Historical Investigation Report - Former Pelham Gas Works (Site #V00565)

Pelham Manor, New York

Prepared by:

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RETEC Project Number: CECN1-15957-400

Prepared for:

Consolidated Edison Company of New York, Inc.
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New York, NY 10003

February 14, 2003

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Executive Summary

The RETEC Group, Inc. (RETEC) has prepared this historical investigation report for Consolidated Edison of New York, Inc. (Con Edison). This report is part of a comprehensive program to research and assess the history of sites formerly used by Con Edison's predecessor companies for the manufacture and/or distribution of gas, and documents the historic and current conditions of the sites.

The purpose of this historical investigation program is to support Con Edison in its negotiations with the New York State Department of Environmental Conservation (NYSDEC), to support Con Edison's efforts to rank manufactured gas plant (MGP) site investigation priorities, and to provide a starting point for future site investigations. This report presents the summary of the research and findings for the former Pelham Gas Works site located at the intersection of Pelham Parkway and Boston Post Road in the Town of Pelham, Village of Pelham Manor, Westchester County, New York (Site #V00565).

As part of its historical investigation, RETEC reviewed a number of sources to assess the historical ownership and operations of the MGP, subsequent site uses, and current site conditions. These sources included historical records obtained from private and public repositories, a chain-of-title search, tax and zoning records, and geologic reports for the general area.

In addition, RETEC visited the former MGP site on May 1, 2002 to:

- assess current site environmental conditions and property use;
- perform a visual inspection for the presence of potential MGP residuals on the site and surrounding properties; and
- identify potential receptors that may be at risk if MGP residuals or other by-products are present.

From our records review and site reconnaissance, RETEC was able to determine the following about the former Pelham Gas Works MGP site:

- The site included property extending to Pelham Parkway to the north and northeast, to Boston Post Road to the southeast and to the Hutchinson River Eastchester Creek Channel to the west. The property extended to the southwest to a point on Boston Post Road directly across from Mt. Owen Avenue. This southwest portion of the property is located in the City of New York, Bronx County.
- The site is located in what is currently a mixed industrial/commercial business area. The site use is zoned business. There is a Con Edison electrical substation and a strip mall currently occupying the site, with

the primary store being a Kmart department store. There are smaller stores adjacent to the Kmart. There is also a bank and automotive repair shop located to the east along Pelham Parkway and the remainder of the property is an asphalt parking lot.

- The soil along the bank of the Hutchinson River was observed at approximately 4.5 feet below the ground surface of the current site surface elevation. The soil had a light hydrocarbon-like odor. A corrugated metal pipe and a corroded cast iron pipe were observed to be protruding from the bank at approximately four feet below ground surface. Residuals were not observed in the pipes, and the pipes did not appear to be in use. Coal fragments were seen along the channel bed and bank. There are no current visible indications of any MGP structures or MGP residuals on the site.

- The MGP site operated from between 1896 and 1899 until 1958

- The first utility owner, Pelham Gas Light Company purchased the site property in 1896. In 1901, the MGP became incorporated into the Westchester Lighting Company, which later merged into Consolidated Edison Company. The last utility owner, Consolidated Edison Company sold the property in 1965, however, they continued to lease the site and maintain equipment on the property until 1968.

- The Pelham Works produced gas via coal carbonization and carbureted water gas processes. Residuals associated with these processes include tar (containing volatile compounds, PAHs, and phenolics), purifier residuals, ammonia residuals, clinker, coke, gas purification residues, tar/water emulsions, and wastewaters. Subsurface structures containing residuals may remain at the site, as the limited information regarding decommissioning of the site did not describe details of the removal of site structures or the disposition of residuals from MGP operations. Con Edison continued to use the site as a natural gas/propane plant after the MGP ceased operations.

- Other operations that may have impacted the site include the presence of electrical transformer banks. Transformers are present along Pelham Parkway on Con Edison property.

- The use of the site as a shopping center may have generated some residuals, however, products associated with retail operations of a store such as Kmart, typically were stored in indoor areas. Additionally, the pavement at the site may have prevented the residuals from infiltrating the surface. Residuals associated with products used to de-ice the parking lot in winter have the potential to impact the site soil and groundwater if infiltration through cracks

occurred. A bank of electrical transformers is also located at the southwest side of the department store building.

- Given the past uses of the site, there may be residuals remaining in the subsurface, either in subsurface structures or in soil or groundwater underlying the site.

- Potential receptors to residuals remaining on the site include consumers and workers of all kinds, but since the site is completely covered the potential for direct contact exposures is minimal. Direct contact exposure is possible along the site boundary at the Hutchinson River bank. Excavation workers may be exposed to residuals in subsurface soil, should excavation be necessary.

- In addition, groundwater containing residuals has the potential to migrate offsite to the Hutchinson River or to the properties to the southwest of the site. Groundwater is not used on the site, and none of the wells mapped as present within a one-mile radius of the site are used for potable purposes.

1 Objective

The RETEC Group, Inc. (RETEC) has prepared this historical investigation report for Consolidated Edison of New York, Inc. (Con Edison). This report is part of a comprehensive program to research and assess the history of sites formerly used by Con Edison's predecessor companies for the manufacture and/or distribution of gas, and to report on the historic and current conditions of the sites. These sites are located in New York City and Westchester County. The purpose of this historical investigation program is to support Con Edison in its negotiations with the New York State Department of Environmental Conservation (NYSDEC), to support Con Edison's efforts to rank manufactured gas plant (MGP) site investigation priorities, and to provide a starting point for future site investigations. This report presents the summary of the research and findings for the former Pelham Gas Works MGP site in the Town of Pelham, Village of Pelham Manor, Westchester, New York.

The report consists of eleven sections and eight appendices:

- Section 1 provides an introduction to the report objective, the investigative methodologies and processes, and a summary of the limiting conditions of this report.
- Section 2 presents a property description.
- Section 3 provides a summary of the current site use and site reconnaissance.
- Section 4 presents the site setting, including site geology, topography, zoning, demography, and neighboring property description.
- Section 5 presents a summary of the past site ownership according to the chain-of-title and tax records, and supplemented by historical records as appropriate.
- Section 6 presents a summary of past site operations, including potential residuals associated with site use and any significant reconstruction or excavation activities that took place on the site.
- Section 7 provides a summary of the environmental and regulatory agency database searches for the site and surrounding areas.
- Section 8 discusses potential exposure pathways based on past site operations and human and environmental receptors to residuals from the site.

- Section 9 provides a discussion of the accuracy and completeness of the research conducted and offers conclusions to this historical component of investigative activities at the site.

- Section 10 summarizes the findings of the historical investigation and presents the information in a manner that can be used for further assessment of the site.

- Section 11 presents a list of references used in this report.

- Appendices A through H provide the documentation that was gathered during this historical investigation.

RETEC reviewed a number of sources to assess the historical ownership and operations of the MGP, subsequent site uses, and current site conditions. These sources include historical records obtained from private and public repositories (e.g., Con Edison resources, federal, state, and local agencies), a chain-of-title search, tax and zoning records, a review of geologic reports for the general area, and a site reconnaissance. A report checklist summarizing the review requirements and our findings is provided in Appendix A. A detailed list of the sources reviewed and the findings are provided in Sections 5, 6, and 7 of this report.

The findings presented in this historical investigation report are based on the scope of work agreed to by Con Edison and the data that could be obtained in the course of this process. The availability of historical records may be limited by a number of factors, including the size and duration of MGP activities at the site, the record keeping practices of the time, and local interest in the property. An assessment of the current site conditions may be limited by current site ownership and access, the ability to assess only general geologic conditions and lack of site-specific data, and availability of public records.

The opinions presented in this report are in accordance with currently accepted hydrogeologic and engineering standards and practices. This report may be based, in part, on unverified information supplied to RETEC by third-party sources. While efforts have been made to substantiate this third-party information, RETEC cannot guarantee the completeness or accuracy of such information.

This historical investigation report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local governmental agencies. Any use of this historical investigation report constitutes acceptance of the limits of RETEC's liability. RETEC's liability extends only to its client and not to any other parties who may obtain the report.

2 Property Description

This section includes a description of the property based on the furthest extent of the MGP boundaries, the site size, and the current tax map designations for parcels located within the former MGP boundaries.

2.1 Site Location and Property Boundaries

The former Pelham MGP site was located at the intersection of Pelham Parkway and Boston Post Road in the Village of Pelham Manor, Westchester County, New York. The site location is illustrated in Figure 2-1. The property begins at the intersection of Pelham Parkway and Boston Post Road to the north and northwest, south along the Hutchinson River to the west [Sanborn Maps]. The property extends to the southeast to a point on Boston Post Road directly across from Mt. Owen Avenue [1935 Sanborn Map]. This southwest portion of the property is located in the City of New York, Bronx County. The entire property encompasses approximately 21.3 acres [Sanborn Maps; Con Edison Property Record, 1961]. The coordinates for the site are approximately N 40°53'30.2" latitude and W 73°49'15.3" longitude.

2.2 Tax Designation

Con Edison identified the following lots in the summary of MGPs prepared for the application to the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program:

- 847 Pelham Parkway, Pelham, NY, Section 166.34 Block 1 Lot 1;
- 4325 Boston Post Road, Bronx, NY, Section 18 Block 5655 Lot 300.

In addition to these parcels the following was also part of the Pelham Gas Works property:

- Section 166.34 Block 1 Lot 2.

This third parcel is currently owned by Con Edison and is used as the site of an electrical transformer substation.

Con Edison also owns a permanent easement to a 20 foot by 360 foot strip of land along the northwest side of the property for maintenance of a gas pipeline and pipe bridge across the Hutchinson River which was part of the former MGP property (Figure 3-1).

