PHASE I

ENVIRONMENTAL

SITE ASSESSMENT

September 22, 1999

Site Identification:	**Perx Property** **68 South Broadway** **Village of Red Hook** **Dutchess County, New York**
Tax Lot Identification:	**Map 6272, Block 10, Lots 265576, 278603, 298593, 209574 and 305666**
Property Description:	**Approximately 20.8-acre property containing six vacant structures**

ESI File Number: DR99140.10

Prepared By:

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Prepared For:

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Services performed by Ecosystems Strategies, Inc. and summarized in this Phase I Environmental Site Assessment have been conducted in accordance with Method 1527-97 as developed by the American Society for Testing and Materials (ASTM).

The undersigned has reviewed this Phase I Environmental Site Assessment and certifies to Dutchess County Water and Wastewater Authority 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

1.0 Introduction

1.1 Purpose of the Investigation

This Phase I Environmental Site Assessment ("Phase I ESA") identifies environmental conditions that might represent a financial liability resulting from or associated with the storage, use, transport, or disposal of hazardous or regulated materials on the Perx property located at 68 South Broadway, Village of Red Hook, Dutchess County, New York. A full property description is provided in Section 2.1, below.

1.2 Methodology

This Phase I ESA has been prepared in conformance with guidelines set forth by the American Society for Testing and Materials (ASTM) Method E1527-97. The specific components of this Phase I ESA are as follows:

1. Investigation of the subject property's history and characteristics through the analysis of historic photographs; local and regional maps; municipal records; and information provided by subject property representatives. Complete references are provided in Section 5.0 of this Phase I ESA.

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 inspection of the subject property conducted on September 10, 1999 by Mary F. Martello, of Ecosystems Strategies, Inc. ("ESI"). ESI personnel were accompanied by Scott Chase, Executive Director of Dutchess County Water and Wastewater Authority, for portions of the site inspection.

1.3 Limitations

This Phase I ESA is an evaluation of the property described in Section 2.1 below and is not valid for any other property or location. It is a representation of the property analyzed as of the dates that services were provided. This Phase I ESA cannot be held accountable for activities or events resulting in environmental liability after the respective dates of the site inspection or historic and regulatory research.

This Phase I ESA 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.

2.0 Site Location and Description

2.1 Description of the Subject Property

The subject property as defined in this Phase I ESA consists of the 20.8-acre property and structures located at 68 South Broadway, Village of Red Hook, Dutchess County, New York. A map depicting the location of the subject property is provided on Page 5 of this Phase I ESA. The subject property comprises five tax lots (Village of Red Hook Tax ID: Map 6272, Block 10, Lots 265576, 298593, 278603, 209574 and 305666).

The subject property is an irregularly shaped parcel which has 104 feet of frontage on the western side of South Broadway and extends approximately 1,372 feet westward. The subject property also has 50 feet of frontage on the eastern side of Smith Street. Five structures are located on the eastern half of the property. The areas that are not occupied by buildings are covered with asphalt. The majority of the paved areas are overgrown with plants and weeds. The western half of the property contains undeveloped land which contains overgrown grasses, wetlands and woodland. There is also the remains of a septic treatment facility (aeration pool) on the southeastern portion of the back half of the property.

Photographs of the subject property are provided in Appendix A of this Phase I ESA. A map illustrating the layout of the subject property is provided on Page 6 of this Phase I ESA.

2.1.1 Site Topography

Information on the subject property's topography was obtained from the review of the United States Geological Survey (USGS) Topographic Map of the Kingston East, New York Quadrangle (dated 1973), and observations made by this office during the September 10, 1999 site inspection. A copy of the USGS Topographic Map with the subject property indicated is included in Appendix B of this Phase I ESA.

According to the above-referenced topographic map and observations made during the site inspection, the topography of the area in which the subject property is located has a gentle downward slope to the southwest, towards the Hudson River. The topography of the subject property has surface elevations ranging from approximately 220 feet above mean sea level (msl) on the eastern portion of the property to 200 feet above msl on the western portion of the subject property. Observations made during the site inspection indicate that the topography of the subject property is relatively level on the eastern portion, and on the western portion of the property, there is a gentle downward slope to the west.

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

2.1.2 Site Geology

No information regarding site-specific investigations of the subsurface (e.g., test pits or borings) was readily available; therefore no documented determinations are provided in this Phase I ESA. The presence of on-site structures indicates that soils located on the subject property may have been altered by cutting, regrading and/or filling activities.

The United States Department of Agriculture Soil Conservation Service's Dutchess County Soil Survey Users Guide ("Users Guide"), dated September 1991, was reviewed by this office to ascertain which soil types are likely to be present on the subject property. Provided below is a summary of the information obtained from this review.

According to the Soil Survey, the subject property is located in an area composed of the Haven-Urban land complex (0 to 2 percent slopes) soil type. This soil unit consists of areas where 40 percent of the soils are very deep, nearly level, well drained, loamy, Haven soils, 35 percent are Urban land which has at least 50 percent of the surface is covered by buildings, parking areas or other impervious structures, and 25 percent other soil types.

Depth to bedrock in the Haven Land soil type is likely to be greater than 60 inches below grade. No information regarding the depth to bedrock in the urban soil type is available.

2.1.3 Site Hydrogeology

No site-specific investigation of groundwater depth or direction of flow is known to have been performed on the subject property; therefore, no documented determinations are provided in this Phase I ESA. Information contained in the above-referenced Soil Survey indicates that shallow groundwater is likely to be present at depths of greater than six feet below grade. The direction of on-site groundwater flow is likely to be in a southwesterly direction, toward the Hudson River located approximately 3.5 mile west of the subject property.

2.1.4 Surface Hydrology

Information regarding on-site surface hydrology was obtained from the review of available maps and from observations made by this office during the September 10, 1999 site inspection. According to these sources, there are two surface water bodies located on the southwestern portion of the subject property. These are both federally designated wetlands (see below). The wetland on the central portion of the western property border also extends onto the adjoining property. The other wetland/pond was located on the southwestern corner of the subject property.

Also noted during the site inspection were dry, seasonal streams that join the two wetland areas. It is believed that the stream originating at the northernmost wetland flows north to south and that the stream originating in the other wetland flows from east to west. Provided on Page 6 of this Phase I ESA is a copy of the Selected Site Features Map for the subject property with streams and wetlands noted.

