 to 13 feet below surface grade. Boring logs documenting the physical characteristics of encountered soils were maintained by the driller (Site Environmental Services, L.L.C.). Ecosystems Strategies, Inc. personnel maintained independent field logs documenting the physical characteristics, PID readings and any field indications of contamination for all encountered material at each boring location.

Relevant information from Ecosystems Strategies, Inc. logs for each boring location is summarized in Section 2.2.2, below. Copies of boring logs prepared by Site Environmental Services, L.L.C. are included in Appendix B of this Report.

All soil and groundwater samples were collected in a manner consistent with USEPA and NYSDEC sample collection protocols. All samples were collected in sample containers sterilized at the laboratory and placed in a cooler. Selected samples were shipped on ice via overnight delivery to Matrix Analytical, Inc., a New York State Department of Health approved laboratory (ELAP Certification Number: 11116). All sample collection equipment was properly decontaminated prior to initiation of sampling and between sample locations to avoid cross-contamination of soils and groundwater. Complete laboratory results are included in Appendix A of this Report.

2.2.2 Field Work Observations

Boring B-1

Boring B-1 was extended approximately 2 feet east of the southeastern edge of the tank field and approximately 34 feet north of Building #5a. B-1 was extended to a depth of 10 feet below grade; shallow groundwater was encountered at a depth of 6 feet 7 inches below grade. The initial recovery consisted of an upper layer of asphalt-stained black sandy fill material that graded into gray sandy fill at the 1 to 2 foot depth. Recovery between 2 and 4 feet below grade consisted of fine grained olive-gray sand and silt with trace amounts of clay and rock fragments. Recovery between 4 and 6 feet below grade consisted of an olive-gray silty clay with trace amounts of fine sand; this recovery was moist throughout. Recovery between 6 and 10 feet below grade consisted of an olive-gray silty clay with trace amounts of brick fragments; this recovery was wet throughout.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-1. A PID reading of 5 ppmge was recorded at the 8 to 10 foot recovery. The borehole was left open to allow for groundwater recharge in the boring column prior to sample collection. Groundwater sample (BW-1) was collected at a depth of 6 feet 7 inches below grade and analyzed for aromatic VOCs (USEPA Method 8020).

Boring B-2

Boring B-2 was extended approximately 7 feet south of the concrete pad of the tank field and 17 feet west of B-1. B-2 was extended to a depth of 11 feet below grade; shallow groundwater was encountered at a depth of approximately 7 feet below grade. Recovery between 5 and 7 feet below grade consisted of an olive-gray silty clay. Recovery between 7 and 9 feet below grade consisted of olive-gray clay with pockets of fine to medium grained sand, silt and trace gravel; this recovery was wet throughout. Recovery between 9 and 11 feet below grade consisted of gray clay with a pocket of light brown-gray silt at approximately 10 feet below grade.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-2. PID readings of 14 ppmge were recorded between the 5 to 7 foot recovery; PID readings of 65 ppmge were recorded between 7 and 9 feet below grade; and PID readings of 19 ppmge were recorded between 9 and 11 feet below grade. The borehole was left open to allow for groundwater recharge in anticipation of groundwater sample collection. No groundwater sample could be collected due to slow recharge rates; however, droplets of product were noted on collected water from the borehole.

Boring B-3

Boring B-3 was extended 15 feet north from the northeast corner of Building #5b and approximately 3 feet west of the tank field. B-3 was extended to a depth of 11 feet below grade; shallow groundwater was encountered at a depth of approximately 7 feet below grade. Recovery between 5 and 7 feet below grade consisted of a fine to medium grained sand and silt with trace amounts of clay grading into an olive-gray clay at 6 feet below grade. Recovery between 7 and 9 feet and 9 to 11 below grade consisted of an olive-gray clay with pockets of light brown silt; this recovery was wet throughout.

Recovery between the 5 and 9 foot depth was saturated and stained with product (toluene) and exhibited a strong chemical odor; a soil sample B-3 (5-7) was collected as a composite sample from between 5 and 7 feet below grade and analyzed for aromatic VOCs (USEPA Method 8020). PID readings of greater than 2,028 ppmge were recorded from this recovery. The saturation of the soil with product extended to the 8 foot 6 inch depth. PID readings of 87 ppmge were recorded at the 11 foot depth.

Boring B-4

Boring B-4 was extended approximately 15 feet south of B-2 and 14 feet east of the northeast corner of Building #5b. B-4 was extended to a depth of 13 feet below grade. Recovery between 5 and 7 feet below grade consisted of an olive-gray clay and silt with trace amounts of fine grained sand; this recovery was wet throughout. Recovery between 7 and 11 feet below grade consisted of an olive-gray clay with a pocket of silt and fine grained light brown sand at the 10 foot 5 inch depth. Recovery between 11 and 13 feet below grade consisted of an olive-gray clay.

Recovery between the 5 and 7 foot depth was stained and exhibited a strong chemical odor of toluene; no free product was noted from this recovery. PID readings of greater than 1,700 ppmge were recorded at the 5 foot depth; PID readings of 775 ppmge were recorded at the 7-8 foot depth and readings of 482 ppm were recorded at the 11 foot depth. Low level PID readings of 23 ppmge were recorded between 11 and 13 feet below grade. A soil sample B-4 (5-6) was collected as a composite sample from between 5 and 6 feet below grade and analyzed for aromatic VOCs (USEPA Method 8020).

Boring B-5

Boring B-5 was extended approximately 5 feet north of Building #5a and approximately 14 feet southeast of B-4. B-5 was extended to a depth of 11 feet below grade. Recovery between 3 and 5 feet below grade consisted of medium to coarse grained sand at 3 feet below grade grading into a brown-gray clay with trace silt from 3 to 5 feet below grade; this recovery was moist. Recovery between 5 and 9 feet below grade consisted of an olive-gray clay and silt; recovery from 7 feet was wet throughout. Recovery between 9 and 11 feet below grade consisted of an olive-gray clay with a pocket of light brown silt at the 10.5 foot depth.

Recovery between the 5 and 7 foot depth was stained and exhibited a strong chemical odor of toluene; droplets of free product were noted on this recovery. PID readings of greater than 1,700 ppmge were recorded at the 5 foot depth; PID readings of 881 ppmge were recorded at the 8 foot depth and readings of 176 ppmge were recorded at the 11 foot depth. A soil sample B-5 (7-8) was collected between 7 and 8 feet below grade and analyzed for aromatic VOCs (USEPA Method 8020).