3 Current Site Use

This section provides a summary of the current site use and the site reconnaissance conducted by RETEC for the Pelham former MGP site.

3.1 Site Use

The Pelham former MGP site is currently used for commercial purposes as the site of various retail sales stores. The property of the Pelham former MGP site was graded and paved, according to correspondence between Con Edison and the Town of Pelham in 1968. This property was turned into a shopping center around 1970 and it continues to be used for these purposes. The site is currently occupied by a strip mall, with the primary store being a Kmart department store. The present occupant of the shopping center, Kmart, indicated that the store at this location is to be closed. It is not known if the property will continue in its present use as commercial property. There are smaller stores adjacent to the Kmart, and a bank and automotive repair shop located to the east along Pelham Parkway. The remainder of the property is an asphalt parking area. The current site layout is illustrated in Figure 3-1.

3.2 Site Reconnaissance

A team of RETEC geologists and environmental engineers visited the location of the former Pelham MGP site on May 1, 2002. The purpose of the reconnaissance was to:

- assess current site environmental conditions and property use;
- perform a visual inspection for the presence of potential MGP residuals on the site and surrounding properties; and
- identify potential receptors that may be at risk if MGP residuals or other by-products are present.

During the site reconnaissance the inspection team documented their observations in a bound field notebook, and took photographs of the site. A photographic log of the site reconnaissance is provided in Appendix B. The inspection team accessed the site, walked the perimeter of the property and inspected an accessible portion of the Hutchinson River bank adjacent to the site property to make observations.

The last owner according to the chain-of-title search on September 28, 1998 is Janice H. Levin for the Westchester County portion of the property. The last owner according to the chain-of-title search on September 25, 2002 for the Bronx County portion of the property is Janice H. Levin (deceased) willed to William A. Farber and Paul Skwiersky as co-Trustees of three trust funds. The

current on-site structures at the Pelham former MGP site include a large shopping complex (Kmart and other small shops), an automotive repair shop, a bank, and a paved parking area surrounding the shopping centers and covering the whole area of the site. The Hutchinson River bounds the site on the west, Boston Post Road bounds the site on the southeast, Pelham Parkway bounds the site on the north and northeast and a Getty petroleum sales terminal bounds the southwest potion of the site. Commercial and industrial properties bound the whole perimeter of the site property. Figure 3-1 illustrates the property and adjoining streets.

RETEC was able to walk on the paved areas around the entire site. The current site surface is approximately 70% covered by parking lots and the other 30% is shopping center buildings (Figures 1-3 in Appendix B photo log). There were no visual indications of MGP residuals on the surface of the property. The pavement was cracked in places.

The interiors of the site buildings were not inspected during the site visit. The buildings are of single-story construction, and it is not known if there are basements in the shopping centers (construction records for the shopping centers were not found).

There are overhead utility lines along the streets. It is unknown if subsurface utility lines exist on the site, however subsurface lines are likely to be present in association with the commercial businesses. A storm drain is located in the paved parking area north-northeast of the main shopping center.

Off-site property use includes Rossini Contracting Corp. to the northwest, Getty and closed-down Mobil gas stations to the east-southeast, an asphalt plant across the Hutchinson River to the west-southwest, and a Getty petroleum sales terminal to the south-southwest.

The Hutchinson River is the nearest surface water body to the former Pelham MGP site, forming the western property boundary. The river is approximately 40-feet wide at the site and contained within a man-made channel. The depth of the channel in the area of the site was not determined; it appears to be maintained for navigation as the Pelham Parkway crosses the river using a drawbridge. The bank of the river is partially covered with riprap, concrete fragments, and industrial debris, some of which was in the water. Rocks and mud, along with some concrete and brick fill material make up the exposed portions of the riverbed. A pipe bridge extends over the channel adjacent to the site. At the time of the site reconnaissance, the water in the channel near the site was stagnant and had a bio-sheen appearance, likely due to algae. It is likely that the river was at a slack-water state at low tide, as the river is tidal at this location with a tide range of approximately five to six feet. There were no visual indications of MGP residuals in the river at this location.

Most of the bank along the river is protected by bulkheads; however, at one location where a bulkhead was not constructed the soil was observed along the bank of the river to 4.5 feet below the ground surface at the current site surface elevation (see Picture 7 in Appendix B). The soil appeared to be composed of fill, with bricks, concrete, and coal observed at different levels. At approximately one to three feet below the ground surface the soil had a light hydrocarbon-like odor. A corrugated metal pipe and a corroded cast iron pipe were observed to be protruding from the bank at approximately four feet below the ground surface. Residuals were not observed in the pipes, and the pipes did not appear to be in use. Coal fragments were seen along the channel bed and bank.

The site reconnaissance also identified that there are no schools or day care centers within 0.25-mile of the former MGP site.

4 Site Setting and Demography

This section provides the current zoning characteristics for the Pelham former MGP site and surrounding area and a description of the physical setting of the site, including geological and hydrogeological characteristics.

4.1 Characteristics of Site and Neighboring Properties

The Pelham former MGP site is located in a mixed industrial-commercial business area. The site itself is used for retail commercial business purposes. Commercial and industrial businesses surround the site property.

The neighboring properties include the following:

- Getty gas station and a closed-down Mobil gas station to the east;
- The Hutchinson River and Rossini Contracting Corp. to the northwest;
- Across the Hutchinson River, there is an asphalt plant to the southwest; and
- Getty petroleum sales terminal to the southwest.

The U.S. Census Bureau's records from the 2000 Census were used to determine the demographics for the site and surrounding area. The census showed that Pelham had a population of 5,466 people. The area surrounding the site was identified in the 2000 Census as Census Tract 55, Westchester County, New York (see Figure 4-1). The population for this area is 2,319 people.

4.2 Physical Setting

4.2.1 Site Topography and Surface Drainage

The 1969 U.S. Geologic Survey (USGS) topographic map for the Mount Vernon, New York Quadrangle was reviewed to provide information about the topography of the site. The map shows that the site is moderately sloped from the intersection of Pelham Parkway and Boston Post Road (29 feet MSL) to the east to the Hutchinson River, which borders the site to the west (13 feet MSL) with an overall change of 16 feet.

Based on the topography of the general area, the surface water is expected to run off the site to the west or southwest via sheet flow and then discharge into the Hutchinson River, which bounds the site along the western edge of the

property. The Hutchinson River is designated as Class SB saline surface water. Class SB surface water is defined as follows: "Best usages are primary and secondary contact recreation and fishing. Waters shall be suitable for fish propagation and survival." According to the database search completed by Environmental Data Resources (EDR) on behalf of Con Edison, the site is within a mapped Federal Emergency Management Agency (FEMA) 100-year flood zone. A map of the site location and the flood zone area is provided in a map in EDR's report in Appendix C.

The site itself is not mapped as a designated wetland area. The western shoreline of the Hutchinson River across from, and northwest of, the site are mapped as wetland areas.

4.2.2 General Site Geology

The Surficial Geology Map of New York – Lower Hudson Sheet [Cadwell, 1989] was reviewed to obtain information about the surficial deposits at the site. The map shows that a thin layer of glacial till material is likely to be present at the site. The formation is comprised of silty clay with occasional boulders. According to information presented on the map, the till is expected to have low permeability. Based on current and historical maps of the area, it is likely that the surficial soils prior to filling and site development were composed of saltwater wetland deposits associated with the Hutchinson River floodplain.

The Geologic Map of New York published by the New York State Museum of Science [Fisher, 1970] was reviewed to provide information about the bedrock geology at the site. The site is located in the Manhattan Prong, which is a geologic sub-province of the New England Upland physiographic region of New York that encompasses most of Westchester County. The bedrock at the site is the Hartland Formation, which is Cambrian in age. This formation is a metamorphic rock comprised of a basal amphibolite, which is overlain by pelitic schists. The estimated depth to bedrock is approximately 10 feet below ground surface.

4.2.3 General Site Hydrogeology

Groundwater flow direction is assumed to mimic the surface topography that slopes from the northeast to the west/southwest. It is assumed the groundwater discharges into the Hutchinson River, which bounds the site to the west; however, this was not directly tested during the site reconnaissance. The depth to groundwater in the vicinity of the site is expected to be approximately 10 feet below ground surface, based on the elevation of surface water in the Hutchinson River and on information for a well near the site obtained from a Federal and State well database search completed by EDR (Appendix C). The Hutchinson River is tidal at the site, with a tide range of approximately five to

six feet; therefore it is possible that the water table beneath portions of the site may fluctuate with the tides.

A map entitled “Unconsolidated Aquifers of Westchester County, New York” [Keneally, June 2001] was reviewed to determine if the site is located within the footprint of a significant unconsolidated groundwater aquifer. The map does not show any significant aquifer within, or in close proximity to the footprint of the site.

A well search of both Federal and New York State databases was completed to determine if water wells are present in the vicinity of the site. A total of six wells were identified within a one-mile radius of the site. The locations of the wells are provided on the Physical Setting Source Map in the EDR database search results in Appendix C. All of the wells are located upgradient to the west of the Hutchinson River, which is expected to act as a local groundwater divide.

Records for two wells drilled in the vicinity of the site were found in *The Ground Water Resources of Westchester County* [Asselstine and Grossman, 1955]. Both wells were located west of the Hutchinson River, upgradient of the MGP site. One of the wells was located approximately 0.25-mile northwest of the MGP site along the north side of South Columbus Avenue. There were no records for this well indicating the depth to bedrock or the water table, or the soil type. The bedrock is identified as "schist." This well was abandoned after drilling because the hardness of the water was so great as to make water-softening costs prohibitive.

