Forest Laboratories, Inc.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

at

300, 303, 320, 321 and 330 Prospect Street

Inwood, New York 11096

December 2006

Volume 1 of 2

Prepared By

ESPL *ENVIRONMENTAL CONSULTANTS CORPORATION*

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REPORT SPECIFICATIONS

Copies and circulation of this report are as follows:

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Commack, New York 11725

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1.0 Executive Summary

ESPL Environmental Consultants Corp. (ESPL) was retained by Forest Laboratories, Inc. (Forest) to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing Materials (ASTM) Standard E 1527-05 and EPA AAI Rule at their Inwood Facility located on Prospect Street, Inwood, New York 11096. This facility is comprised of five (5) buildings, 300, 303, 320, 321, and 330 (See Appendix A – Figures 1 - 3).

Site Inspection

On October 25, 2006, an inspection of the subject sites was conducted. The subject area is located in a residential/light industrial section of Inwood, NY. The site is in a developed urban area with flat topography. There were no ecological sensitive areas located within the general vicinity of the subject site. The buildings are generally developed. Surrounding buildings includes 1-2 stories single families. Mary's Manor complex is a senior citizen center that is located at the corner of the Prospect Street and Doughty Blvd. (eastern side of the 300 and 303 Prospect Facilities). Physical inspection of the accessible areas of the flooring or walls of the subject site did not reveal any evidence of stressed vegetation, chemical staining, soil discoloration, standing water or odors. Currently all five buildings are occupied by Forest utilizing the buildings for product research and development, quality control, warehousing, building maintenance, warehousing, and production of solid dosage pharmaceutical products. There is no basement within the buildings. There are no sign of any fuel oil underground storage tanks within the subject site. All heating units (boilers and roof top units) use natural gas. The site visit did not reveal any evidence of past releases of hazardous waste. No obvious presence of non-scope items such as mold or suspect asbestos containing materials was observed. Painted surfaces were in good condition. Heating is provided by numerous gas fired roof top heating units at each building. A floor plan of each building has been provided in Appendix A – Figures 29 – 35.

Long Island Power Authority (LIPA) provides the electricity and Keyspan provides gas. The 300 Building is serviced by a bank of transformers located on pole #5 and 303 Building is serviced from the same bank on pole #5 and an additional bank on pole #4. Buildings 320, 321, and 330 are all serviced by pad mounted transformers numbered 18737, 17402, and 18020, respectively. The transformers are owned by LIPA.

The Long Island Water Authority (LIWA) provides potable water to the buildings. There was no drinking water wells located on the subject sites or on any of the adjacent sites during the site inspection. The subject buildings, as well as the buildings in the vicinity of the subject sites, are served with the village domestic water well located 0.5 miles away from the subject area.

The 300, 320 and 321 facilities have 1,000-gallon underground holding tanks and the 330 Facility has a 500-gallon underground holding tank. These holding tanks isolate the process waste water discharge and to provide a representative sampling point prior to discharge to the municipal sewer. The 303 Facility has a 2-gallon waste water sampling

port on the east side of the building prior to discharging to the municipal sewer. All floor drains are connected to the sewer.

Site History Review

Location and Sanborn maps are listed in Appendix A - Figures 24 - 27. The properties' dimensions and usage/structures are as follows:

Bldg.	Usage	Lot Acreage	Bldg. Sq. Ft.	Construction Year
300	PRD	0.4886	9,700	1958
303	Production	0.2626	6,700	1957
320	Shipping, Receiving, Warehousing, Production	0.5719	14,400	1987
321	Offices, Production, Maintenance, Q/C Lab	1.12	48,000	1990
330	Production	0.8313	22,000	

Environmental Liens

No environmental liens were found for the property.

Review of Public records

Correspondence from the New York State Department of Environmental Conservation (NYSDEC), Nassau County Department of Health (NCDOH), Nassau County Fire Commission (NCFC) and LIPA is listed in Appendix D.

The 303 Facility maintained a 1,000-gallon steel UST containing number 2 fuel oil used for heating. The tank was removed in December of 1988 when Forest switched from oil to natural gas at their facility.

On June 25, 2003 a spill was reported to the NYSDEC and spill number 0303189 was issued. The spill was caused by the pad mounted transformer leaking oil. It was estimated that ten gallons had leaked onto the concrete pad and into a containment pit. A clean-up was performed by Tradewinds under Keyspan's supervision. NYSDEC documented that approximately 10 gallons of non-PCB transformer oil was spilled and that the spill was contained in the containment pit and no drains were impacted.