Boring B-6

Boring B-6 was extended 6 feet north of Building #5b and approximately 15 feet southwest of B-3. B-6 was extended to a depth of 7 feet below grade. Recovery between 3 and 5 feet below grade consisted of a brown olive-gray clay; this recovery was moist. Recovery between 5 and 7 feet below grade consisted of an olive-gray clay and silt; this recovery was saturated with groundwater.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-6. PID readings of 47 ppmge were recorded at the 5 foot depth and PID readings of 8 ppmge were recorded between 5 and 7 feet below grade. A soil sample B-6 (3-5) was collected as a composite sample from between 3 and 5 feet below grade and analyzed for aromatic VOCs (USEPA Method 8020).

Boring B-7

Boring B-7 was extended approximately 45 feet west of B-3 and 10 feet north of Building #5b. B-7 was extended to a depth of 7 feet below grade. Recovery between 3 and 5 feet below grade consisted of an olive-gray clay with pockets of silt at the 5 foot depth; this recovery was moist. Recovery between 5 and 7 feet below grade consisted of an olive-gray clay; this recovery was saturated with groundwater.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-7. PID readings of 1 ppmge were recorded between 3 and 5 feet below grade.

Boring B-8

Boring B-8 was extended 8 feet north of Building #5a and approximately 25 feet east of B-5. B-8 was extended to a depth of 11 feet below grade. Recovery between 3 and 5 feet below grade consisted of a brown-gray clay with trace silt; this recovery was moist. Recovery between 5 and 9 feet below grade consisted of a brownish clay and silt; recovery from 7 feet was wet throughout. Recovery between 9 and 11 feet below grade consisted of an olive-gray clay with a pocket of brown silt at the 11 foot depth.

No instrument or field indications of contamination were noted in recovery between 3 and 5 feet below grade. Recovery between the 5 and 7 foot depth exhibited a strong chemical odor of toluene; no free product was noted from this recovery. PID readings of greater than 1,700 ppmge were recorded between the 6 to 8 foot depth; PID readings of 520 ppmge were recorded at the 9 foot depth and readings of 124 ppmge were recorded at the 11 foot depth.

Boring B-9

Boring B-9 was extended approximately 75 feet west of the northeast corner of Building #5a and approximately 50 feet east of the tank field in the paved access road. B-9 was extended to a depth of 11 feet below grade. Recovery between 5 and 7 feet below grade consisted of a light brown clay with pockets of silt; this recovery was moist. Recovery between 7 and 11 feet below grade consisted of a light brown clay grading into a darker gray clay with pockets of silt from the 8 foot depth; this recovery was saturated with groundwater from the 9 foot depth.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-9. No PID readings were recorded during the extension of B-9.

Boring B-10

Boring B-10 was extended directly southeast of B-9 (between Building #5a and B-9). B-10 was extended to a depth of 11 feet below grade. Recovery between 5 and 7 feet below grade consisted of a light brown clay with pockets of silt; this recovery was moist. Recovery between 7 and 11 feet below grade consisted of a light brown clay grading into a darker gray clay at the 8 foot depth; this recovery was saturated with groundwater from the 9 foot depth.

No material exhibiting any field indications (e.g., stained, discolored or odorous soils) was encountered during the extension of Boring B-10 and no PID readings were recorded during the extension of B-10.

2.2.3 PID Screening of Encountered Soils

Field screening of encountered soils was conducted using the PID during the extension of each of the ten boreholes. Screening was performed at the intervals of specific split spoon sampling (5-7, 7-9 and 9-11 feet below grade). Field screening was performed in order to document the presence or absence of volatile organic compounds (VOCs) in the encountered soils and, if present, document the lateral and vertical extent of toluene-contaminated soils in the vicinity of the three chemical USTs. Provided below in Table 1 are the field screening results of soils encountered at specified depths using the PID.

Table 1: Registered PID Readings in Soils at Specified Sampling Locations and Depths
(Total VOCs concentrations recorded in parts per million-calibrated gas equivalents. All depth measurements recorded as depth below surface grade.)

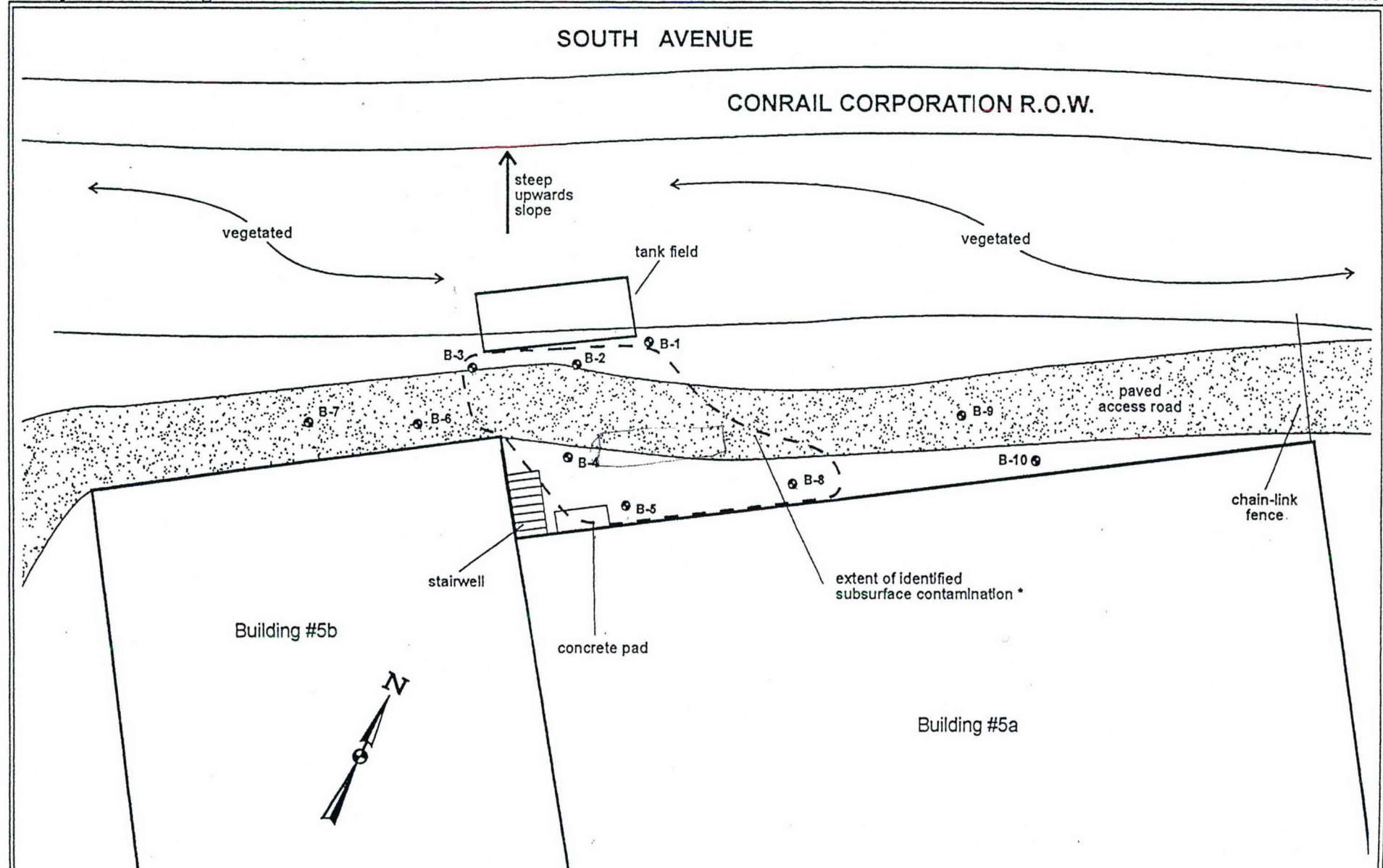
Boring Locations										
Depth	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10
5' - 7'	ND	14	>2028	>1700	>1500	8	1	>1500	ND	ND
7' - 9'	ND	65	>1500	775	881	NA	NA	>1500	ND	ND
9' - 11'	ND	19	87	482	176	NA	NA	124	ND	ND
Notes: 1. ND = Not Detected 2. NA = Not Analyzed with the PID										