The other well was located approximately 0.5-mile northwest of the MGP site. There were no records for this well indicating at what depth the bedrock was found. The overburden is reported to be 10 feet thick, with a water table 14 feet below the ground surface. This well was drilled to 315 feet below the ground surface into schist bedrock, and was abandoned after drilling. The reason for the abandonment is unknown.

Groundwater at the site is expected to be at a depth of approximately 10 feet below ground surface. Groundwater in the vicinity of the site is classified as GA - fresh groundwaters with best usage as a source of potable water supply. However, this area is not classified as a primary water supply aquifer or a principal aquifer.

5 Past Site Ownership

The ownership history of the former Pelham Gas Works site was established using historical and current records from the earliest record of the site, through the time of the MGP operations, to the present time. A list of the records reviewed and a description of each is provided below, followed by a summary of site ownership as established using all the resources that were identified.

5.1 Records Reviewed

5.1.1 Brown's Directory of American Gas Companies

Brown's Directory of American Gas Companies (Brown's Directory) began publication of gas companies' statistics in 1887 and continues into recent times to provide information on currently operating gas companies. RETEC reviewed the available Brown's Directories for the years 1887 through 1957, which covers the operational period of most MGPs, to determine site ownership and operational information for the Pelham MGP. Years that are not available in the public domain and are therefore unavailable for review are 1888, 1895 through 1898, and 1952-1953. It is noted that Brown's Directory may not distinguish between two or more sites, if they were operated simultaneously by the same company. The results of the Brown's Directory search for the Pelham site are provided in Table 5-1.

From 1899 through 1900, the Brown's Directory reports operational information for the Pelham Gas Light Company. In 1900, the site operated under the name New York Suburban Gas Company before merging with the Westchester Lighting Company around 1901. In 1901, gas production from all Westchester Lighting Company plants were combined together.

As early as 1905, the Consolidated Gas Company (predecessor to Con Edison) secured financial control of the Westchester Lighting Company of Mount Vernon, New York; however, the Westchester Lighting Company still continued to operate as an affiliate. In 1936, Consolidated Gas Company became Consolidated Edison Company, and the affiliation with the Westchester Lighting Company of Mount Vernon continued. In 1951, the Westchester Lighting Company was fully merged into Consolidated Edison as the Westchester Division.

5.1.2 Public Service Commission Reports

The New York Public Service Commission (PSC) Reports for the years 1907 to 1968 were reviewed to determine the ownership and operational history of the Pelham MGP site. According to the 1911 PSC report, the Westchester Lighting Company was incorporated on November 5, 1900 under the Transportation Corporations Law. On December 1, 1900, the New York Suburban Gas Company (incorporated March 9, 1899) was merged into the Westchester Lighting Company. The Pelham Gas Works was operated at that time as a branch works of the New York Suburban Gas Company. The reports also indicated that the Westchester Lighting Company served the territory of the Town of Pelham from 1907 until its merger with Consolidated Edison Corporation in 1937 and that Consolidated Edison provided service thereafter.

The PSC reports provided site-specific information for the Pelham MGP site starting in the year 1914. The 1914 PSC Report indicated that coal gas and water gas were produced at the Pelham site. By 1915, only water gas was being produced. Beginning in the early 1930s, the Pelham MGP was put on stand-by service that continued until approximately 1951, with the plant operating intermittently in the 1940s to produce water gas.

The 1944 PSC report indicated that equipment at the site at that time included one station, six water gas sets, (one water-gas set was retired from service during the year), one 350,000-cubic foot relief holder, and 13 storage holders totaling 11,854,100-cubic feet. In 1947, the Westchester Lighting Company completed installation of a liquid petroleum system at its Pelham Gas Works. Some of the water gas sets continued to be maintained for stand-by service. In 1951, the remaining water gas sets were converted to oil gas for peak production. Installation of vaporizing and mixing equipment to produce Liquid Propane (LP) -air gas also occurred in 1951. By 1958, propane tanks and associated equipment were installed to increase peak production capacity.

5.1.3 Chain-of-Title Search

A deed chain-of-title search was performed by Commonwealth Land Title Insurance Company on behalf of Con Edison for the Pelham site. The chain-of-title search was conducted to establish the ownership history of the site from the time immediately prior to utility company ownership to the present-day. The results of the chain-of-title search are included in Appendix D, and a summary of the property ownership is provided in Table 5-2.

Note that the title search for this site was conducted in two parts. The portion of the site within Westchester County was researched by Commonwealth's White Plains office, and the results were stated as being valid through May 1, 2002. The New York City portion of the site was researched by Commonwealth's New York City office; this search noted that the search was

valid through September 25, 2002. This is significant, because the search for the New York City parcel found that the entire site had undergone a change in ownership after the conclusion of the Westchester search.

The first utility to own the property located in Pelham was the Pelham Gas Light Company of Pelham, who bought the property in Pelham from private property owners in 1896. According to the chain-of-title, the Pelham Gas Light Company merged into the Westchester Lighting Company on December 1, 1900. The property was conveyed to the New York and Westchester Lighting Company on July 12, 1904, and the New York and Westchester Lighting Company and Westchester Lighting Company merged on October 20, 1904. The property was sold to the County of Westchester on May 19, 1927 (which had since merged into Consolidated Edison Company of New York Inc.). The last utility to own the site property was Consolidated Edison Company of New York Inc., which sold most the property in June 1965 to Barbara Realty Corp. A small portion of the property, a lot 100 feet by 109 feet in size (Lot 2) at present is retained by Con Edison for continued use as an electrical substation. According to the chain-of-title search on September 28, 1998 the last and current owner was Janice H. Levin

The chain-of-tile search for the New York City portion of the site did not identify property ownership prior to 1904; the first property transaction listed for this lot was the transfer of the property from Westchester Lighting Company to the New York and Westchester Lighting Company on October 20, 1904. Consolidated Edison Company of New York Inc. sold the property to Barbara Realty Corp. in June 1965. The final transaction occurred on June 1, 2002 where the executors of the will of Janice H. Levin conveyed fractional interest in the property, as specified in her will, to three Trusts (thirty percent each), with the final ten percent conveyed to the co-trustees of the trust.

5.1.4 Historical Maps

Historical Sanborn Fire Insurance Maps (Sanborn Maps) were obtained from Con Edison for the Pelham MGP site. Sanborn Maps were available for the years of 1918, 1932, 1935, 1942, 1950, 1951, 1975, 1977, 1981, 1986, 1990, 1992, 1993, 1995 and 1996, although not all of the maps offered coverage of the entire site. A copy of the Sanborn Maps are included in Appendix E. An additional insurance map from 1957 showing the Pelham Gas Plant site was found in the Con Edison files (See Appendix F). These maps were used to compile a composite historical site layout map as illustrated in Figure 5-1 and Figure 5-2. Figure 5-3 presents the historical site layout as it falls within the current tax map property boundary.

Additionally, the *Atlas of New York and Vicinity* [Beers, 1868] and the *Atlas of the Hudson River from New York City to Troy* [Beers, 1891] were reviewed to determine if additional historical maps were available for the site location. The Pelham former MGP site was not in existence at that time.

The results of the historical map review are summarized below:

- The earliest Sanborn Map of the site is from 1918. The site is identified as the Pelham Gas Works for the Westchester Lighting Company. This map shows three gas holders present, two of which are on the eastern portion of the site and labeled "Steel Gasometer". These holders have capacities of 3 million and 1 million cubic feet. The third holder, labeled "Relief Holder" with a capacity of 350,000 cubic feet, is located near the center of the site just north of the 1 million cubic feet holder. Other structures in the center portion of the site include a building labeled "Office & Meter Ho.", a purifer building, a building containing an exhauster, scrubbers, condensers, and a machine shop, and a pump room building. Also included in this portion of the site were underground brick tar separator tanks and a 50,000 gallon salt water tank on a 40 feet-high steel trestle. Just to the south of the buildings in the center of the site was a pipe shed and a light oil recovery plant. Located in the western portion of the site adjacent to the Hutchinson River is a generator and retort house building and a coal shed building. A coal elevator is located between the river and the coal shed. Between the retort house and coal shed is an underground brick tar tank. South of the coal shed, there is a small storage building, two tar tanks and two water tanks (labeled as "W.T."). Furthest south, but still within the Pelham portion of the site, are two large above-ground steel tanks. These tanks are labeled as "steel gas holders", although later maps and photographs indicate that these are liquid storage tanks.

- The 1932 Sanborn Map shows much of the site as it appeared in 1918, with a few additions along with some areas not included on the 1918 map. Also, some of earlier features have disappeared. These additions include a circular structure identified as "Reservoir (frame)", an office building near the relief holder, more storage buildings in the southern portion of the site, and four tar tanks and two oil tanks south of the machine shop. Additions that were in areas not included on the 1918 map include an additional large above-ground oil tank just north of the New York City line crossing the site, and a "foamite generator house". Note that all three large above-ground tanks are labeled as oil tanks, and all three are shown to be within concrete or brick secondary containment structures. Features that have disappeared include the coal shed, the pipe shed near the light oil recovery plant, and the two water tanks. The building containing the light oil recovery plant is labeled as "Storage" on the 1932 map. The 1932 Sanborn Map also shows the presence of a Sinclair Oil Refining Company oil storage facility along the southwest side of the site, with 17 above-ground tanks shown. North of the gas works property another oil storage site is shown, along with a coal yard and auto repair facility, at the northeast side of the intersection of Pelham Parkway and the Hutchinson River. Seven

above-ground oil tanks are shown at this site. Further north, approximately 500 feet from the MGP site is another petroleum terminal (Colonial Beacon Oil Company), with seven above-ground gasoline tanks and two oil tanks shown. Other oil tanks are shown mapped at two sites along the west side of the creek. A filling station is also shown at the northeast corner of the intersection of Boston Post Road and Pelham Parkway.