Wetlands

The New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands Map (1973) and the United States Department of the Interior Federal Wetlands Map (1994) of the Kingston East, New York Quadrangle were reviewed by this office. According to a review of these maps, there are no NYSDEC wetlands (areas greater than 12.4-acres) on or in the immediate vicinity of the subject property. However, there are two federally designated wetlands located on the southwestern portion of the subject property. They are Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PFOIE) wetlands.

2.2 Description of Surrounding Properties

2.2.1 Surrounding Land Uses

The subject property is located in an suburban area comprised primarily of residential and commercial properties. A description of the adjoining and nearby properties is provided in Table 1, below.

Table 1: Land Uses in the Vicinity of Subject Property

Direction	Adjoining Use(s)	Vicinity Use(s)
North	• Scaffolding Company • Universal Builders Supply	• Small Business & Commercial • Residential
East	• White Horse Liquors • Don's Tackle	• Small Business & Commercial • Residential
South	• Residential	• Residential • Small Business & Commercial
West	• Residential	• Multi-Family Residential

2.2.2 Sensitive Environmental Receptors

A review of available information including maps, as well as observations made during the site inspection indicate that there are two sensitive environmental receptors located on the subject property. These receptors are the two federally designated wetlands on the southwestern portion of the subject property. The wetland, which is located on the subject property, also extends on to the western adjoining property. There are also streams extending off the subject property that lead to the Fallkill Creek. Adjoining and surrounding properties are likely to be connected to the central water system rather than private water supply wells.

Site location

selected site features

3.0 Investigation

3.1 Ownership Records

The information listed below on current or former property ownership is gathered from available sources, including Town of Red Hook Assessor's Office records. This ownership summary does not constitute a title search. Provided below in Table 2 is a summary of the ownership information for Map 6272, Block 10, Lots 265576, 278603, 209574, 298593 and 305666.

Table 2: Ownership Information

Parcel ID	Owner	Date
Map 6272, Block 10, Lot 265576	O'Callaghan Red Hook Industrial Corporation Dutchess County	1952 Unknown 3/5/96
Lot 298593	Orchard Hill Farms Red Hook Industrial Park Corporation	1967 Unknown
Lot 278603	Orchard Hill	1970
Lots 209574 & 305666	Red Hook Industrial Corporation Robert A. & Harold A. O'Callaghan Jr.	Unknown 1957

3.2 Site History

The history of the subject property is reconstructed through the review of historic photographs, Village of Red Hook Assessor's Office and Building Department files, and information provided by subject property representatives.

3.2.1 Aerial Photographs

A summary of the information obtained from the review of aerial photographs dated 1966, 1985, and 1995 is provided below. The small scale and quality of the photographs made distinguishing details difficult.

1935: There are greenhouses and a few other small structures on the eastern portion of the subject property. There is an oval-shaped wet area on the western portion of the property. No areas of disturbance are noted on the subject property.

No structures are present on the property adjoining the subject property to the north. Further north there is the center of the Village of Red Hook. There are several structures located in this area. Adjoining the subject property to the east, across South Broadway, is one structure. Further east there is a cemetery, farmland, orchards and woodland. Several structures are present on the southern adjoining property. These structures are possibly associated with a farm. There is also an orchard on this parcel. Further south there are orchards, scattered residences, and businesses, a running track and farms. Orchards are present on the western adjoining parcel. Further west there are orchards, farmland and a wet area. No areas of disturbance likely to affect the subject property are noted on the adjoining properties or in the surrounding area.

1960: The current on-site warehouse is now present on the subject property. There current on-site house is also shown on the eastern portion of the subject property. It appears as though there is a parking lot on the eastern portion of the property near the warehouse. No areas of disturbances are noted on the subject property.

Adjoining the subject property to the north is a greenhouse. The remainder of this property consists of cleared areas and an orchard (on the western portion of this parcel). Further north there is additional development. Adjoining the subject property to the east is farmland. Further east there is additional residential development. Adjoining the subject property to the south are two structures along South Broadway, and residential structures extend along the other southern property border. Further south there is a new residential development on Amherst Road. Adjoining the subject property to the west is one house. Further west there are additional developments along the main streets. No areas of disturbance likely to affect the subject property are noted on the adjoining parcels or in the surrounding area.

1967: The “septic pool” is now located on the central portion of the property. No other significant changes, or areas of disturbance are noted on the subject property.

There is now one structure on the easternmost portion of the northern adjoining property. The area directly to the west of this structure appears to have been cleared, and there is an open grassy area with a few treas on the western portion of the property. The greenhouse is gone. No significant changes are noted on other adjoining parcels or in the surrounding area. There are no areas of disturbance which may have affected the subject property noted on the adjoining or surrounding parcels.

1970: No significant changes are noted on the subject property, or in the surrounding area. The only noted change to the adjoining property is to the north where there is one additional structure present. Also there is a large amount of materials being stored on the property. No areas of disturbance are noted on the subject property, adjoining parcels and in the surrounding area.

1980: No significant changes, or areas of disturbance are noted on the subject property.

There are additional areas of storage noted on the northern adjoining parcel. There is a stand of trees west of the storage area. There are no other significant changes noted on the other adjoining parcels. Generally, there is more development on the parcels in the area surrounding the subject property. No areas of disturbance likely to affect the subject property are noted on the adjoining parcels or in the surrounding area.

1985: It appears as though the subject property is no longer in use. No other significant changes are noted on the subject property, adjoining parcels, or in the surrounding area.

1995: No changes are noted on the subject property, adjoining parcels or in the surrounding area. Three of the four on-site structures, and the septic pool are clearly shown in this photograph. There are also no areas of disturbance noted on these properties.

3.2.2 Local Records

Town of Red Hook Assessor's Office Records

On September 10, 1999, Town of Red Hook Assessor's Office property card records for the subject property were reviewed by this office. The only on-site structure recorded in the Assessor's files was the main packaging plant. It was noted that this structure was constructed in 1960. This date conflicts with the 1950s date provided in the owner provided documents and aerial photographs. The entire subject property was occupied by Germantown Cold Storage Company, beginning in August 1967. However, the date in which they vacated the property was not listed on the available property card. The on-site structures utilized communal/public water and sewer system, and was heated with natural gas. However, it is known that the on-site water supply wells were installed in 1981, and there is an on-site wastewater treatment plant. No other information pertinent to the environmental integrity of the subject property was present in these records. A summary of the readily available property ownership information is provided in Table 2, above.