Field screening using the PID identified concentrations of VOCs ranging from not detected to greater than 2028 ppmge. PID readings recorded as "greater than" (i.e., >1500 ppmge) identify levels of VOCs at concentrations greater than the maximum that can be safely analyzed by the instrument; therefore, these designated readings cannot be considered as the highest concentration of VOCs present in the specific sample analyzed. The maximum concentration of VOCs was detected with the PID in the borings extended south and southeast of the tank field between Building #5a and the paved access road (B-4, B-5 and B-8) and the single boring extended approximately 3 feet west of the tank field (B-3). These four borings all registered PID readings of greater than 1500 ppmge at depths extending from approximately 5 to 9 feet below surface grade. The PID readings steadily decreased in these four boreholes to concentrations less than 200 ppmge (with the exception of B-4 which registered readings of 482 ppmge) at 11 feet below grade.

Low level PID readings (less than 10 ppmge) were recorded in borings extended approximately 45 feet west of the tank field along the access road at depths ranging from 4 to 7 feet below grade (B-6 and B-7); a PID reading of 375 ppmge was recorded at the 3 foot depth in B-6. No PID readings were detected in borings extended approximately 50 feet east of the tank field along the access road (B-9 and B-10) at depths ranging from 5 to 11 feet below grade.

Field screening with the PID identified the lateral extent of contamination at distances extending southeast from the tank field towards Building #5a (approximately 30 feet) and in the immediate vicinity of B-3. Based on the high levels recorded at B-5 and B-8, located only 5 feet from the foundation of Building #5a, it is likely that contamination extends for an unknown distance under the foundation of Building #5a. See the Field Work Map, Page 11 of this Report for the estimated lateral extent of identified contamination.

Field screening with the PID identified the vertical extent of contamination at depths ranging from approximately 5 to 9 feet below surface grade; however, elevated PID readings (>50 ppmge) were recorded at depths less than 5 feet below grade in borings B-3, B-4, B-5 and B-6 and at depths greater than 9 feet below grade in borings B-3, B-4, B-5 and B-8.



Feature locations are approximate.

Field Work Map

April 11, 1996

Ecosystems Strategies, Inc.

● = boring location

* extent of contamination underneath structures could not be determined

ESI File Number: SB9548.31

April 1996

Scale: 1" ≈ 35' (approximately)

Page 11

Each sample for laboratory analysis was collected in a manner consistent with USEPA and NYSDEC sample collection protocols. All soil samples for laboratory analyses were collected in sample jars sterilized at the laboratory; sample vials for groundwater analyses were provided by the laboratory with hydrochloric acid for sample preservation. Upon completion of soil and groundwater collection activities, the five (5) soil samples and the one (1) groundwater sample were shipped on ice via overnight delivery to Matrix Analytical, Inc. Appropriate chain of custody procedures were followed. The five soil samples and the single groundwater sample were analyzed for volatile organic compounds (USEPA Method 8020).

The term "action level," as defined in this Report, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting action levels is to assess the integrity of on-site soils and groundwater relative to conditions which are likely to present a threat to public health, given the existing and probable future uses of the site. On-site soils and groundwater with contaminant levels exceeding these action levels are considered more likely to warrant remediation.

The action levels identified in this Report for soils are determined based on the New York State Department of Environmental Conservation's (NYSDEC) Spill Technology and Remediation Series (STARS) Memo #1: Petroleum-Contaminated Soil Guidance Policy (July 1993) and the NYSDEC Clean-up Criteria for Soil (October 1991). The action levels identified in this Report for groundwater are determined based on the NYSDEC Clean-up Criteria for Groundwater (October 1991). In accordance with standards set forth in the above-referenced documents, all compounds referenced below are presented with their respective action levels.

Laboratory Analyses of Soil Samples

Analytical results of the five (5) soil samples collected at specified depths in the immediate vicinity of the UST field are provided below in Table 2, below. Complete laboratory results are provided in Appendix A of this Report.

Table 2: Analytical Results of Soil Samples
(All results in parts per billion - ppb. Results in **bold** exceed the designated action levels.)