Numerous off-site facilities within the radius specified under ASTM Standard E 1527-05 were identified through the Environmental Data Resources database search. All releases identified in the record search were represented as minimal potential for hazard by the reporting agency. The surrounding area of the sites is urban and the surface and sub surface environment is highly developed, therefore it would be unlikely that an impact to the subject sites would occur based on the available information. The standard environmental record source of the subject site and the surrounding properties were

reviewed (See Appendix C). The data search is summarized on the following table:

Map Findings Summary								
Latitude: 40.612900 **Longitude:** 73.746900								
Database	Target Property	Search Distance (Miles)	<1/8	1/8 - ¼	¼ - ½	½ - 1	>1	Total Plotted
Federal Records								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL Recovery		TP	NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	1	NR	NR	1
CORRACTS		1.000	0	0	0	0	NR	0
RCRA-TSD		0.500	0	0	0	NR	NR	0
RCRA LQG	X	0.250	1	0	NR	NR	NR	1
RCRA SQG	X	0.250	0	4	NR	NR	NR	4
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS	X	TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0

Map Findings Summary								
Latitude: 40.612900 Longitude: 73.746900								
Database	Target Property	Search Distance (Miles)	<1/8	1/8 - ¼	¼ - ½	½ - 1	>1	Total Plotted
State and Local Records								
HSWDS		0.500	0	0	0	NR	NR	0
State Haz Waste		1.000	0	0	0	1	NR	1
DEL SHWS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	2	NR	NR	2
SWRCY		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
LTANKS		0.500	2	1	26	NR	NR	29
HIST LTANKS		0.500	2	1	22	NR	NR	25
UST	X	0.250	2	3	NR	NR	NR	5
CBS UST		0.250	0	0	NR	NR	NR	0
MOSF UST		0.500	0	0	2	NR	NR	2
HIST UST		0.250	0	3	NR	NR	NR	3
AST		0.250	1	6	NR	NR	NR	7
CBS AST		0.250	0	0	NR	NR	NR	0
HIST AST		TP	NR	NR	NR	NR	NR	0
MOSF AST		0.500	0	0	2	NR	NR	2
MANIFEST	X	0.250	1	3	NR	NR	NR	4
NY Spills	X	0.125	5	NR	NR	NR	NR	5
NY Hist Spills		0.125	4	NR	NR	NR	NR	4
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	1	0	NR	NR	NR	1
BROWNFIELDS		0.500	0	0	0	NR	NR	0
SPDES		TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
Tribal Records								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	1	0	0	NR	1
Toxic Targeting, Inc.*								
BROWNFIELDS		0.500	1	2	0	NR	NR	3

TP-Target Property
NR-Not Requested
* Provided by Forest Laboratories, Inc.

Conclusions and opinions are submitted based on the careful consideration of the results of the site inspection and the scope of work. The information provided in this report has been obtained during interviews and field inspections, and database search, review of geographical location, geology and hydrogeology of the site including the physical evidence. This ESA has no evidence of Recognized Environmental Conditions (REC) in connection with the subject sites.

It should be noted that when a Phase I ESA is completed without subsurface exploration of chemical screening of the soil and the groundwater beneath the site, no statement of certainty can be made regarding the subsurface conditions that may result from on-site or off-site sources. The possibility always exists for contamination to migrate through surface water, air and/or groundwater. However, ESPL believes that the assessment was sufficient to provide a reasonable characterization of the environmental condition of the property, and that the preliminary identification of potential environmental concerns/problems can be made on the information procured.

2.0 Introduction

ESPL Environmental Consultants Corp. (ESPL) was retained by Forest Laboratories, Inc. to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing Materials (ASTM) Standard E 1527-05 and 40 CFR Part 312 All Appropriate Inquiries (AAI) Rule at their Inwood Facility located on Prospect Street, Inwood, NY, 11096. This facility is comprised of five (5) buildings, 300, 303, 320, 321, and 330.

This report presents the findings of the ESA and makes conclusion and opinions regarding the environmental condition of the property within the Limitations and Exceptions (Section 2.4) and Limiting Conditions and Methodology Used (Section 2.7). It is generally not within the scope of this report to perform any testing or sampling but to compile information that are publicly available and obtainable within a reasonable time and cost constraints, and practically reviewable.