Village of Red Hook Building Department Records

Village of Red Hook Building Department records for the subject property were requested by this office on September 10, 1999. According to building department personnel, there are no building department records available for the subject property.

3.2.3 Subject Property Representative Information

Pertinent information regarding the subject property was provided to this office by Scott Chase, Executive Director of Dutchess County Water and Wastewater Authority. According to Mr. Chase, no environmental liens are known to exist for the subject property. When queried about the potential presence of petroleum bulk storage tanks on the property, Scott Chase noted the two gasoline pumps on the property, but he indicated that he had not previously been aware of tanks ever having been located on-site.

3.2.4 Previous Environmental Reports

The following documents were provided by Mr. Chase to ESI for review.

Wastewater Facilities Report

According to a Wastewater Facilities Report, from the early 1970's, the subject property had been occupied by Orchard Hill Farms, Inc. since 1949. Beginning in 1949, Orchard Hill Farms engaged in the processing of apple products, and beginning in 1955 they began to engage mainly in the processing of frozen foods (TV Dinner, Pot Pies and other various entrees).

This report also indicated that the subject property obtained water from the Village of Red Hook municipal water supply, and there was a wastewater treatment facility on-site. The following items were discharged into the wastewater treatment facility: raw materials (food wastes), gravy, biodegradable soaps and detergents, and sanitary wastes. There was also a 3,200 square foot aeration pool which was associated with the sanitary system located to the west of the warehouse. The waste which was produced on the subject property was eventually discharged into an unnamed creek which leads to the Saw Kill Creek. No permits for this operation were provided to this office for review.

Town Meeting Minutes

A meeting was held on April 26, 1996 to discuss the issues involved with making the Perx Property available to the Village and Town of Red Hook for water supply and wastewater purposes. It was noted in the minutes that Orchard Hill had been a major user of the village water supply at some time in the past, and at some point the village required them to establish their own well field. At this time Orchard Hill became a major supplier to the Village, supplying over half of their water. It was believed that the wells yielded 100 gallons per minute (gpm) at some time in the past, but were currently filled with sand given that the Town of Red Hook attempted to pump the wells, and as a result they pulled up a large quantity of sand.

t was also noted in this meeting's minutes that the on-site wastewater treatment plant served only the subject property only. All the on-site structures were in bad condition and would need to be demolished. There was also a concern of asbestos being present within the structures.

Memorandum and Water Tests

A memorandum dated February 27, 1997, from James M. Gavin includes background information on the site, and information on the groundwater quality tests which were conducted at the property. This memo notes that in 1981, the private water supply was approved for Orchard Hill Farms and that biological and Part 5 chemical analyses were performed. Chemical analyses were performed again in 1985 and the memo states that "no mention of high levels of arsenic" were made. No laboratory results from 1981 or 1985 were available for Mr. Gavin's review. Also in 1985, the DCDOH approved the subject property to be used as a emergency water source by the Village of Red Hook. In 1996, there were discussions of having the subject property become a secondary water source, and also there were reports of improper storage and disposal of chemicals on and adjacent to the site.

In 1997 a well pump test and Part 5 lab analysis was conducted. All of the samples which were analyzed indicated that contaminant levels were below NYS Part 5 maximum containment levels except for Arsenic (0.10 mg/L) and total coliform. Laboratory personnel indicated that the high arsenic concentrations could be due to the digestion of the high solids content of the samples. Other potential sources of the arsenic in water were stated to be: industrial contamination, industrial poisons and herbicides/pesticides and contamination from waste-chemical disposal practices. This memo stated that arsenic could be removed from the water by reverse osmosis, ion exchange, activated alumina adsorption or conventional coagulation, sedimentation and filtration. It was recommended that the 1981 and 1985 chemical analyses be obtained for comparison, that the well be resampled and that testing for dissolved, suspended and total arsenic be conducted to determine what portion of the arsenic level was attributable to turbidity. Sampling of the a nearby pond was also recommended.

Pertinent information provided by Mr. Chase is also provided in relevant sections of this Phase I ESA, where appropriate.

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 ASTM databases were searched at their specified radii, consistent with ASTM protocol:

USEPA National Priority List (1.0 mile)
USEPA CERCLIS List (0.5 mile)
USEPA RCRIS CORRACTS Hazardous Waste TSD Facilities (1.0 mile)
USEPA RCRIS non-CORRACTS Hazardous Waste TSD Facilities (0.5 mile)
NYSDEC Registry of Inactive Hazardous Waste Disposal Sites (1.0 mile)
NYSDEC Registry of Active and Inactive State Landfills (0.5 mile)
NYSDEC Leaking Underground Storage Tank (LUST) Records (0.5 mile)
USEPA RCRIS Hazardous Waste Generators Facilities List (subject/adjoining properties)
USEPA Emergency Response Notification System (subject property)
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 Resource Recovery Projects in New York State (1.0 mile)
USEPA RCRIS Hazardous Waste Transporters List (0.5 mile)
NYSDEC Major Oil Storage Facilities (0.5 mile)
NYSDEC Petroleum and Chemical Spill Records (0.5 mile)
NYSDOH Basement Radon Readings (by County, Municipality and Zip Code)
USEPA NPDES Wastewater Discharge Permits (subject/adjoining properties)

A complete definition of each database, along with the date of the version used for this review, is provided below in Section 5.1 of this Phase I ESA. Provided in Appendix C of this Phase I ESA are copies of the facility printouts for the sites identified herein.

3.3.2 Findings of Regulatory Records Review

Federal Hazardous Waste Sites

The subject property is not identified on the United States Environmental Protection Agency's (USEPA) National Priority List (NPL) of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions. According to a review of USEPA records, there are no NPL sites located within 1.0 mile of the subject property.

The subject property is not listed on the USEPA's CERCLIS list detailing all sites which are either proposed to the NPL or are in the screening and assessment phase for possible inclusion on the NPL. According to a review of USEPA records, there are no CERCLIS sites located within 0.5 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. According to a review of NYSDEC records, there are no NYSDEC inactive hazardous waste disposal sites located within 1.0 mile of the subject property.

Hazardous Waste Storage and Disposal

The USEPA Resource Conservation and Recovery Information System (RCRIS) database details facilities which report generation, storage, transportation, treatment or disposal of hazardous waste.

SQG/LQG

According to a review of USEPA records, the subject property is not registered with the USEPA as a small (between 100 and 1000 kg/month) or large (greater than 1000 kg/month) quantity generator of hazardous waste.