Compound	Action Levels ¹	Sample Location				
		B-3 (5-7')	B-4 (5-6')	B-5 (7-8')	B-6 (3-5')	B-10 (6-8')
Benzene	14 ppb	7,500	230	ND	ND	ND
Ethylbenzene	100 ppb	1,400	830	1,400	ND	ND
Toluene	100 ppb	440,000	590,000	450,000	35	ND
Xylene	100 ppb	2,100	740	1,200	ND	ND
MTBE	1,000 ppb	ND	ND	ND	ND	ND

Notes: 1. NYSDEC STARS Memo #1: Petroleum-Contaminated Soil Guidance Policy (July 1993) and the NYSDEC Clean-up Criteria for Soil (October 1991)
2. ND = Not Detected

Laboratory analyses of the soil samples collected in the vicinity of the tank field document the presence of detectable levels of volatile organic compounds (VOCs) in on-site subsurface soils. As shown in Table 2 above, laboratory analyses of soil samples collected from locations south and southeast of the tank field (B-3, B-4 and B-5) document the presence of elevated concentrations of VOCs at depths ranging from 5 to 8 feet below grade. Elevated levels of benzene, ethylbenzene, toluene and xylene (BTEX) were detected in borings B-3 and B-4 at levels exceeding NYSDEC-designated action levels; these two borings are located south and southeast of the tank field respectively. Ethylbenzene, toluene and xylene were detected at levels exceeding NYSDEC-designated action levels in boring B-5, located southeast of the tank field and within 5 feet of Building #5a; however, concentrations of benzene were not detected in this sample.

Laboratory analyses indicate that toluene was the compound detected at the greatest concentration in borings B-3, B-4 and B-5 at levels ranging from 440,000 ppb to 590,000 ppb; toluene was not detected in borings B-6 and B-10 at levels exceeding NYSDEC action levels.

Laboratory analyses did not detect the presence of BTEX compounds in levels exceeding NYSDEC-designated action levels in borings B-6 or B-10; these borings are located approximately 15 feet southwest and approximately 50 feet east of the tank field, respectively. Detection limits for analyzed soil samples from borings B-6 and B-10 were either at or below NYSDEC guidance values.

Laboratory analyses confirm field screening results which identified the lateral and vertical extent of contamination at distances extending southeast from the tank field towards Building #5a (approximately 30 feet) and at depths ranging from 5 to 9 feet below grade (see the Field Work Map, Page 11 of this Report for the estimated lateral extent of identified contamination). Current laboratory analyses identify the presence of other BTEX compounds as well; the presence of these other aromatic volatile hydrocarbons may be the result of a mixing of gasoline and toluene.

Based on the high levels of BTEX compounds recorded at B-5, located within 5 feet of the foundation of Building #5a, it is likely that contamination extends beneath the foundation of Building #5a; the extent of this contamination beneath the building is unknown at this time.

Laboratory Analyses of Groundwater Samples

Analytical results of the single groundwater sample collected from boring B-1 located 2 feet east of the tank field are provided below in Table 3, below. Complete laboratory results are provided in Appendix A of this Report.

Table 3: Analytical Results of Groundwater Samples

(All results in micrograms per liter - $\mu\text{g/l}$. Results in **bold** exceed designated action levels.)

Compound	Action Levels ¹	Sample Location
		BW-1 (6')
Benzene	0.7 $\mu\text{g/l}$	4 $\mu\text{g/l}$
Ethylbenzene	5 $\mu\text{g/l}$	5 $\mu\text{g/l}$
Toluene	5 $\mu\text{g/l}$	97 $\mu\text{g/l}$
Xylene	5 $\mu\text{g/l}$	2 $\mu\text{g/l}$
MTBE	50 $\mu\text{g/l}$	ND
Notes: 1. NYSDEC <u>Clean-up Criteria for Groundwater</u> (October 1991) 2. ND = Not Detected		

Laboratory analysis of the groundwater sample collected from a depth of approximately 6 feet below grade (the shallow groundwater interface) documents the presence of detectable levels of volatile organic compounds (VOCs) in on-site groundwater. Concentrations of benzene and toluene were documented at levels (4 and 97 ppb, respectively) exceeding NYSDEC-designated action levels. Ethylbenzene and xylene were also detected in this sample but at levels either at or below NYSDEC groundwater quality standards.

The single groundwater sample collected from boring B-1 documented the presence of toluene and benzene at a concentrations exceeding NYSDEC-designated action levels. The location of this boring relative to known sight conditions would indicate that this groundwater sample is not representative of peak groundwater concentrations. That is, concentrations of toluene and possibly other aromatic hydrocarbons in the overburden aquifer are likely to be greater south and southeast of the tank field in the vicinity of borings B-3, B-4, B-5 and B-8.

3.0 Conclusions and Recommendations

On April 11, 1996 Ecosystems Strategies, Inc. conducted a limited subsurface investigation in the vicinity of the three inactive underground chemical bulk storage tanks; these tanks were reportedly used for the storage of toluene. Investigative work involved the extension of borings in the vicinity of the tank field and included field screening and laboratory analyses. The following conclusions and recommendations (in **bold**) are made based on field work conducted by this office on a portion of the property identified in Section 2.1, above. Where appropriate, cost estimates for proposed investigative and/or remedial actions are provided in *italics*.

1. The subsurface investigative work performed by this office identified a release of a New York State Department of Environmental Conservation (NYSDEC) regulated hazardous substance (toluene). Laboratory analyses of specified soil and groundwater samples from extended borings confirmed a release of toluene (chemical abstract service number: 108-88-3). Based on these results, the NYSDEC was notified of this release and assigned the NYSDEC Spill Number: 9600893. The reporting of this release was performed in accordance with NYSDEC chemical bulk storage regulations 6 NYCRR Parts 595-599.

It is recommended that the NYSDEC be involved with the ultimate closure of the spill file for the Beacon Terminal site (#9600893). It is further recommended that the NYSDEC be made aware of any future investigative and/or remedial actions concerning this reported spill.

2. Soil encountered during the extension of the borings consisted primarily of an initial fine to medium grained sandy fill material with trace amounts of silt and gravel extending to an average depth of 3 feet below grade. This material graded into an olive-gray clay with interspersed pockets of silt extending from approximately the 3 foot depth to approximately 13 feet below grade (the maximum depth of extended borings). Groundwater was encountered at an average of approximately 5 feet below grade.

The presence of this clay and its associated properties helps to minimize the lateral and vertical extent of identified contamination; the encountered clay has a consistency ranging from soft to medium stiff and is therefore likely to have quite a low permeability. These properties help to prevent the lateral and vertical migration of the toluene within the subsurface soils; however, the presence of this clay may also limit the effectiveness of specific non-intrusive remedial options (e.g., vapor extraction, bioremediation).