2.1 Purpose

The purpose of this practice is to identify REC within the subject sites.

The term REC means the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or threat of a release into structures or into the ground, groundwater, or surface water of the property. The de-minimis conditions that generally do not present a material risk of harm to public health or the environment, which would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are excluded.

The ESA consists of a review of various sources of information concerning the previous ownership and uses of the real property. Among which, a historical review of the records of past use of sites and adjacent properties is conducted. Past and present owners are interviewed and investigated. An on-site walk–through

inspection and evaluation of the property's current use is conducted, and areas of potential environmental concern are identified. In addition, records from federal, state and local government, as well as private agencies, are examined, and Sanborn maps can be provided, if available.

The report format of this ESA follows the ASTM Designation E 1527-05 that has been arranged to address general observations, conditions and concerns under the Superfund Amendments and Reauthorization Act (SARA 1986).

The most notable element included in the scope of this report is related to the fact that as a buyer of real property, it limits the amount of liability, resulting from preceding property activity, you might eventually have to face as a landowner. It clearly states that if the site assessment is conducted in due diligence, the new owner is entitled to be considered an "innocent land owner".

2.2 Detailed Scope-of-Services

The scope of services for this assessment was in general accordance with the ASTM Standard Practice for Environmental Site Assessment: Phase I ESA Process (ASTM Designation: E1527-05) and 40 CFR Part 312, Standards and Practices for AAI. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions.

2.2.1 All Appropriate Inquiry

Pursuant to 40 CFR, Part 312, the primary scope of this ESA is to identify releases and threatened releases of hazardous substances which cause or threaten to cause the incurrence of response costs. Potentially hazardous substances may be present at a site due to:
1) previous uses, or
2) migration of contaminant plumes from off-site locations, through soils and groundwater, to the site.
If hazardous materials are present, site excavation and/or redevelopment activities could create or increase the pathways of exposure to these contaminants for new occupants and nearby residents. Under CERCLA, persons may be held strictly liable for cleaning up hazardous substances at properties that they either currently own or operate or owned or operated at the time of disposal. Strict liability in the context of CERCLA means that a potentially responsible party may be liable for environmental contamination based solely on property ownership and without regard to fault or negligence.

In preparing this ESA, we have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in and to 40 CFR Part 312, Standards and Practices for All Appropriate Inquiries. Compliance with the federal standards for

conducting all appropriate inquiries is necessary to qualify for various defenses to liability under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

2.3 Significant Assumptions

While this report provides an overview of potential past and present environmental concerns, the environmental assessment is limited by the available information at the time of the assessment. The conclusion and opinions that are presented in this report are based on a scope of work authorized by the client.

ESPL has made the following significant assumptions:

- The information provided by EDR regarding the regulatory status of the facilities is complete, accurate and current.
- The information provided during the interviews was complete and non-bias.
- That based on the USGS groundwater contour maps that the regional groundwater flow in the area is to the southwest and that the site lays approximately 19 feet above sea level.

2.4 Limitations and Exceptions

The purpose of this investigation was to identify potential sources of contamination at the subject sites, and to satisfy the all-appropriate inquiry standard set forth in Section 9601 (35)(b) of CERCLA. The findings and conclusions set forth in this report are based upon information that was available to ESPL during its inspection of the properties and after review of acquired records and documents.

The presence or absence of any such condition can only be confirmed through the collection and analysis of air, soil and/or groundwater samples, which was beyond the scope of work for this investigation. In conformance with the scope and limitations of ASTM Practice E 1527-05 a Phase I ESA and EPA AAI Rule was performed at Inwood Facility located on Prospect Street, Inwood, New York 11096. The use of ASTM practice E 1527-05 is strictly limited to the scope set forth in the ASTM standards on ESA for commercial real estate.

ESPL does not represent that the sites referred to herein contains hazardous or toxic substances or other latent conditions beyond those observed during the site assessment. ESPL does not assume responsibility for the discovery of any special resources, nor does it assume responsibility for the elimination of hazards or adverse conditions that may cause accidents, injuries, damage, client liabilities, or environmentally adverse conditions.

2.5 Special Terms and Conditions

The preceding ESA is subject to the following conditions and to such other conditions and limiting conditions as are set forth in the report:

1. ESPL assumes no responsibility for hidden or latent conditions or misrepresentation by the property owner, his representatives, public information officials or any authority consulted in connection with the compilation of this report.