According to a review of USEPA records, Patent Scaffolding Company, located on the northern adjoining parcel at 64 South Broadway is a registered facility on the RCRIS database (Handler ID: NYD986988590); however, no information regarding handler activities or the type and/or quantity of hazardous waste generated or transported was available in readily accessible records. No other information regarding the type and/or quantity of hazardous waste transported was available in readily accessible records. No other adjoining properties are registered as small or large quantity generators of hazardous waste.

TSDs and Transporters

The subject property is not registered with the USEPA as a treatment, storage, or disposal (TSD) facility for or transporter of hazardous waste or materials. According to a review of USEPA records there are no TSDs located within 1.0 mile or transporters of hazardous waste located within 0.5 mile of the subject property.

Landfills and Solid Waste Disposal Facilities

According to a review of NYSDEC records, the subject property is not listed with the NYSDEC as an active or inactive landfill, transfer station or solid waste disposal facility. No active or inactive landfills, solid waste disposal facilities or transfer stations are located within 0.5 mile of the subject property according to NYSDEC records.

The subject property is not listed with the NYSDEC as a resource recovery facility, according to a review of NYSDEC records. There are no resource recovery facilities located within 1.0 mile of the subject property.

Chemical Bulk Storage

A review of NYSDEC records indicates that the subject property is not registered with the NYSDEC as a chemical bulk storage (CBS) facility. Observations made during the site inspection did not indicate the presence of chemical bulk storage on the subject property. No adjoining properties are registered with the NYSDEC as CBS facilities.

Petroleum Bulk Storage

Subject Property

The subject property is not registered as a PBS facility with the NYSDEC, and no other information regarding on-site USTs was available for this Phase I ESA. However, observations made during the site inspection indicated the presence of two gasoline pumps on the central portion of the subject property, near the edge of the vacant lots. There was also a fill port and vent pipe located in between the two gasoline pumps. These pumps and the fill port and vent pipe suggest the presence of on site USTs. These tanks, if present are not believed to have been used since the closure of the Orchard Hill facility.

State PBS Regulations

NYSDEC Petroleum Bulk Storage Regulations 6 NYCRR Parts 612-614 apply to facilities with a combined storage capacity greater than 1,100 gallons (excluding tanks less than 1,100 gallons used to store fuel oil for on-site consumption). Given that the storage capacity of the subject property is not known, the subject property's compliance to NYSDEC PBS regulations can not be determined. These regulations require the proper registration of all on-site tanks subject to PBS regulations and the precision testing of tanks greater than 1,100 gallons.

Federal Regulations

Federal PBS regulations specified in 40 CFR Part 280 require that all gasoline underground storage tanks installed prior to December 22, 1988 be upgraded, closed, or replaced by December 22, 1998. Given the age of the gasoline pumps (greater than ten years old), any underground tanks potentially present in their vicinity are likely to have been installed prior to December 1988 and therefore require removal.

Federal Regulations specified in 40 CFR, Part 112 apply to all facilities storing greater than 42,000 gallons of petroleum product underground or 1,360 gallons aboveground. Given that the storage capacity of the subject property is not known, the subject property's compliance to federal PBS regulations can not be determined.

Adjoining Properties

According to a review of NYSDEC records, Universal Builders Supply which adjoins the subject property to the north, is a PBS facility (PBS Number: 3-600415). This facility has eight active tanks, and a total storage capacity of 4,800 gallons. The five active tanks are all of steel/carbon steel construction which have no secondary containment or leak detection systems. These tanks do have a vent whistle for overfill protection, and the date in which they were installed is not provided. There are four 550-gallon USTs, two 300-gallon ASTs, one 1,000-gallon UST and a 1,000-gallon AST at this facility.

There was also an active 275-gallon fuel oil AST noted on one of the eastern adjoining properties, White Horse Liquors, during the site inspection.

Major Oil Storage Facilities (MOSFs)

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

Federal Chemical and Petroleum Spills

The USEPA Emergency Response Notification System (ERNS) database details initial reports of releases of oil and hazardous substances as reported to federal authorities. There are currently no chemical or petroleum spills on record for the subject property, according to a review of the USEPA ERNS database.

State Chemical and Petroleum Spill and Leaking Underground Storage Tank Events

A review of NYSDEC spill records indicates that no spill events are known to have occurred on the subject property since 1986. Available information indicates that thirty eight spill events are believed to have occurred within 0.5 mile of the subject property. The exact locations of a number of these events and their distance from the subject property could not be determined based on the available information. Of these events, nine are classified as leaking underground storage tank (LUST) events.

The spill event closest to and with the greatest likelihood of impacting the subject property, based on available information, occurred approximately 200 feet east of the subject property. Spill number 9611787 occurred at Don's Fishing and Tackle at 69 South Broadway on December 26, 1996. This spill event involved the release of approximately 200 gallons of #2 fuel oil, and occurred when the owner of the business dumped 200 gallons of fuel oil into the basement, and did not clean it up. However, the NYSDEC commented that the Red Hook Police Department investigated, and saw less than one gallon of fuel oil on the ground, and there was no smell. Land is the resource listed as having been most affected by this event. This spill event was closed on January 8, 1997, and met all NYSDEC clean up standards.

Air Discharges

No NYSDEC permits for air discharges from the subject property are known to exist. No operations likely to require a NYSDEC air discharge permit were noted on the subject property during the site inspection.

Groundwater Usage

According to observations made during the site inspection and information provided by the property representative, the subject property obtained potable water from the central water system until 1981 when three groundwater supply wells were installed on-site. These three wells are located on the western portion of the property and were last tested in 1997. During this most recent testing, high levels of arsenic were detected. It was believed that these levels could have been caused by the high levels of sand particles in the samples, industrial contamination, industrial poisons, herbicides/pesticides or contamination from waste-chemical disposal practices. The samples analyzed for this test also failed a total coliform test. These wells are not currently in use.

Wastewater Discharges

No USEPA National Pollutant Discharge Elimination System (NPDES) permit is known to exist for the subject property. According to observations made during the site inspection and information provided by the property representative, the on-site structures appear to be connected to an on-site wastewater treatment system. However, this facility is no longer active. Given that no information regarding the specifications for this system were available, no definitive statement can be made regarding the need for any specific permits (e.g., SPDES) or sampling requirements were this system to be used. No adjoining properties are registered with the USEPA as NPDES facilities.