Investigative work performed to date indicates that toluene is present in the subsurface soils and groundwater at levels warranting remediation.

See recommendations in Paragraphs #3 through #6, below.

3. According to available information, two (2) 2,000-gallon tanks and one (1) 4,000-gallon tank formerly operated by Chemprene Corporation and used for the storage of toluene are located beneath the concrete pad of the tank field. According to available information, these tanks reportedly were filled with sand when Chemprene vacated the site; the date of this closure is unknown.

Laboratory analyses identified the presence of aromatic volatile organic compounds in the on-site soil and groundwater in the vicinity of the tank field. Toluene was the compound detected at the highest concentration in the on-site subsurface soils and groundwater; however, other aromatic volatile hydrocarbons were detected as well suggesting that all three of the tanks might not only contain toluene. Field work performed to date suggests that contamination may extend from only one tank present in the tank field (located on the western portion of the tank field in the vicinity of boring B-3).

It is recommended that the existing tanks and all internal tank material (e.g., product or sand) be removed from the site in accordance with procedures set forth by the NYSDEC. The tanks should be uncovered, removed from the ground and properly disposed of at a licensed off-site disposal facility.

Any material removed from the interior of the tanks should be considered and analyzed as a hazardous waste due to the assumed contamination of this material by a NYSDEC regulated hazardous substance (toluene).

It is estimated that tank removal, including the proper handling, testing and disposal of internal material, will cost in the range of \$25,000 to \$30,000. This cost estimate is based the removal of a total storage volume of 8,000 gallons.

It is further recommended that soils in the immediate vicinity of the tanks which are known to contain elevated levels of toluene be removed and properly disposed of at a licensed off-site disposal facility; this work can be conducted at the time of tank removal work. Any soils removed from the site should be handled and disposed of as a hazardous waste.

It is estimated that soil removal in the immediate vicinity of the tanks will cost in the range of \$10,000 to \$15,000.

4. Free product (toluene) was encountered at depths ranging from 5-9 feet below grade in B-3, located immediately south of the southwestern edge of the tank field and at depths ranging from 5-7 feet below grade in B-5, located along the northern side of Building #5a. Laboratory analyses of these soil samples indicate the likelihood that free product is also present between these two boring locations (i.e., between the tank field and Building #5a).

It is recommended that a product recovery system be installed to remove free product known to be present in the vicinity of the tank field; this system should be installed to a depth no greater than 11 feet below grade. The product recovery wells should be located in the former tank locations and in the vicinity of B-3. Hand bailing of these wells should occur until a proper determination of product volume is achieved to document the need for, and if warranted, the specifications of a long term product recovery system.

Any product recovered from these wells should be considered, handled and disposed of as a hazardous waste.

It is estimated that the installation of a product recovery well(s) and short term system maintenance (i.e., manual bailing) will cost in the range of \$10,000 to \$15,000.

5. A single groundwater sample collected from boring B-1, located 2 feet east of the tank field, documented the presence of toluene at a concentration exceeding NYSDEC-designated action levels; this groundwater sample was collected from 6 feet below grade. The location of this boring relative to known sight conditions would indicate that this groundwater sample is not representative of peak groundwater concentrations. That is, concentrations of toluene and possibly other aromatic hydrocarbons in the overburden aquifer are likely to be greater south and southeast of the tank field in the vicinity of borings B-3, B-4, B-5 and B-8.

It is recommended that at least three (3) monitoring wells be installed in the vicinity of the tank field to document the presence or absence of on-site groundwater contamination and determine whether on-site groundwater remediation is warranted.

SUBSURFACE INVESTIGATION REPORT
SB9548.31APRIL 19, 1996
PAGE 17 OF 17

6. Elevated PID readings (>50 ppmge) were recorded at depths primarily ranging from 5 to 11 feet below grade (the vertical extent of contamination) in borings B-2, B-3, B-4, B-5 and B-8. Low level PID readings (<10ppmge) were recorded in borings extended approximately 45 feet west of the tank field along the access road at depths ranging from 3 to 7 feet below grade (B-6 and B-7). No PID readings were detected in borings extended approximately 40 feet east of the tank field along the access road (B-9 and B-10) at depths ranging from 5 to 11 feet below grade.

Laboratory analyses of soil samples collected at depths ranging from 5 to 8 feet below grade in borings B-3, B-4, B-5, B-6 and B-10 confirmed instrument indications delineating the vertical and lateral extent of toluene-contaminated subsurface soils. Elevated levels of BTEX concentrations exceeding NYSDEC-designated action levels were detected in borings B-3, B-4 and B-5 at depths ranging from 5 to 8 feet below grade. Toluene was the compound detected at the highest concentration in the on-site soils from borings B-3 (440,000 ppb), B-4 (590,000 ppb) and B-5 (450,000 ppb); however, other aromatic volatile hydrocarbons were also detected. Elevated levels of BTEX compounds were not detected in borings B-6 and B-10.

Based on field observations and analytical data, it is estimated that toluene is present in soils over an approximate 2,800 square foot area, not including any contamination under the building; however, soil characteristics are likely to have minimized the lateral migration of toluene under the building. At an average depth of 4 feet, the total volume of toluene contaminated soil is estimated to be 415 cubic yards.

It is recommended that a vapor interceptor trench be installed along the northern edge of Building #5a in the general location of Building #5a in order to prevent the further migration of contamination under the foundation of the Building #5a.

The specifications and dimensions of this trench should be designed to encompass the extent of known lateral and vertical contamination. Based on work performed to date, it is recommended that this trench extend in an easterly direction from the eastern wall of Building #5b to a distance of approximately 80 feet along the northern side of Building #5b. The trench should be installed to a depth of approximately 11 feet below grade (the greatest vertical extent of identified contamination). It is further recommended that a vapor barrier be installed along the specified extent of Building #5a to prevent the migration of vapors beneath the building.

Any material encountered during the installation of this trench should be considered, handled and disposed of as a hazardous waste.

It is estimated that the installation of a vapor interceptor trench will cost between \$5,000 and \$8,000.

7. The lateral extent of soil contamination appears to be limited in the southwestern and northeastern direction. No borings were extended to the northwest of the tank field due to the location of the Conrail Corporation ROW; however, migration of product in this direction is not considered likely. The southeastern extent of soil contamination could not be accurately determined because of the location of Building #5a. Borings extended within 5 feet of the building (B-4, B-5 and B-8) identified elevated levels of toluene in the subsurface soils; therefore, it is likely that contamination of soils extends beneath the foundation of the building.