- A 1935 map for the Bronx portion of the site does not show an MGP related structures on this portion of the property. A structure identified as a traveling crane and a small storage building are shown at the southernmost portion of the property. The MGP related structure is the circular tank to the northwest of the traveling crane. The map shows another oil storage facility (Town and Country Oil Corporation) approximately 400 feet to the south.

- The 1942 county atlas provided by EDR only shows the major structures on the site. These structures are in keeping with those shown on the 1932 Sanborn Map.

- The 1950 Sanborn Maps show the same structures at the site as the 1932 map. Offsite, five additional above-ground gasoline tanks are shown approximately 700 feet to the north-northeast of the gas works at a Sun Oil Company facility.

- The 1957 insurance map (Appendix F) shows a detailed plan view of the site layout as well as cross-sections and details of several of the MGP structures. Additional features include the liquefied petroleum plant located south of the 1 million cubic foot holder.

- The 1975 Sanborn Map shows the on-site and off-site areas as shown on the 1950 map. However, according to the 1970 aerial photograph, all remnants of the MGP were gone by this time, and a large building was present. The 1975 Sanborn Map is therefore incorrect, having not been updated for that year.

- The 1977 Sanborn Map for the New York City portion of the site shows a large nearly square structure immediately north of the city line. The building is unlabeled. To the south of the site, the above ground oil tanks on the Sinclair property are shown, however the tanks at the Town and Country Oil facility are no longer present. Immediately east of the Town and Country Oil facility a United Parcel Service distribution center and a separate truck parking lot and private garage are shown.

- The 1981 and 1986 Sanborn Maps for the New York City area are unchanged from the 1977 edition.

- The 1990 Sanborn Map for the Pelham area shows none of the former MGP structures. A large building is shown in the middle of the site, with two smaller buildings between the large building and the city line to the south. The buildings are in the configuration of the current shopping center however the exact use of the buildings in the 1990 Sanborn Map is unknown. A transformer area is identified at the southwestern corner of the largest building. Two small buildings are shown at the eastern corner of the site: one a bank, and the other an auto repair facility. Immediately north of the auto repair facility is a transformer yard. The balance of the site is labeled as parking. Off-site, an additional filling station is shown at the southeast side of the intersection of Pelham Parkway and Boston Post Road, and a carpet cleaning facility is shown straddling the city line immediately across Boston Post Road from the MGP site. Northeast of the site, across Pelham Parkway, a building labeled as manufacturer of electronics component parts is shown. Other unlabeled factory and warehouse buildings are also shown along the northeast side of Pelham Parkway. Further north, the Colonial Beacon Oil facility is now identified as Humble Oil Refining Company, Eastern Esso Division, with the loss of four small oil tanks and the addition of one large tank. Six additional above-ground tanks are shown between the Humble Oil facility and the creek, possibly as part of the Humble Oil facility. The Sun Oil Company tanks and facility are no longer shown.

- The 1992 and 1993 Sanborn Maps for the Pelham area show the same on-site and off-site information as shown in 1990, with the exception that the electronics manufacturing building is no longer labeled as such.

- The 1992, 1993, 1995, and 1996 Sanborn Maps for the New York City area show the same information as presented in the 1977 map.

- The 1995 Sanborn Map for Pelham shows all of the oil tanks at and adjacent to the Humble Oil facility are no longer present. All of the site features are the same as shown in the 1990 map.

- The 1996 Sanborn Map is unchanged from 1995 map.

5.2 History of Site Ownership

The history of site ownership was compiled using the chain-of-title search, Brown's Directory, PSC reports, and Sanborn Maps. A site ownership chronology is provided in Table 5-2.

The Pelham Gas Light Company of Pelham bought the Pelham property in 1896 (records were not available for when the portion of the site in the Bronx of New York City was obtained). The property was operated by Pelham Gas

Light Company from the earliest record of gas production at the site [1899 Brown's Directory]. By 1900, the Pelham Gas Light Company was operating as a branch works of the New York Suburban Gas Company of New Rochelle [1900 Brown's Directory]. In late 1900, the New York Suburban Gas Company merged into the Westchester Lighting Company [Brown's Directory and PSC Reports]. Beginning as early as 1905, the Consolidated Gas Company (predecessor to Con Edison) secured financial control of the Westchester Lighting Company, however, the company still continued to operate as an affiliate [Brown's Directory, 1905]. The Pelham site was part of Westchester Lighting Company in 1951 when the company was fully merged into Consolidated Edison as the Westchester Division [Brown's Directory]. In 1965 Con Edison sold the property to Barbara Realty Corporation, though it retained a small parcel of land along the south side of Pelham Parkway for maintenance as an electric substation, and a perpetual easement along Hutchinson River for maintenance of gas lines and the pipe bridge across the creek [Con Edison Property Records].

6 Past Site Operations

The operational history of the former MGP site in Pelham was established using historical and current records from the earliest record of the site, through the time of the MGP operations, to the present time. A list of the records reviewed and a description of each is provided below, followed by a summary of the MGP site operational history and subsequent site uses as established using all the resources that were identified. For each site use, potential residuals associated with the process are identified.

The historic records identified in Section 5.1 were reviewed for information related to the site operational history as well as ownership history. These records include the Brown's Directory, PSC Reports, chain-of-title, historical maps, and photographs and records provided by Con Edison. In addition, historical aerial photographs for the Pelham MGP site were reviewed at the Westchester County Planning Department in White Plains, New York.

6.1 Aerial Photograph Review

Aerial photographs were available from the Westchester County Planning Department for the years 1925, 1940, 1947, 1954, 1960, 1970, 1976, 1980, 1986, 1990, 1995, and 2000. Low-altitude aerial photographs were also provided by Con Edison for 1948 and 1953. A summary of the aerial photograph review is provided below, and copies of selected aerial photographs are included as Appendix G. Sanborn Maps were used to help identify structures shown on the aerial photographs.

In 1925 there appeared to be three large above ground gas holders, two smaller holders, and MGP buildings present on the northern portion of the property. The 1940 photograph showed one new smaller holder present on the property. Everything else appeared to stay the same. The area surrounding the target property was more developed since 1925.

The 1947 photograph showed that the site layout appeared the same as in 1940. There was more development of the surrounding property and the pipe bridge crossing the Hutchinson River adjacent to the site is now present.

Three low-altitude oblique air photographs taken in 1948 show considerable detail of the site and some of the surrounding areas. The photographs show the facilities to be in operation, with all three gas holder bells at nearly their fully raised heights, and coal stockpiles near the Hutchinson River. The majority of the site appears to be unpaved. The portion of the river bank that is presently unprotected is shown in the same condition in the photograph. The portion of the property south of MGP operations appears to be used for storage of equipment, with an overhead traveling crane visible at the southern tip of the site. Offsite, the property directly across Pelham Parkway to the north of the

gas plant appears to be used as a pole storage yard. A mix of commercial, industrial, and residential property uses are also visible surrounding the site.

In the single low-altitude oblique air photograph taken in 1953 shows the MPG site to be similar to what is shown in the 1948 photographs, but with some changes. A coal unloading structure located along the Hutchinson River and most of the coal stockpiles on the site are no longer present. Three horizontal tanks are shown within what appears to be a secondary containment bermed structure south of the largest gas holder. (These structures are identified on a historical ground photograph as part of the liquefied petroleum plant.) Offsite, a set of commercial buildings are now shown across Pelham Parkway to the northeast of the site.

By 1960, all the holders were removed and it appears that an MGP building in the north-northwest corner of the site was removed. All the other MGP buildings and the pipe bridge were present. Cylindrical objects (possibly tanks) were installed on the southwest portion of the property. Surrounding properties were yet more developed. By 1970, all of the former MGP buildings were removed, the whole site appeared to have been paved over, and a large building (probably the present shopping center) was present. The configuration of the property appears to have stayed the same until the present time. Additional details of the current site conditions are provided in the site reconnaissance in Section 3.2. Copies of selected aerial photographs are included in Appendix G.

6.2 Site Operational History

The records identified in Section 6.1 were used to compile a comprehensive operational history of the Pelham former MGP site, including gas production at the site (including capacity, equipment, and residuals produced), MGP site closure activities (including structures remaining, converted to other uses, dismantling), other site uses, and any general changes to the site over time.

6.2.1 History of Gas Production

Operational History

A comprehensive operational site history was developed for the Pelham Gas Works former MGP site using Brown's Directory, PSC Reports, historical maps (Sanborn Maps and Atlas Maps), aerial photographs, and information provided by Con Edison.

The exact construction and starting date for gas production at the site is not known. The property was purchased by the Pelham Gas Light Company in September 1896.

The Brown's Directory listing for Pelham is for the Pelham district, which included Pelham Manor, Pelham Heights, Corlies Park, and Pelhamville. It does not distinguish among different gas plants in Pelham; however, no other gas plants have been identified within this district, making it likely that the production records are for the Pelham Works site. The earliest Brown's Directory that has a record of a gas plant in Pelham is from 1899, which reports that the Pelham Gas Light Company produced 3 million cubic feet of coal gas and carbureted water gas in Pelham. Since the Brown's Directory generally reports product records for the previous year, the latest starting date for production at the site would be 1898.