2. This report is prepared for the sole and explicit purpose of assessing the potential liability with respect to the suspected presence of hazardous substance or petroleum product on the property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. This report is not intended to have any direct bearing on the value of the property.

3. Any relevant information made available after this date, or change in use of the property other than what is identified in this report, future events and/or investigation could change the findings stated herein and require update and revision of the report. Should additional investigations encounter differing conditions, sections of this report may require updating.

4. The ESA is for the sole use of the principal parties. Sole ownership of this report is granted by ESPL to Forest Laboratories, Inc. ESPL's responsibility for the contents of this report remains with Forest Laboratories, Inc. and does not extend to future holders of the report or property owners.

5. Although this investigation was performed in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry, ESPL cannot guarantee that the property is completely free of hazardous substances or other materials or conditions that could subject Forest Laboratories, Inc. to potential liability.

6. ESPL or their representatives are not required to give testimony with reference to the expressed herein without prior written arrangement.

7. This information contained in this report has been obtained from publicly available sources and other secondary sources of information produced by entities other than ESPL. Although great care has been taken by ESPL in compiling and checking the information contained in this report to insure that it is current and accurate, ESPL disclaims any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence or otherwise, and for consequences arising there from. The data provided hereunder neither purports to be nor constitutes legal or medical advice. It is further understood that ESPL makes no representations or warranties of any kind, including, but not limited to, the warranties of fitness for a particular purpose of merchantability, nor any such representations or warranties to

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2.6 User Reliance

This report may be distributed and relied upon by Forest Laboratories, Inc., its successors and assigns. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of ESPL.

The information in this ESA is time sensitive. Some components of the investigation must be updated within 180 days of the issuance date. These components include interviews with past and present owners, operators, and occupants; search for recorded environmental clean up liens; reviews of regulatory databases, visual inspections of the facility and adjoining properties, and the declaration by the environmental professional. After a period of 12 months, all components of the ESA must be updated.

2.7 Limiting Conditions and Methodology Used

To perform the ESA, the following procedure and methodology was used:

1. A detailed inspection of the subject sites including the interior and exterior of the accessible existing buildings and the sites' perimeters for RECs.

2. Mr. Al Osani/Gibson Maintenance was interviewed concerning past and present activities conducted on-site.

3. Neighboring property utilization was evaluated to determine potential impact on the subject site.

4. Review the sites for PCB contaminated transformers.

5. Review of files and documents maintained by the federal, state and local regulatory agencies concerning environmental hazards associated with the subject site if such information exists.

6. Identification of surrounding property and their use.

7. Locate and review areas of possible contamination.

3.0 Site Description and Improvement

The subject area is situated in a residential/light industrial of Inwood, NY (See Appendix A, Fig. 1). It is geographically located at latitude 40.612900 and longitude 73.746900. The Inwood Facility contains five (5) buildings used for offices, maintenance, production, warehousing and laboratories. All buildings are single story with the exception of 321 building which consists of 2 stories.

The properties' dimensions, usage and improvements are as follows:

Bldg.	Usage	Lot Acreage	Bldg. Sq. Ft.	Construction Year
300	PRD	0.4886	9,700	1958
303	Production	0.2626	6,700	1957
320	Shipping, Receiving, Warehousing, Production	0.5719	14,400	1987
321	Offices, Production, Maintenance, Warehousing, Q/C Lab	1.12	48,000	1990
330	Production	0.8313	22,000	

3.1 Location and Legal Description

The Inwood Facility is located in the County of Nassau in the Town of Hempstead and is owned by Forest Laboratories, Inc. and the legal description of the site is as follows:

Building	Section	Block	Lot
300	40	160	205, 219, 220
303	40	184	7
320	40	160	7, 210, 213
321	40	184	818
330	40	160	18, 20, 208

3.2 Site and Vicinity General Characteristics

The adjoining uses of the Inwood Facility originally consisted of vacant lots, residential buildings and light industrial use.