It is recommended that an additional contaminant delineation investigation be conducted beneath Building #5a. Borings should be extended to the water table with intervening soils screened for volatile organic compounds. Laboratory analyses should be conducted on both soil and groundwater samples to document concentrations of toluene using USEPA Method 8020 or a comparable method.

It is estimated that contaminant delineation studies beneath the building will cost between \$10,000 and \$12,000.

APPENDIX A

Complete Laboratory Results



APR 22 1996

ANALYTICAL DATA

SUMMARY

Report Date: 04/18/96
Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603
914-452-1658
Project Manager: Brad Fisher
Project Name: SB9548.31 (4-12-96)
Project No.: SB9548.31

Sample Information:

<u>Laboratory ID</u>	<u>Client/Field ID</u>	<u>Laboratory ID</u>	<u>Client/Field ID</u>
61031365-001	B-3 (5-7)	61031365-005	B-10 (6-8)
61031365-002	B-4 (5-6)	61031365-006	BW-1(6')
61031365-003	B-5 (7-8)	61031365-007	QC Report -Soil
61031365-004	B-6 (3-5)	61031365-008	QC Report -Water

Reviewed by

Christine A. Larkin

Christine A. Larkin
Laboratory Manager

Lab Certifications

EPA ID: No. MA059
Massachusetts: No. M-MA059
Maine: Reciprocity
Rhode Island: No. 87
South Carolina: No. 88011

Florida(DEP): QA Plan No. 900437G
Florida(HRS): No. E87290
Connecticut: No. PH0515
New York: ELAP No. 11116
New Hampshire: No. 2041



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-001
Client ID: B-3 (5-7)
Matrix: Soil

Date Sampled: 04/11/96 10:10
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	7,500	ug/kg	100	8020	sh	04/15/96
Chlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,2-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,3-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,4-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
Ethylbenzene	1,400	ug/kg	500	8020	sh	04/15/96
MTBE	ND	ug/kg	500	8020	sh	04/15/96
Toluene	440,000	ug/kg	500	8020	sh	04/15/96
Xylene	2,100	ug/kg	500	8020	sh	04/15/96
The detection limit reported is based on a X100 dilution of the sample.						
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	97	Percent			sh	04/15/96
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	18.2	Percent			mm	04/16/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-002
Client ID: B-4 (5-6)
Matrix: Soil

Date Sampled: 04/11/96 11:25
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	230	ug/kg	100	8020	sh	04/15/96
Chlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,2-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,3-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,4-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
Ethylbenzene	830	ug/kg	500	8020	sh	04/15/96
MTBE	ND	ug/kg	500	8020	sh	04/15/96
Toluene	590,000	ug/kg	500	8020	sh	04/15/96
Xylene	740	ug/kg	500	8020	sh	04/15/96
The detection limit reported is based on a X100 dilution of the sample.						
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	93	Percent			sh	04/15/96
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	20.8	Percent			mm	04/16/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-003
Client ID: B-5 (7-8)
Matrix: Soil

Date Sampled: 04/11/96 12:00
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	ND	ug/kg	100	8020	sh	04/15/96
Chlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,2-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,3-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
1,4-Dichlorobenzene	ND	ug/kg	500	8020	sh	04/15/96
Ethylbenzene	1,400	ug/kg	500	8020	sh	04/15/96
MTBE	ND	ug/kg	500	8020	sh	04/15/96
Toluene	450,000	ug/kg	500	8020	sh	04/15/96
Xylene	1,200	ug/kg	500	8020	sh	04/15/96
The detection limit reported is based on a X100 dilution of the sample.						
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	93	Percent			sh	04/15/96
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	25.1	Percent			mm	04/16/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-004
Client ID: B-6 (3-5)
Matrix: Soil

Date Sampled: 04/11/96 13:25
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	ND	ug/kg	5	8020	sh	04/16/96
Chlorobenzene	ND	ug/kg	25	8020	sh	04/16/96
1,2-Dichlorobenzene	ND	ug/kg	25	8020	sh	04/16/96
1,3-Dichlorobenzene	ND	ug/kg	25	8020	sh	04/16/96
1,4-Dichlorobenzene	ND	ug/kg	25	8020	sh	04/16/96
Ethylbenzene	ND	ug/kg	25	8020	sh	04/16/96
MTBE	ND	ug/kg	25	8020	sh	04/16/96
Toluene	35	ug/kg	25	8020	sh	04/16/96
Xylene	ND	ug/kg	25	8020	sh	04/16/96
The detection limit reported is based on a X5 dilution of the sample. Detection limit due to matrix interference.						
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	94	Percent			sh	04/16/96
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	24.2	Percent			mm	04/16/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-005
Client ID: B-10 (6-8)
Matrix: Soil

Date Sampled: 04/11/96 15:30
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	ND	ug/kg	1	8020	sh	04/15/96
Chlorobenzene	ND	ug/kg	5	8020	sh	04/15/96
1,2-Dichlorobenzene	ND	ug/kg	5	8020	sh	04/15/96
1,3-Dichlorobenzene	ND	ug/kg	5	8020	sh	04/15/96
1,4-Dichlorobenzene	ND	ug/kg	5	8020	sh	04/15/96
Ethylbenzene	ND	ug/kg	5	8020	sh	04/15/96
MTBE	ND	ug/kg	5	8020	sh	04/15/96
Toluene	ND	ug/kg	5	8020	sh	04/15/96
Xylene	ND	ug/kg	5	8020	sh	04/15/96
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	86	Percent			sh	04/15/96
<u>MISCELLANEOUS TESTING</u>						
Percent Moisture	23.5	Percent			rw	04/18/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

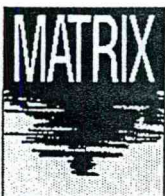
Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name: Ecosystems Strategies