The Pelham Gas Light Company was absorbed into the New York Suburban Gas Company around 1899 and subsequently the Pelham Gas Light Company was operating as a branch works of the New York Suburban Gas Company of New Rochelle [1900 Brown's Directory] in late 1900. After 1899, Brown's Directory reports combined production for the Pelham plant and other plants that merged into Westchester Lighting Company, therefore, information specific to production at the Pelham plant is not available from Brown's Directory, except where noted below.

According to information provided by Con Edison, the Pelham Gas Works was originally built as an oven gas MGP by Westchester Lighting Company's predecessor, the Pelham Gas Light Company. According to the Brown's Directory, the MGP was using water gas and coal gas methods in 1899. But according to the PSC reports, the MGP used coal gas processes until 1915 at which time water gas processes were used. It appears that the capacity to produce water gas was added to the site, but the exact date that this capacity was added is unknown. However, coal gas also continued to be produced [Brown's Directory and PSC Reports].

The earliest available Sanborn Map for the Pelham site is for 1918, which shows the Westchester Lighting Company plant located on Pelham Parkway in the Village of Pelham Manor. Three gas holders were present at this time, including two storage holders of 3 million and 1 million cubic feet capacity, and a relief holder with a capacity of 350,000 cubic feet. Both coal gas and carbureted water gas were produced at this time, with a large generator building shown at the northwest side of the site, and several large above-ground oil storage tanks at the southern side of the site.

In 1918, a light oil recovery unit was installed at the Pelham site. This unit produced light oil, benzene, and toluene from coal gas tars. This unit was put into operation on May 8, 1918 (Gas Age, 1919). This unit is shown on the 1918 Sanborn map.

In the 1923 Brown's Directory, Consolidated Gas Company reports that additional gas making equipment was installed at several stations of the Westchester Lighting Company, although at which sites is not known. At that

time, a 20-inch emergency transmission main was installed between a 10-million cubic foot holder at Fordham Road & Harlem River in the Borough of Manhattan and the City of Yonkers, connecting in Yonkers with the 20 inch main from the Pelham Plant to the Yonkers Works.

The 1932 Sanborn Map illustrates the presence of a large number of structures associated with site including a generator building; an iron conveyor connected to the generator building and another structure to the west; a boiler house; a gasoline tank to the far north of the boiler house; several pump houses; an office; a production building with an exhauster room, pusher room, metal shop, and storage; gas condensers directly northeast of this production building; scales; a purifier house with steel tanks and raised tanks to the south of the building; scrubbers to the north of the purifier house; oil scrubbers south of the purifier building; eight tar tanks southwest of the purifier building; two small oil tanks and three large oil tanks south and southwest of the purifier building; a meter shop; three gas holders; a reservoir; a pipe shed; acetylene and oxygen "drums"; a paint and oil storage building; and several additional storage buildings. The 1932 Sanborn Map does not illustrate the 20 inch main that was indicated in Brown's Directory, and the toluol recovery plant is now labeled as "storage", though the associated oil scrubber columns are still shown as present.

The 1935 Sanborn Map only shows coverage of the area south of the gas plant. The only identified site structures shown are a traveling crane and a small storage building.

A 1942 Westchester County atlas map illustrates the Westchester Lighting Company, Pelham Gas Works, but not in the level of detail to distinguish if it is operational or the use of the various structures.

Brown's Directory and PSC reports indicate that the Pelham gas plant was placed on stand-by service in the 1930s, however, the plant continued to produce gas intermittently until approximately 1951. The Brown's Directory report for 1951-1952 lists the Consolidated Edison Company of New York (Westchester Division), formerly Westchester Lighting Company, as converting to natural gas supply. The PSC reports that mixing equipment to produce LP-air gas was installed at the site in 1951, and by 1958 propane tanks and associated equipment were installed to increase standby and peak production capacity [PSC Reports]. The MGP was no longer operational after 1958.

All structures at the site except for a small electrical transformer yard along Pelham Parkway and the pipe bridge across the Hutchinson River were demolished between 1958 and 1968.

Residuals Associated with MGP Site Use

The former MGP at Pelham produced gas via coal carbonization and carbureted water gas processes. The gas manufacturing processes generated a variety of residuals including tar, ammonia liquor, coke, clinker, gas purification residues, tar/water emulsions, and wastewaters. The following provides a general overview of the residuals produced and used at a typical MGP site, and it is not specific to the Pelham MGP site except where it is noted.

Coke is a solid material that is primarily carbon (typically 80 to 90%). It is the remnant of bituminous coal that has been subjected to high temperature destructive distillation. The non-carbon portion of the coke contains metals in varying concentrations.

Tar produced during gas manufacture was a complex mixture of hydrocarbons that could range from viscous liquid to a gummy solid depending on its water content, origin, age, storage conditions, and temperature. Tar contains hundreds of compounds with the ones of primary environmental interest being volatile aromatics and polynuclear aromatic hydrocarbons (PAHs). Tar produced during coal carbonization also contained tar acids, such as phenols. For the most part, tar and water were immiscible, being readily separated by gravity settling. However, at intermittent and unpredictable times, some carbureted water gas processes produced tar/water mixtures that were miscible and not readily separable by gravity settling methods. These tar/water mixtures were called tar/water emulsions. Tar is the most likely residual to be found on MGP sites, and may be found in subsurface structures remaining on the site. A number of tar tanks, gas holders and oil tanks were shown on Sanborn Maps of the Pelham former MGP site [Sanborn Maps 1918, 1932, 1942, 1950 and 1975]. Facility drawings also showed a network of pipes used to transfer tar from structures to collection tanks at the site.

Based on historical site photographs, it appears that the three gas holders first shown at the site on the 1918 Sanborn Map were built as on-grade holders. All three holders are clearly shown on site photographs to have above-ground tank sections. It is therefore not expected that there are significant underground structures associated with the holders that could contain residuals. Piping for gas, tar, and water handling may still be present however. It is unknown if these are the original holders at the site. Holders built prior to 1900 may have been constructed with below-grade pits.

As produced at the time, ammonia was generally in the form of an ammonia-water solution. Ammonium sulfate crystals were sometimes produced in by-product coke ovens.

The Pelham gas works had a toluene or light oil recovery unit, which operated around the time of World War I. Light oils extracted from coal gas could be released from the production or storage areas for these materials.

For the most part, gas purification residues were solid materials generally made up of woodchips, corn cobs, or a similar fluffing agent impregnated with iron salts. During gas purification, these materials absorbed hydrogen sulfide and, in the case of coal carbonization, cyanide from the gas. These purification materials were generally regenerated and reused several times, but when the sulfur content reached approximately 30 to 40% of the material, the purification materials were no longer useable and became "spent." Prior to the use of iron salts, lime was used as a purifying agent and may be present at MGP sites as a purification residual. The Sanborn Map of the former MGP site at Pelham indicates a purifier house and raised purifier tanks in the central potion of the site [Sanborn Maps].

Clinker was a granular solid material resulting from the coke or coal reaction in the water gas generator vessel. The material was the fused ash remaining after the carbon had been reacted to form gas.

Wastewater was the water overflow from tar separators. A major portion of this overflow was recycled as cooling water. Excess overflow was wastewater.

Wastewater was universally considered a waste at the time of operation. Other materials were considered useable as by-products or fill. Coke, tar, and ammonia were sometimes sold to generate revenue, thereby reducing the cost of gas to the consumer. Coke and tar were sometimes used in gas making as feedstock or fuel. Gas purification residues (e.g., spent oxides) and clinker were sometimes used as fill materials at MGP sites and elsewhere.

In addition to residuals produced, feedstocks to the process, including gas oil used in the carbureted water gas process, have the potential to remain in the subsurface.

Other facilities at the site at the time of the MGP included a paint and oil shed and residuals may be associated with this site use.

There are no available records to indicate how residuals or feedstock at the site may have been managed, stored, or disposed (including potential sale of by-products) during and subsequent to MGP operations. Table 6-1 summarizes potential MGP residuals that may be remaining at the site.

6.2.2 Other Site Uses

Operational History

The Brown's Directories and the PSC Reports indicate that the Pelham MGP was maintained for stand-by operations from 1936 through 1951. Brown's Directory indicated that Con Edison had switched to natural gas in 1951 [Brown's Directory, 1951-1952]. Around this time, facilities were also added to the site for a liquid petroleum (propane) system. The installation of

vaporizing and mixing equipment to produce LP-air gas occurred in 1951 [PSC Reports]. By 1958, propane tanks and associated equipment were installed to increase peak production capacity [PSC Reports]. The natural gas-propane mixing plant continued to operate into the 1960s until there was no longer a need for this backup supply facility.

Con Edison sold the property in 1965, however, they continued to lease the site and maintain equipment on the property. Con Edison applied to the Public Service Commission and received permission on March 18, 1968 to demolish the plant [Con Edison Letter, 1968].

A 1968 letter from Consolidated Edison to the Town of Pelham indicated that the plant and equipment associated with the propane plant was placed in an inoperative condition and the final demolition was to begin shortly as Con Edison's intent was to vacate the property. This summary focused on the propane operations and did not appear to address the former gas plant structures. Aerial photographs from 1970 indicate that the above-ground portions of the gas plant had been removed by that time [Aerial Photographs].

The property of the Pelham former MGP site was graded and paved, according to correspondence between Con Edison and the Town of Pelham in 1968. This property was turned into a shopping center around 1970 and it continues to be used for these purposes. The present occupant of the shopping center, Kmart, indicated that the store at this location is to be closed. It is not known if the property will continue in its present use as commercial property.

Residuals Associated with Other Site Uses

Con Edison continued to use the site as a natural gas/propane plant after the MGP ceased operations. Other site uses that may have impacted the site include oil tanks on the site in association with the peaking process, liquid propane, and process water. A small electrical substation was also present at the site.