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 (pCi/liter). Provided below in Table 3 is a summary of the available radon information for the subject property's vicinity.

Table 3: Radon Levels in Vicinity of Subject Property
All radon levels provided in picoCuries/liter (pCi/liter)

NYSDOH Radon Information	Village of Red Hook	Dutchess County	Zip Code (12571)
Average Radon Level	8.1	6.6	9.71
Standard Deviation	3.4	3.0	2.9
Number of Homes Tested	102	2513	89

These average radon levels does suggest the potential presence of elevated radon levels on the subject property. No radon testing is known to have been conducted on the subject property. The absence of any residential usage of the subject property precludes the need for radon testing at this time.

3.4 Site Inspection

3.4.1 Protocol

The site inspection was conducted on September 10, 1999 in order to address any potential concerns raised during the regulatory agency records review (above, Section 3.1) and to identify any additional indications of contamination from the use, storage or disposal of hazardous or regulated materials. To the extent possible, site structures, vegetation, topography, surface waters and other relevant site features were examined for any obvious evidence of existing or previous contamination or unusual patterns (e.g., vegetative stress, soil staining, surface water sheen, or the physical presence of contaminants), which would indicate that the environmental integrity had been or could be impacted.

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 adjoining properties as they concern the potential or actual environmental condition of the subject property.

A Selected Site Features Map illustrating the general layout of the subject property and the locations of specific identified concerns discussed specifically in this Section of the Phase I ESA is provided on Page 6. Photographs of the subject property are provided in Appendix A of this Phase I ESA.

3.4.2 Physical Characteristics of Subject Property

3.4.2.1 Property

The subject property is approximately 20.8-acre, and is an irregularly shaped parcel with 104 feet of frontage on the western side of South Broadway and it extends approximately 1,372 feet westward. The subject property also has fifty feet of frontage on the eastern side of Smith Street. Five structures are located on the eastern half of the property (see below). The areas that are not occupied by buildings are covered with asphalt. However, the majority of these paved parking lots and driveways are overgrown with plants and weeds.

The western half of the property contains undeveloped land which contains overgrown grasses, wetlands and woodland. The two on-site wetlands are located on the central western property border and the southwestern corner of the property, respectively. There is also the remains of a septic treatment facility (aeration pool) on the southeastern portion of the back half of the property. This aeration pool is 3,200 square feet in size, and approximately 10 feet deep when full. There is also a round "septic pool" located to the northeast of the aeration pool. This pool was filled with water. However, the water level in the pool at the time of the site inspection was well under 10 feet deep. Also located on the central western portion of the subject property are three water supply wells.

3.4.2.2 Structures

There are five structures currently on the subject property. The dates of construction of these structures is not known, except for the main warehouse which was built in 1960. It is believed that all the on-site structures were constructed around the same time as the main warehouse. Currently, the subject property and all on-site structures are vacant. Mr. Chase estimated that the subject property has been vacant for approximately 10 to 15 years.

Main Warehouse

The main warehouse is located on the northeastern portion of the subject property. The exterior walls of this structure are constructed of concrete blocks and aluminum siding. There is a flat, built up roof, and a metal roof on this structure. There are interior walls composed of concrete blocks, plaster, ceramic tiles and aluminum. The ceilings are acoustical ceiling tiles or exposed metal. The floor of this structure was mainly concrete, but the office area was carpeted.

The first three areas are located in the western portion of the structure and consist of three large, open rooms which were most likely used as a packaging, storage or receiving area while the site was active. The northwestern side of the structure has three garage doors and a loading/unloading dock.

The eastern portion of this structure appeared to have been used as an office area. This portion of the structure consists of three stories. The first story contains multiple offices, larger "work" rooms and restrooms. The upper level consists entirely of offices (with carpeted floors). There is also the remains of an eating area on the third floor (a converted attic).

Maintenance Garage

The maintenance garage is located to the southwest of the warehouse. The exterior of this structure is constructed of aluminum, and there is an exposed aluminum roof on this garage. The floor is concrete. There are four garage doors on this structure, and there are two large, empty rooms inside. There are wooden work benches and lofts along the edges of the interior walls.

Shed #1

There is a shed directly north of the maintenance garage. This is a small structure consisting of one main room and one small room. There is also a basement to this structure which was not assessable at the time of the site inspection. This structure is constructed of concrete blocks and a flat, built up roof. The floor is concrete, and there is a large machine (possibly a food processor) located inside the main room of the shed. Also located within the shed is a rectangularly shaped subgrade vault which appeared to contain a pump likely to have been associated with the potable water supply system. Aluminum sulfate, a product used in water treatment, was also located within Shed #1.

Shed #2

A second shed was noted on the central portion along the southern property border. However, due to the heavy amount of foliage at the time of the site inspection a close inspection of this structure could not be conducted.

House

The two-story residential building located on the northeastern portion of the subject property was not assessable at the time of the site inspection. The exterior is constructed of wood siding, and the roof is finished with asphalt shingles. This structure was damaged by fire at some time in the past.

Site Utilities

According to available information, the subject property is serviced by the on-site groundwater wells and wastewater treatment plant. The subject property was connected to the Village of Red Hook municipal water system until 1981, when the wells were installed, and the warehouse and residential building is heated with natural gas.

3.4.3 Specific On-Site Environmental Conditions

Debris Areas

An approximate total of 35 cubic yards of debris was noted in various areas of the subject property. The majority of debris (approximately 25 cubic yards) was noted in the main warehouse structure. This debris consisted of old packaging materials, cardboard boxes, Styrofoam, wooden grates, glass and plastic bottles, broken ceiling tiles and ceramic tiles and other miscellaneous liter. Approximately 5 cubic yards of the debris which consisted of household garbage, dumped on-site, was noted inside the small shed. The final 5 cubic yards of scattered debris was noted on other areas of the subject property, including the western-central wetland. This debris consisted of empty metal and plastic 55-gallon drums and other litter.

Petroleum Storage

Two gasoline pumps were noted on the central portion of the subject property, in the area of overgrown vegetation to the west of the warehouse. There was also a fill port and vent pipe located in between the two gasoline pumps. These pumps and the fill port and vent pipe suggest the presence of on site USTs. These tanks, if present are not believed to have been used since the closure of the Orchard Hill facility.

No small quantities of petroleum products or aboveground storage tanks were noted on the subject property during the site inspection.