Sample Information

Lab ID: 61031365-006
Client ID: BW-1(6')
Matrix: Water

Date Sampled: 04/11/96 08:55
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
<u>VOLATILE ORGANICS</u>						
Benzene	4	ug/l	1	8020	sh	04/15/96
Chlorobenzene	ND	ug/l	1	8020	sh	04/15/96
1,2-Dichlorobenzene	ND	ug/l	1	8020	sh	04/15/96
1,3-Dichlorobenzene	ND	ug/l	1	8020	sh	04/15/96
1,4-Dichlorobenzene	ND	ug/l	1	8020	sh	04/15/96
Ethylbenzene	5	ug/l	1	8020	sh	04/15/96
MTBE	ND	ug/l	5	8020	sh	04/15/96
Toluene	97	ug/l	1	8020	sh	04/15/96
Xylene	2	ug/l	1	8020	sh	04/15/96
<u>SURROGATE STUDIES - VOLATILES</u>						
Bromofluorobenzene (602/8020)	76	Percent			sh	04/15/96



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name:

Sample Information

Lab ID: 61031365-007
Client ID: QC Report -Soil
Matrix: Soil

Date Sampled: / / :
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
----------------------	--------	------	-----------------	------------	---------	---------------

METHOD BLANKS

Method Blank - Volatile

ND

ug/l

8020/602

MATRIX SPIKE STUDIES - VOLATILES

Sample ID:

1365-001

Benzene

77

Percent

Chlorobenzene

90

Percent

Toluene

Unable to report spike recovery due to the high level in the sample.

METHOD SUMMARIES

NOTE: Analytical results have been corrected and are reported on a dry weight basis. If required, detection limits can also be corrected to dry weight using the percent moisture data included in this report.

Volatile organic analysis is performed using H/P 5995 or 5970 GC/MS, Tekmar purge and trap, and ALS autosampler. Chromatography incorporates packed and megabore columns. Data reduction is performed on RTE 1000 and ChemStation systems. Tuning is based on BFB standards. Procedural guidelines follow EPA 624 or SW846 for all analyses.

METHOD REFERENCES

1. Test Methods For Evaluating Solid Waste: Physical Chemical Methods. EPA SW 846. November 1986.
2. Methods For Chemical Analysis of Water and Wastes. EPA 600/4-79-200. Revised March 1983.
3. Standard Methods For Examination of Water and Wastewater. APHA-AWWA-WACF., 17th Edition. 1989.



Matrix Analytical, Inc.
106 South Street
Hopkinton, MA 01748-2295
1 (800) 362-8749

FINAL REPORT

Client Information

Account: Ecosystems Strategies
Address: 60 Worrall Ave.
Poughkeepsie, NY 12603

Project Name: SB9548.31 (4-12-96)
Project Number: SB9548.31
Project Manager: Brad Fisher
Sampler Name:

Sample Information

Lab ID: 61031365-008
Client ID: QC Report -Water
Matrix: Water

Date Sampled: / / :
Date Received: 04/12/96 : 0
Date Reported: 04/18/96

Analytical Parameter	Result	Unit	Detection Limit	Method No.	Analyst	Date Analyzed
----------------------	--------	------	-----------------	------------	---------	---------------

METHOD BLANKS

Method Blank - Volatile

ND

ug/l

8020/602

MATRIX SPIKE STUDIES - VOLATILES

Sample ID:

1285-004

Benzene

91

Percent

Chlorobenzene

99

Percent

Toluene

91

Percent

METHOD SUMMARIES

Volatile organic analysis is performed using H/P 5995 or 5970 GC/MS, Tekmar purge and trap, and ALS autosampler. Chromatography incorporates packed and megabore columns. Data reduction is performed on RTE 1000 and ChemStation systems. Tuning is based on BFB standards. Procedural guidelines follow EPA 624 or SW846 for all analyses.

METHOD REFERENCES

1. Test Methods For Evaluating Solid Waste: Physical Chemical Methods. EPA SW 846. November 1986.
2. Methods For Chemical Analysis of Water and Wastes. EPA 600/4-79-200. Revised March 1983.
3. Standard Methods For Examination of Water and Wastewater. APHA-AWWA-WACF., 17th Edition. 1989.

APPENDIX B

Drilling Logs

APR 15 1996



Site Environmental Services, L.L.C.

121 Old Ansonia Road, Seymour CT 06483-3512

- Licensed in CT, MA, NY, NJ -

MEMO

Date: 11 April 1996

From: John A. DeAngelis, Jr.

To: Paul H. Ciminello
Ecosystems Strategies, Inc.
60 Worrall Avenue
Poughkeepsie NY 12603-2332
T. 914 452-1658
F. 914 485-7083

Subject: SES Project No. 96032
579 South Ave.
Beacon NY

Message: Paul,

Here are two sets of boring logs, for the drilling job completed today.

Thanks for the work.

Should you have any questions, please feel free to call.

Regards, John.

enc: logs, invoice

MISSION STATEMENT

"To understand, service and satisfy our customer's needs - will fulfill our mission"

Site Environmental Services, L.L.C.
121 Old Ansonia Road, Seymour CT (203) 734-5880
Client

Boring #: **B-1**

Start:	4/11/96	4/11/96	Finish:
Water Obser:	6.17'	CME55	Drill:
Auger I.D.:	2-1/4"	1-3/8"	Spoon I.D.:

Finish: Ecosystems Strategies, Inc.
Drill: 60 Worrall Avenue
Spoon I.D.: Poughkeepsie NY 12603-2332

Project #:	96032-1
Location:	579 South Ave. Beacon NY

[illegible]

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #: **B-1**

Site Environmental Services, L.L.C.

121 Old Ansonia Road, Seymour CT (203) 734-5880
Client

Boring #: **B-2**

Start:	4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #:	96032-2
Water Obser:	5.57'	CME55	Drill:	60 Worrall Avenue	Location:	579 South Ave.
Auger I.D.:	2-1/4"	1-3/8"	Spoon I.D.:	Poughkeepsie NY 12603-2332		Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0			0.17	ASPHALT	PAVEMENT			
			0.42	Processed STONE	ROADBASE FILL			
			3.00	Olive-Grey Silty SAND, trace Gravel	FILL			
				Grey CLAY varved w/Silt	LAKE BOTTOM			
5	5'-7'	2-2-2-2				1	2.00	1.50
	7'-9'	2-2-2-1		Grey CLAY, occas. layer of Yellowish Silt		2	2.00	2.00
	9'-11'	2-2-2-2				3	2.00	2.00
10			11.00					
				End of Exploration				
15								
20								
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #: **B-2**

Site Environmental Services, L.L.C.
121 Old Ansonia Road, Seymour CT (203) 734-5880
Client

Boring #:

Start:	4/11/96	4/11/96	Finish:
Water Obser:	5.83'	CME55	Drill:
Auger I.D.:	2-1/4"	1-3/8"	Spoon I.D.:

Finish: Ecosystems Strategies, Inc.
Drill: 60 Worrall Avenue
Spoon I.D.: Poughkeepsie NY 12603-2332

Project #: 96032-3
Location: 579 South Ave.
Beacon NY

[illegible]

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #. **B-3**

Boring #: **B-4**

Project #:	96032-4
Location:	579 South Ave. Beacon NY

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #: **B-4**

Site Environmental Services, L.L.C.