The use of the site as a shopping center may have generated some residuals, however, products associated with retail operations of a store such as Kmart, typically were stored in indoor areas. Additionally, the pavement at the site may have prevented the residuals from infiltrating the surface. Residuals associated with products used to de-ice the parking lot in winter have the potential to impact the site soil and groundwater if infiltration through cracks occurred.

6.2.3 Previous Site Investigations

An environmental site investigation is in the process of being conducted under a Voluntary Cleanup Agreement (VCA) between the present site owner and NYSDEC. According to the DEC project manager (Jamie Malcomb) for the

Pelham Voluntary Cleanup Agreement, the current VCA is the second VCA for the site. An initial VCA was executed in 1996 or 1997; the current VCA was issued in 2001. The objective of both VCAs was to support expansion of the retail sales buildings at the site.

The consultant for the property owner is AKRF, Inc. of White Plains, NY. They prepared a work plan for a Site Investigation under the VCA, which was approved by DEC. The investigation took place in mid-2002, and the Site Investigation Report is due to be submitted to DEC in February 2003. DEC expects that there will be a Phase II investigation, to address data gaps in the 2002 investigation. The data gaps are primarily because site access problems meant that some areas of the site could not be accessed for drilling during this investigation. This included some of the areas expected to be most impacted by MGP operations. The Phase II investigation may be performed following demolition of the northern buildings at the site, and prior to construction of replacement retail buildings.

The DEC project manager indicated that so far they have found impacted soils and groundwater, DNAPL, and LNAPL at the site. He also stated that there was some groundwater sampling data from the early 1990s, and other data from 1995 or 1996, but that there were questions about the data quality and usability issues.

7 Environmental and Agency Records Review

A review of information available in public and private databases and records was conducted to collect information related to the site and the surrounding properties. An EDR database records search was provided to RETEC from Con Edison and was reviewed to establish the history of environmental actions involving the site or nearby properties. Additionally, RETEC searched public agency records to obtain information about the site. The results of each of these searches are provided below.

7.1 Environmental Records

7.1.1 Database Searches

An environmental records search for the Pelham site was conducted by EDR on behalf of Con Edison. This report was provided to RETEC for review and incorporation into the historical investigation report. The EDR report includes the results of searches of federal, state, and EDR proprietary databases for listings of the target property (site) and any other properties within up to a one-mile radius of the site. The report also includes a physical setting summary as performed by EDR. A copy of the EDR report is included in Appendix C.

The Pelham Gas Light Co. was listed in the EDR proprietary database of former manufactured gas plant sites; however, the exact location was not identified. The site Levin Management Corporation Caldor Pelham Manor Shop (847 Pelham Parkway), a portion of the former Pelham MGP, was listed in the EDR proprietary database as a FINDS and RCRIS-LGQ site.

Surrounding properties within one-mile of the site were identified on several federal and state databases. The results are summarized according to lower elevation or higher elevation to the target property, which may be an indication of properties that are upgradient (higher elevation) or downgradient (lower elevation) from the target property.

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

the Spraylat Corporation site, is located at a higher elevation within approximately 0.5-mile from the target property. This site is located just over 0.25-miles to the north-northwest of the site, on the opposite side of Hutchinson River. No NPL sites were identified within the one-mile search radius from the site.

The Federal Resource Conservation and Recovery Act (RCRA) Corrective Action Activity database (CORRACTS) is a list of which handlers have a nationally defined corrective action core event. The CORRACTS database indicates one site located at a higher elevation within approximately 0.5-mile of the target property. This is the same site identified on the CERCLIS list.

The Federal Resource Conservation and Recovery Information System (RCRIS) database includes selected information on sites that generate, store, treat or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. The source of this database is the USEPA. The EDR review of the RCRIS-TSD (treatment, storage, and disposal site) list dated June 21, 2000, identified one site located approximately 0.20-miles from the target property at an equal or higher elevation, on the western side of Hutchinson Creek. The EDR review of the RCRIS-LQG (large quantity generator) list dated June 21, 2000, identified two large quantity generator sites located within approximately 0.125 mile and six sites located approximately 0.25-mile from the target property at an equal or higher elevation. All but one of these sites are located on the western side of Hutchinson River. The one site located on the east side of the creek is an Exxon property located on Canal Road, approximately 0.125 miles north of the site (the former Beacon/Humble Oil/Esso oil terminal property identified on the Sanborn Maps). The EDR review of the RCRIS-SQG (small quantity generator) list dated June 21, 2000, identified five small quantity generator sites located within approximately 0.125-mile and seven sites located approximately 0.25-mile from the target property at an equal or higher elevation. All but three of these sites are located on west side of Hutchinson River; the balance of these sites are located along Secor Lane, to the north of the former MGP site. Two of the sites on Secor Lane are automotive repair facilities. The activities of the business at the third site are not defined, however a number of underground petroleum storage tanks are present at site.

The State Hazardous Waste Sites (SHWS) records are the states' equivalent to CERCLIS. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data came from the NYSDEC's list of Inactive Hazardous Waste Disposal Sites in New York State. EDR's review of the SHWS list revealed that there is one SHWS site located at a lower elevation within approximately 1-mile of the target property and there is one SHWS site located at higher elevation within approximately 0.25-mile from the target property. The higher-elevation site is the previously mentioned Spraylat Corporation site, located west of Hutchinson River.

The State Leaking Storage Tank Incident Reports (LTANKS) database includes an inventory of reported leaking storage tank incidents reported from April 1, 1986 through the most recent update. A review of the LTANKS lists dated October 1, 2001, as provided by EDR, indicated that there are 39 LTANK reports of incidents at equal or higher elevation within approximately 0.5-mile of the target property. Five of these reports are for sites located within 0.125-mile of the target property. Thirty-four of these reports are for sites located between approximately 0.125 and 0.5 mile from the target property (all of the reports are within 0.5 mile of the target property Of these 34 reports, 21 sites are located across the Hutchinson River, one is within 0.125 miles of the site, seven are located between 0.125 and 0.25 miles from the site, and 13 are located between 0.25 and 0.5 miles from the site. The other 12 site reports are on the same side of the Hutchinson River as the site, seven are located within 0.125 and 0.25 miles from the site, five are located within 0.25 and 0.5 miles from the site. There is also one LTANK site at equal or lower elevation approximately 0.5-mile from the target property.

The State Underground Storage Tank (UST) database contains registered USTs. The data come from the NYSDEC Petroleum Bulk Storage (PBS) Database. EDR's review of the UST lists dated October 1, 2001 indicates that there are 27 UST sites at equal or higher elevation. There are 11 sites within approximately 0.125-mile from the target property, and there are 16 UST sites within approximately 0.25-mile of the target property, all at elevations equal to or greater than the site. Of the sites located on the east side of Hutchinson Creek, nine are located within 0.125 miles of the site, and three are located between 0.125 and 0.25 miles from the site.

The State Chemical Bulk Storage (CBS) UST (underground storage tank) and above-ground storage tank (AST) databases include registration data collected as required by 6 NYCRR Part 596. EDR's review of the CBS UST list dated October 1, 2001 indicates that there is one CBS UST site at equal or higher elevation within approximately 0.25-mile of the target property, located at the Spraylat site. EDR's review of the CBS AST (above-ground storage tank) list dated October 1, 2001 indicates that there are three CBS AST sites at equal or higher elevation within approximately 0.25-mile of the target property. Only one of these tanks is located on the east side of Hutchinson River. It is an inactive xylene tank at the Exxon property north of the site.

The State Major Oil Storage Facilities (MOSF) UST and AST databases include MOSFs licensed or closed since April 1, 1986, (the date at which the NYSDEC petroleum bulk storage registry began), plus available data on the registration of such facilities since the regulations were imposed on such facilities in 1978. EDR's review of the MOSF UST list dated October 1, 2001 found that there are four MOSF UST sites at equal or higher elevation within approximately 0.25-mile of the target property. EDR's review of the MOSF AST list dated October 1, 2001 indicates that there are seven MOSF AST sites at equal or higher elevation within approximately 0.5-mile of the target

property. The only MOSF site located on the east side of Hutchinson River, potentially upgradient of the site, is the Exxon terminal property located on Canal Road. This site is listed on both the UST and AST MOSF lists.

The State Voluntary Cleanup Agreements (NY VCP) program covers virtually any kind of site and contamination. EDR's review of the VCP lists dated December 18, 2001 indicates that there are two VCP sites at equal or higher elevation within approximately 0.5-mile of the target property. One of the two sites is located on the western side of Hutchinson River, and the other site is the former Pelham MGP site. No information is provided for the former Pelham MGP site regarding the voluntary cleanup agreement other than the identity of the volunteer, which is listed as Levin Properties, L.P.

The State Underground Storage Tank (UST) database contains registered USTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database. EDR's review of the UST lists dated October 1, 2001, has revealed that there are 27 UST sites at equal or higher elevation within approximately 0.25-mile of the target property, and eleven of these sites are located within 0.125-mile of the target property.

Additional Environmental Records Searches

RETEC conducted searches of additional records to provide the most comprehensive collection of current and historical records regarding the site. A Freedom of Information Law (FOIL) request was made to the NYSDEC for any information regarding the Pelham former MGP site. No information was obtained; NYSDEC indicated that no information was available for the site.

7.2 Public Agency Searches

A number of city agencies were searched to determine availability of historic or current information for the site. In Pelham, a search was conducted at the building department.

7.2.1 City Directories

City directories for the Town of Pelham and the Village of Pelham Manor could not be obtained; therefore, a review was not conducted.