Bldg.	North	East	South	West
300	Residential	Mary's Manor Senior Citizen Complex & Doughty Blvd.	Prospect St. & 303 Bldg.	320 Bldg.
303	Prospect St. & 300 Bldg.	Mary's Manor Senior Citizen Complex & Doughty Blvd.	Residential	321 Bldg.
320	Residential	300 Bldg.	Prospect St. & 321 Bldg.	330 Bldg.
321	Prospect St. & 320 Bldg.	303 Bldg.	Residential	Residential & Alvin Pl.
330	Residential & Bayview Ave	320 Bldg.	Prospect St. & Residential	Alvin Pl. & Residential

3.3 Current, Past Use and Ownership of the Subject Site

The surrounding properties are residential on North and South, Doughty Blvd. on the east and Alvin Place on the west, with Prospect Street running in between facilities. The site is in a developed urban area with flat topography. Surrounding buildings are 1-2 stories single family and Mary Manor Senior Citizen Complex.

300 Facility
Prior to 1954 this lot was vacant. In 1954 Barrows Chemical Co. constructed a one-story facility. This facility was acquired by Forest Laboratories, Inc. in November of 1981 through a merger with Barrows Chemical Properties, Inc. A building permit No. 177401 dated on 9/13/1957 was issued for the construction of a one-story factory and Certificate of Occupancy No. 92302 was issued on January 21, 1958.

This facility was utilized as a Production Research and Development (PRD) Laboratory for ethical pharmaceuticals by Forest Laboratories. This laboratory maintained several fume hoods and bench scale formulation consisting of six (6) process rooms. Air emissions from the activities at this building were directed to a dust collector located in the northwest corner of the facility.

303 Facility
Prior to 1956 this lot was vacant. This facility was owned by Jackbilt Co. in 1956. A building permit No. 162777 dated on March 1, 1956 was issued for the construction of a one-story manufacturing building and Certificate of Occupancy No. 87735 was issued on July 16, 1956. In July 17, 1956 Barrows Chemical Properties, Inc. acquired the property from Jackbilt Co. This facility was acquired in November of 1981 through a merger with Barrows Chemical Properties, Inc.

This facility was comprised of four (4) process rooms, a formulation and wash room used for the seeding and mixing of solid dosage pharmaceuticals. The manufacturing operations stored and generated solids and waste powders. Additionally, this facility maintains two dust collectors located in the east and south portion of the facility.

320 Facility

This facility was acquired from the Town of Hempstead on December 13, 1985. A building permit No. 8501419 was issued for the construction of a one-story warehouse and Certificate of Occupancy No. A128446 was issued on September 14, 1987.

This facility was utilized for the warehousing, shipping and receiving including five (5) process rooms used for granulation.

321 Facility

This facility was acquired from the Town of Hempstead on April 27, 1990 by 80 Sheridan Associates and acquired from 80 Sheridan Associates on December 26, 1991. There are two easements granted, one to the LIWA dated January 24, 1972 and a drainage easement made by Margaret Albert on July 12, 1991 to the Town of Hempstead. Historical maps indicate that prior to 1950 the lot was vacant. From 1950 to 1961 a Mission Building existed on the site and became a vacant lot again in 1972 (See Appendix A - Figures 4 & 5).

This facility is a two story building utilized for the manufacturing of solid dosage form pharmaceuticals (tablets and capsules), offices, maintenance department and a Quality Control (Q/C) Department. This facility maintains fourteen (14) process rooms used for tablet pressing and granulation with dedicated dust collectors collecting any particulates matter from each room. The maintenance department houses a paint spray booth. Spot painting of equipment is performed in the spray booth with paint spray cans. It also maintained 2-55 gallon steel drums of waste oil generated from equipment within the Inwood Facility.

330 Facility

This facility consists of three lots, 18, 20 and 208. Lots 18 and 20 were residential and lot 208 housed a hen house. In 1961 Kleer Pac Corporation constructed a plastic packaging facility on lot 208. All three lots, 18, 20 and 208 were acquired from KPC Acquisitions, Inc., formerly known as Kleer Pak Corporation, in January of 1986. Kleer Pak Corporation acquired lots 18 and 20 from the Town of Hempstead in July of 1985.

This facility is a one story building utilized for offices and eighteen (18) process rooms used for aqueous seeding process. Additionally, this facility maintains four (4) dust collectors located outside between 320 and 330 Facilities.

3.4 Physical Setting Source

The topographical conditions of the properties have been noted to the extent that was physically observed, or determined from interviews, as well as topography of the area surrounding the properties that is visually or physically observed from periphery of the sites. Based on published geological maps and publications, the properties lies at an approximate elevation of 19 feet above mean sea level and are generally level.