121 Old Ansonia Road, Seymour CT (203) 734-5880
Client

Boring # **B-5**

Start:	4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #:	96032-5
Water Obser:	*	CME55	Drill:	60 Worrall Avenue	Location:	579 South Ave.
Auger I.D.:		3/4"	Spoon I.D.:	Poughkeepsie NY 12603-2332		Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0			1.00	Dark Brown SAND, w/Gravel, Silt	FILL			
				Grey SILT, some Gravel	FILL			
3'-5'	PUSH	Moist	3.00			1	2.00	1.67
			3.50	Grey CLAY	LAKE BOTTOM			
5 5'-7'	PUSH	Moist	4.50	Olive-Brown CLAY	LAKE BOTTOM	2	2.00	2.00
				Olive-Grey CLAY, some Silt	LAKE BOTTOM			
7'-9'	PUSH	Wet				3	2.00	2.00
9'-11'	PUSH	Wet	8.00			4	2.00	2.00
10				Grey CLAY w/ an occas. small Yellowish Silt layer	LAKE BOTTOM			
			11.00					
				End of Exploration				
15								
20				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring # **B-5**

Start:	4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #:	96032-6
Water Obser:	*	CME55	Drill:	60 Worrall Avenue	Location:	579 South Ave.
Auger I.D.:		3/4"	Spoon I.D.:	Poughkeepsie NY 12603-2332		Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0	0'-2	PUSH	Moist	0.25 ASPHALT	PAVEMENT	1	2.00	0.83
				1.50 Brown SAND, some Gravel, Brick	FILL			
	3'-5'	PUSH	Wet	3.50 Olive-Grey CLAY & SILT	LAKE BOTTOM	2	2.00	2.00
				Grey CLAY, little Silt	LAKE BOTTOM			
5	5'-7'	PUSH	Wet			3	2.00	1.83
			7.00					
				End of Exploration				
10								
15								
20								
				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Site Environmental Services, LLC.

121 Old Ansonia Road, Seymour CT (203) 734-5880

Boring #: **B-7**

Start: 4/11/96	4/11/96	Finish: Ecosystems Strategies, Inc.	Project #: 96032-7
Water Obser: *	CME55	Drill: 60 Worrall Avenue	Location: 579 South Ave.
Auger I.D.: 3/4"		Spoon I.D.: Poughkeepsie NY 12603-2332	Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0			0.17	ASPHALT	PAVEMENT			
			2.00	Brown SAND, some Gravel	FILL			
3'-5'	PUSH	Wet		Grev CLAY	LAKE BOTTOM	1	2.00	1.25
5								
5'-7'	PUSH	Wet				2	2.00	0.00
7'-9'	PUSH	Wet		Grev CLAY, w/an occas. Yellowish Silt layer		3	2.00	2.00
			9.00					
10				End of Exploration				
15								
20				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #: **B-7**

Site Environmental Services, LLC.

121 Old Ansonia Road, Seymour CT (203) 734-5880
Client

Boring #: **B-8**

Start: 4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #: 96032-8
Water Obser: *	CME55	Drill:	60 Worrall Avenue	Location: 579 South Ave.
Auger I.D.: 3/4"		Spoon I.D.:	Poughkeepsie NY 12603-2332	Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0			0.50	Dark Brown SAND, some Gravel	FILL			
			2.00	Brown SAND, some Gravel, Brick	FILL			
3'-5'	PUSH	Wet		Olive-Brown CLAY, some Silt	LAKE BOTTOM	1	2.00	2.00
5								
5'-7'	PUSH	Wet	5.00			2	2.00	2.00
				Olive-Grev CLAY	LAKE BOTTOM			
7'-9'	PUSH	Wet	7.00			3	2.00	1.83
				Olive-Brown CLAY	LAKE BOTTOM			
9'-11'	PUSH	Wet	9.00			4	2.00	2.00
10				Grev CLAY	LAKE BOTTOM			
			11.00					
				End of Exploration				
15								
20				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Boring #: **B-8**

Start:	4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #:	96032-9
Water Obser:	*	CME55	Drill:	60 Worrall Avenue	Location:	579 South Ave.
Auger I.D.:		3/4"	Spoon I.D.:	Poughkeepsie NY 12603-2332		Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0			0.25	ASPHALT	PAVEMENT			
				Brown SAND, Silt, Gravel	FILL			
			2.50					
5	5'-7' PUSH	Wet		Olive-Brown CLAY & SILT	LAKE BOTTOM	1	2.00	2.00
	7'-9' PUSH	Wet				2	2.00	2.00
	9'-11' PUSH	Wet	8.00	Grey CLAY w/an occas. Yellowish Silt layer	LAKE BOTTOM	3	2.00	2.00
10								
			11.00					
				End of Exploration				
15								
20				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And

Start:	4/11/96	4/11/96	Finish:	Ecosystems Strategies, Inc.	Project #:	96032-10
Water Obser:	*	CME55	Drill:	60 Worrall Avenue	Location:	579 South Ave.
Auger I.D.:		3/4"	Spoon I.D.:	Poughkeepsie NY 12603-2332		Beacon NY

Sample Depth	Blows per 6"	Moisture	Elev.	DESCRIPTION OF FINDINGS	General	Sample #	Penetration	Recovery (ft)
0				Dark Brown SAND, some Gravel, Silt	FILL			
			2.00					
				Olive-Brown CLAY & SILT	LAKE BOTTOM			
5	5'-7' PUSH	Wet				1	2.00	2.00
	7'-9' PUSH	Wet				2	2.00	2.00
	9'-11' PUSH	Wet	8.50			3	2.00	2.00
10				Grev CLAY	LAKE BOTTOM			
			11.00					
				End of Exploration				
15								
20				* Not Observed				
25								
30								
35								
40								
45								
50								

Driller: J. DeAngelis, Jr.

Engineer: Z. Wojnar

Proportions: 0 - 10% Trace, 10 - 20% Little, 20 - 35% Some, 35 - 50% And