7.2.2 Building Department

Records were reviewed at the building department for the Village of Pelham Manor and pertinent information was incorporated into the report. Appraisal documents were found for Consolidated Edison Company Inc. Pelham Gas Works, which include construction details and inspection reports for the construction of gas plant equipment starting July 3, 1925 and ending July 8, 1958. A work plan was also found for demolition of the gas plant dated

November 28, 1967 and amended in April 18, 1968. RETEC reviewed the inspection reports and the work plan at the Village Hall in Pelham. There is no mention in the reports of the amount of material excavated during construction or demolition.

7.2.3 Real Estate Records

Records were found at the Con Edison property records office regarding the site. The records included documents relating to the sale of the property, as well as miscellaneous drawings of the plant and facilities. The records indicated that the site was sold by Con Edison in 1965 to Barbara Realty Corporation; however, Con Edison continued to lease the property for a period of three years following the sale in order to complete the demolition of the site structures [Con Edison Property Records, 1961 and 1965]. Con Edison also retained a permanent easement along the northwest side of the property for maintenance of the gas pipeline along the top of the bank of Hutchinson River, and the pipe bridge for the gas line across the creek. The records also indicated that a parcel of land along Pelham Parkway, measuring 100 feet by 109 feet, was not included in the sale. This parcel of land was the location of an electric transformer substation.

8 Potential Exposure Pathways and Receptors

This section will discuss the imminent or potential risks to human health or the environment based on an evaluation of potential residuals on the site, potential exposure pathways and receptors.

8.1 Potential Residuals

Past uses of the Pelham site may have impacted soil and groundwater and residuals may be present in the subsurface. Additionally, offsite properties that may have or may in the future contribute to the health and environmental hazards of the area include those properties identified in the EDR database search.

A discussion of potential residuals that may be at the site based on past and current site use was presented in Section 6.0. To summarize, MGP residuals include tarry residuals containing volatile compounds, PAHs, and phenolics that may be present in subsurface structures and surrounding soils and may impact soil and groundwater quality. Purifier residuals containing lime, iron oxides, and cyanide may be present on the site. Ammonium sulfate crystals and clinker may also be MGP residuals remaining in the site soils. Lastly, gas oil used in generation of carbureted water gas could be present on the site in subsurface structures or surrounding soils.

Other site uses during or after the MGP operations ceased may have contributed petroleum products, paints, or metals to the residuals present at the site. Spills on offsite properties, as recorded in the EDR database, have the potential to impact groundwater quality at the site.

8.2 Potential Exposure Pathways and Receptors

The current and anticipated future use of the Pelham former MGP site is commercial (retail sales). The entire site is covered with asphalt or buildings except for a small area of exposed bank along the Hutchinson River. Consumers and workers of all kinds are potential receptors, but since the site is completely covered the potential for direct contact exposures is minimal. Direct contact exposure is possible along the site boundary at the exposed portions of the bank of the Hutchinson River. As stated in the Site Reconnaissance Section, there is coal present along the riverbank (in Section 3 it says that it is coal), a hydrocarbon-like odor was noted in the soils, and there are pipes leading from under the site to the river. A potential route of exposure to workers and consumers may be vapor intrusion from volatile constituents in

soil or groundwater under the buildings; however, it is unknown if these buildings have basements. It is not known if subsurface structures were removed at the time the MGP and subsequent site operations ceased.

Construction workers or subsurface utility workers may be exposed to constituents in subsurface soil if performing subsurface excavation work (e.g., utility line maintenance or replacement).

Since 100% of the site is covered, leaching of constituents from soil to groundwater is not expected to be a significant pathway, however cracks were noted in the pavement. Additionally, constituents already present in subsurface soil or groundwater also have the potential to migrate offsite to downgradient properties. The low permeability silty clay till that regionally underlies the area may prevent extensive migration of MGP constituents horizontally and vertically, although the extent of this unit underlying the site has not been directly assessed via investigation.

Groundwater at the site is expected to be shallow. There are no known wells on the site; however, wells do exist within a one-mile radius of the site. All of these wells are located west of the Hutchinson River and upgradient from the site. There are no known groundwater users for potable purposes in the vicinity of the site. Groundwater likely discharges to the Hutchinson River, which is adjacent to the site. Due to the fact that the site is adjacent to the river, it is likely that the river would be an environmental receptor to potentially impacted groundwater and residuals. Surface water runoff from the site is likely draining to the river, although some of the runoff may be collected in stormwater collection basins on the site. It is not known if these discharge to the river.

There are wetlands in the area according to Section 4. Please revise to clear up this discrepancy. Given the current site use, it is not likely that there are any significant environmental habitats (i.e., endangered species, wetlands, etc.) that would be affected by the site. The site itself is not mapped as a designated wetland area. The western shoreline of the Hutchinson River across from, and northwest of, the site are mapped as wetland areas. The land areas are fully developed, and the reach of the Hutchinson River adjacent to the site has been channelized and bounded in most locations by bulkheads. The site reconnaissance also identified that there are no schools or day care centers within 0.25-mile of the former MGP site.

9 Discussion and Conclusions

9.1 Summary of Findings

A historical investigation of the Pelham former MGP site was conducted to determine the history of site ownership and operations of the site, to assess current site use and conditions, and to determine if there are potential receptors to residuals that may be present at the site. This investigation was in accordance with the scope of work agreed to with Con Edison at the initiation of the project.

The Pelham former MGP operated from sometime between 1896 and 1898 until the early 1930s to produce manufactured gas for the Town of Pelham and surrounding areas. The exact date the MGP was constructed and began operations could not be established from the available records. The MGP site merged into the New York Suburban Gas Company, and subsequently into the Westchester Lighting Company around 1900. The Westchester Lighting Company became affiliated with Consolidated Gas Company (the predecessor to Con Edison) beginning as early as 1905. However, the Westchester Lighting Company continued to operate under its own name until approximately 1951. The Pelham MGP was maintained on standby service until approximately 1951, at which time it was converted solely to natural gas and propane. The propane plant was dismantled in 1968; however, it is not known if the MGP facilities were also dismantled at that time. All remnants of the MGP were gone by 1970 as per the aerial photograph.

Following the operations of the gas plant by Con Edison, the site property was used for commercial businesses as the site of a retail department store. This site use continues to the present day: a strip of retail stores operate in the central portion of the property, with several satellite stores located along Pelham Parkway. The site reconnaissance indicated the site is approximately 100% covered with buildings or pavement. There were no visual indications of MGP residuals on the surface of the property. However, there were visible indications of MGP residuals at the river bank below the current site surface grade, as indicated by the light hydrocarbon-like odor from approximately one to three feet below ground surface and the stratification of coal fragments in the bank.

Given the past uses of the site, there may be residuals remaining in the subsurface either in subsurface structures or in the soil or groundwater underlying the site. The regional geology indicates that the site is underlain by a silty, clay till which may deter migration of constituents in the subsurface. Groundwater is not used on the site, but wells do exist within a one-mile radius of the site. Groundwater likely discharges to the Hutchinson River along the western boundary of the site.

Potential receptors to residuals remaining on the site include site visitors and workers. Since the whole site surface is covered, direct contact with residuals in the surface soil is extremely minimal, although, direct contact with residuals is possible along the site boundary at the riverbank. Site visitors and most workers, except in case of excavation work, are not expected to be in contact with subsurface soils given the nature of the site as being covered with asphalt. Vapor intrusion into buildings on the site is a potential exposure pathway, although this building is not likely to have a basement. The river is likely a receptor to groundwater and residuals from the site.

The site is located in a heavily developed commercial district, with numerous potential upgradient sources of hydrocarbons.

9.2 Limitations of Findings

9.2.1 General

The completeness and accuracy of the historic information presented in this report are limited by the records that are readily available including Brown's Directory, PSC Records, Sanborn Maps, chain-of-title search, other historic maps, aerial photographs, and other sources. The coverage offered by these records may not be complete and there are data gaps in the historic information available pertaining to MGP site ownership and operational periods.

To the extent reasonable, additional records searches were conducted to gather as much information regarding the site as possible. Certain records were not readily available and could not be reviewed including:

- city directories; and
- library records.

Although some records describing the final dismantling of the site facilities were available, information regarding the procedures for handling residuals at the site, the dismantling and decommissioning of the gas plant equipment, and subsequent site activities that may have involved removal of soil or subsurface equipment were also not available.

9.2.2 Roadways

RETEC's interpretation of the relationship between historical MGP operation areas and modern roadways is based on available historical and modern maps. Land surveying and subsurface investigations have not been performed to attempt to mark-out the location of modern and historical features. Because the subsurface environmental conditions at the former MGP sites are currently

unknown, our interpretation of roadway relationships and conditions are subject to change based on the acquisition of new data.

The location and orientation of the roadways adjacent to the former Pelham MGP site do not appear to have changed during or after MGP operations at the site. Most of the gas facilities were located in the interior area of the block; therefore changes to the roads surrounding the block would not be on former MGP property.

9.2.3 Mapping of Property Use

Note that the spatial relationship between the historic MGP property and gas production structures and facilities, and the present-day property could not be exactly determined. The property descriptions from the 1800s deeds were not based on landmarks and references that could be accurately located and compared with the current descriptions of the area. Mapping by a surveyor in conjunction with an expanded deed search would be required to establish this relationship.

10 Summary of Historical Research Findings

This section presents a summary of findings of the historical research conducted for the Pelham former MGP site.

- The MGP site operated from between 1896 and 1898 until approximately 1951. The site was used for standby service from 1951 until approximately 1958.