Based on the general surface topography, the regional groundwater flow direction was anticipated to be to the southwest.

There are no ecologically sensitive lands, i.e., wildlife refuges, located within the general area of the subject site.

3.5 Geology/Hydrogeology

3.5.1 Site Geology

The soil at the subject site is nearly level, well drained and classified as the Riverhead sandy loam (RdA) (See Appendix A - Figure 28, U.S. Department of Agriculture, 1983). Typically, Riverhead formation consists of a surface layer of brown sandy loam approximately 3 inches thick. The upper part of the subsoil is strong brown fine sandy loam to a depth of about 8 inches and a yellowish brown sandy loam to 35 inches. The permeability of this type of soil is moderately rapid in the surface layer and subsoil and very rapid in the substratum.

The natural profile of the Riverhead soil has been altered by grading operations for housing developments, industrial parks and other uses, leaving a final grade of 0 to 8 percent. The drainage of the site flows in a southwesterly direction.

3.5.2 Site Hydrogeology

The primary water supply in Nassau County is underground aquifers. This source is in a saturated wedge-shaped mass of unconsolidated deposits that overlie nearly impermeable consolidated bedrock. The contour of the surface of the water table of Nassau County is roughly the same as that of the landscape topography.

The aquifer system is in recognizable separate units. The upper glacial, or water table, aquifer is at the least depth and is made up primarily of sand and gravel deposits from the most recent glacial period. Deeper in the unconsolidated deposits are layers of good water-bearing strata. These are the Jameco, Magothy, and Lloyd aquifers. The Lloyd is the deepest and rests on bedrock.

Due to less surfacial contamination and higher well yields, the Magothy aquifer is the main supply for drinking and industrial water. As a result, the USEPA has identified it as a Sole Source Aquifer.

According to groundwater counter maps, groundwater is approximately 19 feet below the grade. The direction of ground water flow is generally southwest.

3.5.3 Groundwater Use

There are no drinking water wells located on the subject site or any observed on the adjacent sites during the site inspection. The Inwood Facility is served with municipal water. Groundwater is not utilized for any purpose at the subject site.

4.0 Review of Regulatory Agency Records and Documents

FOIL correspondences requesting all available information being maintained concerning the subject site were sent to state and local regulatory agencies (See Appendix D). This would determine if the subject site is listed, known, or suspected of being a hazardous waste site, or if any hazardous releases have taken place at the site or its immediate surroundings.

4.1 Federal ASTM Standard Records

A. National Priority List

The National Priority List (NPL) is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas.

A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 07/06

B. Proposed National Priority List

The Proposed National Priority List (NPL) identifies sites that maybe listed as a NPL site.

A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 07/06

C. Delisted Proposed National Priority List

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 07/06

D. NPL Recovery

The USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA complies a database of filed notices of Superfund Liens.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 10/91

E. CERCLIS

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

A review of the database indicated that there are no sites within ½ mile radius of the subject site.

Agency Release Date: 06/06

F. CERCLIS-NFRAP

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

A review of the database indicated that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 07/06

G. CORRACTS

CORRACTS (Corrective Action Report) identifies hazardous waste handlers with RCRA corrective action activity. A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 03/06

H. RCRIS

The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this data is the U.S. EPA.
A review of the RCRIS-Transport, Storage and Disposal Facility (RCRIS-TSD) database has revealed that there are no RCRIS-TSD sites within a ½ mile radius of the subject site.

Agency Release Date: 06/06

A review of the RCRIS-Large Quantity Generator (RCRIS-LQG) database has revealed that there is one (1) RCRIS-LQG site within a ¼ mile radius of the subject site. The subject site is also listed as a RCRIS-LQG site.

Agency Release Date: 06/06

A review of the RCRIS-Small Quantity Generator (RCRIS-SQG) database has revealed that there are four (4) RCRIS-SQG sites within a ¼ mile radius of the subject site. The subject site is also listed as a RCRIS-SQG site.

Agency Release Date: 06/06

The Inwood Facility had originally been issued an EPA ID No. NYD002035517, to Inwood Laboratories, Inc.. A new EPA ID No. NYD001288281 was issued to Forest Laboratories, Inc., which is applicable to all five buildings. During the past years the Inwood Facility has been categorized as both a LQG and a SQG depending on the volume of hazardous waste been generated in the calendar year.