Chemical Storage

Fifteen, 100-pound bags of aluminum sulfate were noted inside Shed #1 during the site inspection. These bags were unsealed, and no staining was noted on the floor surrounding this storage area. However, the large quantity of debris on the floor of the shed made it difficult to examine all areas of the floor. No other small quantities of chemicals or aboveground chemical bulk storage tanks were noted on the subject property during the site inspection. No indications of underground chemical bulk storage tanks (e.g., fill ports or vent pipes) were noted on the subject property during the site inspection.

Floor Drains/Conduits

Approximately 10 floor drains were noted on the northern packaging/storage area in the warehouse. No staining was noted in the vicinity of these drains. Additional floor drains may be present in other areas of the structure or in other structures, however, the large amount of debris and the present conditions of the structures prevented a full site inspection. The on-site floor drains discharged directly into the on-site wastewater system.

Asbestos-Containing Materials

Asbestos-containing materials (ACMs) are those materials which are known to contain over 1% of any type of asbestos. The presence or absence of asbestos within a material can only be determined through the physical analysis of material samples.

The age of the on-site buildings (1950s) suggests that ACMs may have been used during initial building construction and/or during subsequent maintenance work. An asbestos survey of the subject property is not known to have been conducted. Suspect 9" x 9" linoleum floor tiles, corrugated, aircell pipewrap insulation and joint compound was noted in the office area of the warehouse. These materials were in fair to good condition during the site inspection. Also, the roofing materials on all the structures also may contain asbestos. Access onto the roofs could not be obtained during the site inspection. Building construction materials (e.g., roofing, plaster, etc.) could potentially contain asbestos.

Lead-Based Paint

The presence or absence of lead-based paint (LBP) can only be determined through the material analysis of paint samples. However, as the manufacture of LBP is known to have ceased in 1978, a building's date of construction is often times used to help assess the likelihood that lead-based paint was used during initial building construction and/or during subsequent renovations. The presence of deteriorated paint is indicative of a potential health risk in that paint dust and chips could be inhaled and/or ingested.

The dates of construction of the on-site structures (1950s) indicate that LBP is likely to have been used. A lead-based paint survey of the subject property's structure is not known to have been conducted. All of the painted surfaces of the areas inspected by this office were in fair to good condition at the time of the site inspection and are likely to have been painted multiple times. However, no statement can be made by this office regarding the presence or absence of LBP in underlying layers of paint.

Water Supply and Sewage Disposal

The on-site structure is serviced by on-site water supply wells, and an on-site wastewater treatment plant.

During the site inspection three water supply wells were noted on the western portion of the subject property, to the east of the northernmost wetland. (The subject property formerly obtained potable water from the Village of Red Hook municipal water system until 1981.)

While the exact configuration of the wastewater treatment plant is not known, an aeration pool and a smaller "septic pool" were noted in the central portion of the property (see the Selected Site Features Map, Page 6) during the site inspection. The septic pool is located to the north of the aeration pool.

Topographic Irregularities

No overt topographic irregularities (e.g., sinkholes or berms) indicative of the presence of material in the subsurface were noted on the subject property during the site inspection.

Vegetative Features

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

Surface Waters

There are two surface water bodies located on the subject property. These are both federally designated wetlands (see section 2.1.4 above). The wetland along the central portion of the western property border also extends onto the adjoining property. There was an 275-gallon AST (on subject property side), rusty 55-gallon drums and other debris in this wetland/pond. There was a film on the surface of the water, but no unusual odors or visible petroleum sheen. The other wetland/pond is located on the southwestern corner of the subject property. There was no evident sheen, staining or odor in this area. There were also streams that were located on the southwestern portion of the subject property in between the two wetlands, and that led off the subject property to the southwestern adjoining parcel.

PCBs

An inspection for the presence of equipment likely to contain PCBs was conducted by this office during the site inspection. PCBs were widely used in equipment such as transformers, capacitors and hydraulic equipment until 1979 when the USEPA regulated their use in this capacity.

There were eight pole mounted transformers noted on the subject property. These transformers are owned by the subject property owner who would be responsible for the cleanup of a release. No staining indicative of a release was noted on the units, the poles, or on the ground around the base of the poles. The flourescent light ballasts which were noted inside the warehouse could potentially contain PCBs. However, a few of these ballasts were labeled “contains no PCBs”).

3.4.4 Environmental Conditions on Adjoining Properties

Patent Scaffolding Company, located on the northern adjoining parcel is a registered SQG facility on the RCRIS database; however, no information regarding handler activities was available in readily accessible records. No other information regarding the type and/or quantity of hazardous waste transported was available in readily accessible records. No unusual activities were noted on this property at the time of the site inspection.

Universal Builders Supply which adjoins the subject property to the north, is a PBS facility with eight active tanks, and a total storage capacity of 4,800 gallons. Evidence of these tanks was not observed during the site inspection. There was also a 275-gallon fuel oil AST noted at White Horse Liquors on the eastern adjoining properties during the site inspection.

Also noted during the site inspection was a large dumping area on the western adjoining property near the on-site wetland on the western-central property border. The debris on this parcel included various metal pipes, drums, scaffolding posts, metal building materials and other various materials. The amount of debris in the subsurface could not be determined. This debris may extend below the surface and no statement regarding the quantity present can be made.

4.0 Conclusions and Recommendations

This Phase I ESA has been performed in conformance with the scope and limitation of ASTM Practice E 1527-97 on the approximately 21.8-acre property and structures located at 68 South Broadway in the Village of Red Hook, Dutchess County, New York as described in Section 2.0, above. This Phase I ESA has revealed no evidence of potential recognized environmental conditions in connection with the property with the exception of the items detailed below. With respect to these conditions, the following conclusions and recommendations (in **bold**) are made.

1. Information obtained during a review of historic photographs, municipal records, and information provided by the property representative indicates that the on-site structures have been present on the subject property since the mid-1950s. The subject property was used as an apple processing facility since 1949 and was also a frozen food processing and packaging plant from 1955 to some time after 1981. Apple orchards were located on the western portion of the subject property during the 1950s and 1960s. It is believed that the subject property has been vacant for approximately 10 to 15 years. At the time of the site inspection there were five structures on the subject property which were all in poor condition.

   No further investigation of historic records is recommended. See recommendations in paragraphs #2, and #3, below with respect to the historic usage of the property as an apple processing facility.