- The MGP site produced coal gas and carbureted water gas. Residuals associated with these processes include tar containing volatile compounds, PAHs, and phenolics, purifier residuals, ammonia residuals, clinker, and gas oil.

- Subsurface structures containing residuals may remain at the site. Information regarding decommissioning of the site or disposition of residuals from MGP operations is not known.

- The site was subsequently used by Con Edison as a natural gas/propane plant. Information regarding dismantling of these facilities is available in the letter from Con Edison to the Town of Pelham, but information is limited.

- Other site uses after the MGP operations ceased may have contributed petroleum products, PCBs, or metals to the residuals present at the site.

- The site is currently used for commercial (retail) purposes and surrounding properties are mixed industrial/commercial use.

- Surficial deposits at the site are expected to consist of glacial till material comprised of silty clay with occasional boulders.

- Groundwater at the site is expected to be at a depth of approximately 10 feet below ground surface. Groundwater flow direction is predicted to be southwest/west toward the Hutchinson River. The channel is located along the western boundary of the site.

- Potential receptors include site workers and visitors, and excavation/ subsurface utility workers. Potential for direct contact with residuals in soil is very limited. Vapor intrusion into buildings on the site is possible, however, this is not thought to be a significant exposure pathway due to the unknown lack of building basements at the site. Excavation workers may be exposed to residuals in subsurface soil, should excavation be necessary. Individuals may also be exposed to constituents present in exposed soil along the riverbank. The

Hutchinson River is likely to be a receptor to any residuals migrating in groundwater.

11 References

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Tables

Figures

Appendix A – History Research Report Checklist

Appendix B - Site Reconnaissance Photographic Log

Appendix C - EDR Radius Map Report

Appendix D - Chain-of-Title

Appendix E - Sanborn Maps

Appendix F – Historical Maps

Appendix G – Aerial Photographs

Appendix H - Historical Site Photographs

Table 5-1 Brown's Directory Summary - Pelham, New York

Year	Operated By	Process	Annual Gas Production (cf)	Gas Holder Capacity (cf)	Byproducts Made/Sold	Service Area Population	Operating Information	Holding and Operating Companies	Financial Reports	Other Brown's Information	Reference Page(s)
Pelham (District includes Pelham Manor, Pelham Heights, Corlies Park, and Pelhamville)											
1899	Pelham Gas Light Co.	Coal and Lowe	3,000,000 (C.P., 24)							No. consumers-37. District included Pelham Manor, Pelham Heights, Corlies Park, and Pelhamville.	84
1900	Pelham Gas Light Co.						operational information lumped together under New York Suburban Gas Co., New Rochelle	New York Suburban Gas Co., New Rochelle		Absorbed in the New York Suburban Gas Co., (see New Rochelle) - Branch works include Pelham	94
1901	Westchester Lighting Co.						operational information lumped together under Westchester Lighting Co., Mt. Vernon			Westchester Lighting Company is a consolidation of Yonkers Gas Light Co. (Yonkers), Municipal Gas Co. (Yonkers), Westchester Gas Light Co. (Yonkers), New York Suburban Gas Co. (MtV), embracing: East Chester Gas Light Co. (MtV), New Rochelle Gas and Fuel Co. (NewRoch), Pelham Gas Light Co.(Pelham), Westchester Gas and Electric Co. (Port Chester), Westchester Gas and Coke Co. (MtV), East Chester Electric Co (NewRoch), Larchmont Electric Light Co. (NewRoch), Port Chester Electric Lighting Co. (Port Chester), Pelham Electric Light and Power Co. (City Island), Mt. Kisco Lighting Co. (Mt. Kisco)	94, 97
1902	Westchester Lighting Co.									See Mt. Vernon	102
1903	Westchester Lighting Co.									See Mt. Vernon	109
1904	Westchester Lighting Co.									See Mt. Vernon	114
1905	Westchester Lighting Co.								First year financial reports are provided in Brown's Directory is 1905 - Consolidated Gas Company of New York, NY was organized Nov. 11, 1884 as an consolidation of the New York Gas Municipal, Metropolitan, Harlem. Knickerbocker, and Manhattan Gas Light Companies. Since 1899 acquired control of the New Amsterdam Gas, New York Edison, Mutual Gas Light, Standard Gas Light, and the United Electric Light and Power Companies, giving Con. Gas Co. entire control of the power and lightling supply of the borough of Manhattan. Also secured control of the Westchester Lighting Co.	See Mt. Vernon	119, 270
1906	Westchester Lighting Co.							Controlled by Consolidated Gas Co., NY		See Mt. Vernon	125
1907	Westchester Lighting Co.							Controlled by Consolidated Gas Co., NY		See Mt. Vernon	127
1908	Westchester Lighting Co.							Controlled by Consolidated Gas Co., NY		See Mt. Vernon	132
1909 - 1935	No Listing under Pelham - see Mt. Vernon						production information reported in Brown's is for all plants of Westchester Lighting Co. lumped together	Controlled by Consolidated Gas Co., NY and later Consolidated Edison Co., NY		Listed under Mt. Vernon	
1936	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y.	Controlled by Consolidated Edison Company of New York, New York. Office, 4 Irving Place. Same company as Consolidated Gas Company.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 4,681,377,600 cu ft., storage holders 12	311, 558
1937	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 5,008,432,500 cu ft., 15 storage holders	315, 570
1938	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 5,326,986,600 cu ft., 14 storage holders	317, 578
1939	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 5,752,283,700 cu ft., 14 storage holders	356, 657
1940	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 6,171,898,800 cu ft., 14 storage holders	364, 664
1941	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 6,633,946,100 cu ft., 14 storage holders	359, 662

Table 5-1 Brown's Directory Summary - Pelham, New York

Year	Operated By	Process	Annual Gas Production (cf)	Gas Holder Capacity (cf)	Byproducts Made/Sold	Service Area Population	Operating Information	Holding and Operating Companies	Financial Reports	Other Brown's Information	Reference Page(s)
1942	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service. Gas supplied by Consolidated Edison Company of New York, N.Y., process water gas	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., Annual sales 6,364,047,700 cu ft., 14 storage holders	352, 649
1943-1944	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y.,13 storage holders, Materials used: coal 233 short tons, coke 391 short tons , oil 2,425 gal	309, 584
1944-1945	Westchester Lighting Company - Mt. Vernon						Plants at Pelham and Ossining maintained for Standby Service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 13 storage holders, Materials used: coal under boilers 259 short tons, coke 391 short tons, gas oil 62,425 gals.	306, 584
1945-1946	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 13 storage holders, Materials used: coal under boilers 123 short tons, coke 362 short tons, gas oil 73,746 gals.	310, 581
1946-1947	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 1,548.35 short tons, gas oil 288,154 gals.	315, 590
1947-1948	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 4,668.29 short tons, gas oil 910,615 gals.	314, 590
1948-1949	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 6,315.50 short tons	262, 487
1949-1950	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 8,378.2 short tons, gas oil used 1,868,621 gals.	259, 487
1950-1951	Westchester Lighting Company - Mt. Vernon						Plant at Pelham maintained for stand by service.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 205 short tons, LP gas plant storage capacity 110,400 gals.	253, 465
1951-1952	Consolidated Edison Company of New York, Inc. (Westchester Div.) (Formerly Westchester Lighting Co.)						Company converted to natural gas, statistics refer to 1950 when carburetted water gas was being served.	Controlled by Consolidated Edison Company of New York, New York.		Main Office 9 South First Ave., Mount Vernon, N.Y., 7 storage holders, Generator fuel used 1,231 short tons, Gas oil used-240,524LP gas plant storage capacity 110,400 gals.	247, 452

Table 5-2 Site Ownership Summary - Pelham, New York

Map	Block	Lot(s)	Utility Owner	Purchased	Sold	Current Owner	Purchased	Other Industrial Activity
Westchester County section								
166.34	1	1	Pelham Gas Light Company	9/23/1896	8/29/1902	Janice H. Levin	9/28/1998	
			Westchester Lighting Company	8/29/1902	7/12/1904			
			New York and Westchester Lighting Company	7/12/1904	10/20/1904			
			Merger: Westchester Lighting Company with New York and Weshester Lighting	10/20/1904	----			
			Consolidated Edison Company of New York Inc.	----	6/15/1965			
166.34	1	2	Consolidated Edison Company of New York Inc.	----	----	Consolidated Edison Company of New York Inc.	----	
Bronx County section								
18	5655	300	Westchester Lighting Company	----	10/20/1904	Janice H. Levin (deceased) willed to William A. Farber and Paul Skwiersky as co-Trustees of three trust funds: (1) Adam K. Levin Trust; (2) Catherine M. Levin Trust; (3) Arielle Tepper Trust	6/1/2002	
			New York and Westchester Lighting Company	10/20/1904	----			
			Consolidated Edison Company of New York Inc. as successor by merger with Westchester Lighting Company	----	6/15/1965			

Table 6-1 Summary of Potential Residuals Associated with Site Use and Off-Site Sources

Potential MGP Residuals

- Coal tar and carbureted water gas tar or tar/water mixtures in structures (Volatile Organic Compounds, particularly Benzene, Toluene, Ethlybenzene, and Xylenes (BTEX); Polynuclear Aromatic Hydrocarbons (PAHs))
- Solid constituents (BTEX, PAHs) or non-aqueous phase liquids (NAPLs) in subsurface (from leaks or spills)
- Purifier residuals (cyanide and lime)
- Metals in soil or groundwater
- Fuel oil (used in carbureted water gas process)
- Coke/Clinker

Potential Residuals from Other Site Uses

- Petroleum products
- Paints

Potential Residuals from Off-Site Sources

- Fuel oil
- Diesel fuel
- Gasoline