2. Three water supply wells are located on the western portion of the subject property. These wells are not currently in use. Based on available information, it was believed that the wells formerly yielded 100 gallons per minute (gpm), but are now filled with sand. In 1981, the private water supply was approved for Orchard Hill Farms. In 1985, the DCDOH approved the subject property to be used as a emergency water source by the Village of Red Hook.

   A Part 5 laboratory analysis and biological testing was conducted on the three wells in 1981 and 1997. Sampling was also conducted in 1985 but no information regarding the analytes was available, with the exception of a reference to the absence of high levels of arsenic. A pump test was also performed in 1997. All of the samples which were analyzed in 1997 had contaminant levels below NYS Part 5 maximum containment levels except for Arsenic (0.10 mg/L) and total coliform test. The source of this elevated level was hypothesized to be attributable to the digestion of sediments into the water. Other potential sources of arsenic contamination were stated to be: industrial contamination, industrial poisons and herbicides/pesticides and contamination from waste-chemical disposal practices. It was recommended that the well be resampled and that testing for dissolved, suspended and total arsenic be conducted to determine what portion of the arsenic level was attributable to turbidity. Sampling of the a nearby pond was also recommended.

   In the opinion of this office, the presence of arsenic in the groundwater could be related to the historic usage of the property as an orchard and as an apple processing facility. Apple processing wastes may have been re-used on-site or discharged to the on-site wastewater treatment facility. The three on-site wells are located topographically downgradient of the wastewater treatment facility. No sampling for pesticides is known to have been conducted.

   It is recommended that a sample from the on-site water supply system and surface soil samples from the vicinity of the wells be tested for pesticides, arsenic and lead. See also recommendation in Paragraph #3, below.

   In the event that on the subject property is to be used as a potable water supply source, additional sampling should be conducted in accordance with local and state Department of Health requirements.

3. An on-site wastewater treatment system which formerly served the subject property is located on the central portion of the property. The aeration pool and septic pool associated with this facility were observed during the site inspection. Approximately 10 floor drains were noted on the northern packaging/storage area in the warehouse. Additional floor drains may be present in other areas of the structure or in other structures, however, the large amount of debris and the present conditions of the structures prevented a full site inspection. These floor drains are believed to discharge into the on-site wastewater treatment facility. The wastewater treatment facility is currently not in operation.

   Given the historic usage of the subject property as an apple processing facility, wastes generated from these activities may have been discharged to the wastewater treatment facility. This facility is located upgradient from the on-site water supply wells.

   a) It is recommended that subsurface soil samples be collected from the vicinity of the wastewater treatment facility components to document the presence or absence of elevated levels of arsenic and lead.

   b) If future use of this system is not anticipated, it is recommended that this wastewater treatment facility and the floor drains be closed in accordance of all local, state and federal regulations.

   c) If this facility is to be used it is recommended that the system be evaluated to determine which federal (NPDES), state (SPDES) and local permits and monitoring regimes are required.

4. Two gasoline pumps with attached fill ports and vent pipes were noted on the in the central portion of the subject property, near the edge of the grass lots. There was also a possible fill port and vent pipe located in between the two gasoline pumps. These pumps and fill ports/vent pipes may indicate the presence of on site USTs. Located between the two pumps are two pumps of unknown utility which could be located to the possible on-site USTs. Federal regulations require that all gasoline tanks installed prior to 1988 be upgraded, closed, or replaced by December 1998. Any gasoline tanks located on the property are likely to have been installed prior to 1988 and therefore require removal.

   It is recommended that all on-site gasoline tanks be removed and properly disposed of in accordance with all applicable local, state, and federal regulations. Documentation of the integrity of the subsurface soils in the vicinity of the on-site USTs should be obtained prior to or at the time of tank closure.

   Subsequent to their closure, it is also recommended that a PBS form accurately representing the subject property's PBS capacity and the status of each tank be submitted to the NYSDEC.

5. Fifteen, 100-pound bags of aluminum sulfate, used for on-site water treatment, were noted inside the shed during the site inspection. These bags were unsealed, and no staining was noted on the floor surrounding the storage area. However, the large quantity of debris on the floor of the shed made it difficult to examine all areas of the floor.

   It is recommended that these chemicals be collected and disposed of offsite according to all state and federal regulations.

6. An approximately 35 cubic yards of debris consisting of old packaging materials, cardboard boxes, Styrofoam, wooden grates, glass and plastic bottles, broken ceiling tiles and ceramic tiles, empty drums, an empty 275-gallon AST and other miscellaneous liter were noted in various areas of the subject property.

   It is recommended that all debris materials be segregated into appropriate waste streams (i.e., those which can be disposed of as solid waste and those which require special handling) and be disposed of in accordance with applicable regulations.

   It is also recommended that building demolition materials be managed in accordance with applicable local, state and federal regulations, including as necessary, sampling and analysis of materials for asbestos and leachable concentrations of lead.

7. Asbestos-containing materials could potentially be present on the subject property. No asbestos survey is known to have been conducted. Suspect 9" x 9" linoleum floor tiles, corrugated, aircell pipewrap insulation and joint compound was noted in the office area of the warehouse. Also, the roofing materials on all the structures may contain asbestos. Building construction materials (e.g., roofing, plaster, etc.) could potentially contain asbestos.

   It is recommended that any suspect material encountered during maintenance, renovation or demolition activities be tested for asbestos or be treated as though it were asbestos in the absence of analytical data. All maintenance, renovation, or demolition activities should be conducted in accordance with applicable regulations.

8. Lead-based paint could potentially be present on the subject property. A lead-based paint survey is not known to have been conducted. All of the painted surfaces of the areas inspected by this office were in good condition at the time of the site inspection and are likely to have been painted multiple times. However, no statement can be made by this office regarding the presence or absence of LBP in underlying layers of paint.

   It is recommended that any suspect material encountered during maintenance, renovation or demolition activities be tested for lead or be treated as though it were LBP in the absence of analytical data. All maintenance, renovation, or demolition activities should be conducted in accordance with applicable regulations.

9. Eight pole mounted transformers were noted on the subject property. These transformers are owned by the subject property owner who would be responsible for the cleanup of a release. No staining indicative of a release was noted on the units, the poles, or on the ground around the base of the poles. The flourescent light ballasts which were noted inside the structure could potentially contain PCBs. However, a few of these ballasts were labeled “contains no PCBs”).

   It is recommended that the fluid inside the on-site transformers be tested for the presence of PCBs. It is also recommended that any other equipment which could potentially contain PCBs or materials contaminated with PCBs encountered during maintenance, renovation, or demolition activities be handled, removed, and disposed of in accordance with applicable regulations.

10. Observations made during the site inspection revealed the presence of a 275-gallon fuel oil AST at White Horse Liquors, the eastern adjoining property. No staining indicative of prior spills were noted on or in the vicinity of the tank.

    No further investigation is recommended.

11. Universal Builders Supply which adjoins the subject property to the north, is a PBS facility. This facility has eight active tanks, and a total storage capacity of 4,800 gallons. No spills were registered with the NYSDEC as having occurred on this property. However, a spill event which was to occur on this adjoining property could potentially impact the subject property.

    It is recommended that the subject property owner periodically review the NYSDEC spills database to determine if any spills occur on the adjoining parcel.

12. A large dumping area is located on the western adjoining property near an on-site wetland present along the western-central property border. The debris on this parcel included various metal pipes, drums, scaffolding posts, metal building materials and other various materials. The amount of debris in the subsurface could not be determined.

    It is recommended that the local municipality and the NYSDEC Division of Solid Waste be contacted regarding this dumping site, and that the adjoining property owner be held responsible for removing the debris from the subject property. Following the cleanup, it is recommended that the on-site dumping area be analyzed for any remaining subsurface debris or contamination.

13. Thirty eight spill events are recorded with the NYSDEC for areas located within 0.5 mile of the subject property. Spill closure dates have been provided by the NYSDEC for all, but three of these events and NYSDEC cleanup standards were met for all but twelve of these events. Based on the available information, spill events which were to occur are not likely to have impacted the subject property.

    No further investigation is recommended.

5.0 Sources of Information

5.1 Regulatory Records Review

USEPA National Priorities List (NPL)

ASTM Database Search:1.0 mile Updated: June 1999	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: June 1999	Listing of abandoned, inactive or uncontrolled hazardous waste sites which the USEPA has investigated or is currently investigating for inclusion on the NPL.

USEPA Resource Conservation and Recovery Information System (RCRIS) Corrective Action Activity (CORRACTS) List of Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF)

ASTM Database Search: 1.0 mile Updated: July 1999	Listing of facilities regulated under the Resource Conservation and Recovery Act (RCRA) that treat, store and/or dispose of hazardous waste with corrective action activity.

USEPA Resource Conservation and Recovery Information System (RCRIS) Non-CORRACTS List of Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF)

ASTM Database Search: 0.5 mile Updated: July1999	Listing of facilities regulated under the Resource Conservation and Recovery Act (RCRA) that treat, store and/or dispose of hazardous waste which are not subject to corrective action.

NYSDEC Registry of Inactive Hazardous Waste Disposal Sites and Solid Waste Disposal Facilities

ASTM Database Search: 1.0 mile Updated: April 1998	Listing of facilities subject to investigations concerning likely or threatened releases of hazardous substances from those facilities.

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

ASTM Database Search: 0.5 mile Updated: July 1998	Listing of active and inactive landfills, transfer stations and solid waste disposal facilities.

NYSDEC Leaking Underground Storage Tanks (LUSTs)

ASTM Database
Search: 0.25/0.5 mile
Updated: April 1999

Subset of NYSDEC Chemical and Petroleum Spills Database (see below) listing all reported leaking underground storage tanks.

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

ASTM Database
Search: Target/Adjoining Properties
Updated: July 1999

Listing of facilities regulated under the Resource Conservation and Recovery Act (RCRA) that generate hazardous waste.

USEPA Emergency Response Notification System (ERNS)

ASTM Database
Search: Target Property
Updated: June 1999

Listing of releases of petroleum, chemical and/or hazardous substances into the environment as reported to the USEPA and Coast Guard.

NYSDEC Petroleum Bulk Storage Tank Records (PBS)

ASTM Database
Search: Target/Adjoining Properties
Updated: April 1999

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 Properties
Updated: April 1999

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 Resource Recovery Projects in New York State

Non-ASTM Database
Search: 1.0 mile
Updated: January 1999

Listing of active resource recovery facilities.

USEPA Resource Conservation and Recovery Information System (RCRIS) List of Hazardous Waste Transporters

Non-ASTM Database
Search: 1.0 mile
Updated: July 1999

Listing of facilities regulated under the Resource Conservation and Recovery Act (RCRA) that transport hazardous waste.

NYSDEC Major Oil Storage Facility Records (MOSF)

Non-ASTM Database Search: 0.5 mile Updated: April 1999	Listing of facilities storing 400,000 gallons or greater of petroleum product.

NYSDEC Petroleum and Chemical Spill Records

Non-ASTM Database Search: 0.25/0.5 mile Updated: April 1999	Listing of all petroleum, chemical or hazardous substance releases reported to the NYSDEC.

USEPA National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge Permit Records

Non-ASTM Database Search: Target/Adjoining Properties Updated: July 1999	List of significant State Pollutant Discharge Elimination System (SPDES) wastewater discharge permitted facilities. Facilities are considered significant based on several characteristics including volume of discharge, size of receiving stream, and toxicity of effluent.

NYSDOH Basement Radon Readings

Non-ASTM Database Updated: July 1998/March 1999	Listing of average radon levels by Municipality and County as of March 1999, and by Postal Zip Code as of March 1999.

5.2 Maps and Documents

Aerial photographs dated 1966, 1985, and 1995, available for viewing at the Dutchess County Soil and Water Conservation District Office.

Bissell, Merril & Associates, Wastewater Facilities Report, dated 1971.

Dutchess County Soil and Water Conservation District, Dutchess County Soil Survey Users Guide, dated September 1991.

New York State Department of Environmental Conservation Freshwater Wetlands Map of the Kingston East, New York Quadrangle, dated 1973.

Town Meeting Notes, dated April 26, 1999.

United States Department of the Interior Federal Wetlands Map of the Kingston East, New York Quadrangle, dated 1994.

United States Geographic Survey Topographic Map of the Kingston East, New York Quadrangle, dated 1973, (photorevised 1991).

5.3 Local Agency Records

Village of Red Hook Building Department records, requested September 10,1999.

Town of Red Hook Assessor's Office records, reviewed September 10, 1999.

5.4 Communications

Scott Chase, Executive Director of Dutchess County Water and Wastewater, various dates September 1999.