I. ERNS

Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 12/05

J. HMIRS

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

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 07/06

K. US Engineering Control Site

The US Engineering Control is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for

regulated substances to enter environmental media or effect human health.

A review of the US Engineering Control database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 03/06

L. US INST Controls

The US Institutional Controls is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions and, post remediation care requirements intended to prevent exposure to contaminants remaining on site.

A review of the US Institutional Control database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 03/06

M. DOD

The Department of Defense (DOD) maintains a list of federally owned or administered lands, administered by the DOD, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the US Virgin Islands.

A review of the DOD database has revealed that there are no sites within a one (1) mile radius of the subject site.

Agency Release Date: 12/04

N. FUDS

The DOD maintains a list of Formally Used Defense Sites (FUDS) where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS database has revealed that there are no sites within a one (1) mile radius of the subject site.

Agency Release Date: 12/05

O. US Brownfields *

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

A review of the US Brownfields Sites database has revealed that there are three (3) sites within a ½ mile radius of the subject site.

Agency Release Date: 07/06
*Toxic Targeting, Inc. Provided By FRX

The Long Island Railroad (LIRR), corner of Dougherty Boulevard and

Redford Avenue, had used mercury rectifiers at their substations to power their locomotive and electric passenger cars. These mercury rectifiers were in use prior to 1979. In December of 2000, LIRR submitted site assessment reports which indicated the presence of mercury contamination.

Keyspan is developing a Preliminary Assessment of the corner of Brunswick Avenue and Beach 12th Street and of West of Sheridan Boulevard and South of Nassau Avenue. Keyspan must complete a Site Characterization by 2010, until then no environmental assessments will be determined.

P. Consent

The Superfund (CERCLA) Consent Decrees are major legal settlements that establish responsibility and standards for cleanup at NPL sites.

A review of the Consent database has revealed that there are no sites within a one (1) mile radius of the subject site.

Agency Release Date: 12/04

Q. ROD

ROD (Record of Decision) documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 07/06

R. UMTRA

The Uranium Mill Tailings Sites (UMTRA) is a listing of sites that mined uranium by private companies for federal government use in national defense programs.

A review of the UMTRA database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 11/05

S. ODI

The Open Dump Inventory (OPI) is a listing of open dumps. An open dump is defined as a disposal facility that does not comply with one or more of the 40 CFR Parts 257 or 258.

A review of the OPI database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 06/85

T. TRIS

The Toxic Release Inventory System (TRIS) identifies facilities which release toxic chemicals to the air, waster and land in reportable quantities.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 12/04

U. TSCA

The Toxic Substance Control Act (TSCA) identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substances Inventory List.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 12/02

V. FTTS

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA.

A review of the database indicated that the subject site is on the database.

Agency Release Date: 07/06

W. SSTS

SSTS is a tracking system requiring all registered pesticide-producing establishments to submit a report to the EPA.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 12/04

X. ICIS

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Elimination System program.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 02/06

Y. PADS

The PCB Activity Database (PADS) identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 07/06

Z. MLTS

The Nuclear Regulatory Commission maintains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements.

A review of the database indicated that the subject site is not on the database.

Agency Release Date: 07/06

AA. MINES

Mines Master Index File contains all mine identification numbers issued for mines active or opened since 1971. A review of the database indicated that there are no sites within a ¼ mile radius of the subject site.

Agency Release Date: 05/06

BB. FINDS

The Facility Index System (FINDS) contains both facility information and pointers to other sources that contain more detail.

A review of the database indicated that the subject site is on the database.

Agency Release Date: 07/06

CC. RAATS

The RCRA Administration Action Tracking System (RAATS) contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.
A review of the database indicated that the subject site is not on the database.

Agency Release Date: 04/95

4.2 New York State ASTM Standard Records

A. HSWDS

Hazardous Substance Waste Disposal Site (HSWDS) Inventory list includes any known or suspected hazardous substance waste disposal sites.

A review of the database indicated that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 09/02

B. SHWS

Inactive State Hazardous Waste Sites (SHWS) records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. 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.

A review of the database indicated that there is one (1) site within a one-mile radius of the subject site.

Agency Release Date: 05/06

C. Delisted SHWS

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Sites.

A review of the database indicated that there are no sites within a one-mile radius of the subject site.

Agency Release Date: 05/06

D. SWF/LF

Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

A review of the database indicated that there are two (2) sites within a ½ mile radius of the subject site.

Agency Release Date: 07/06

E. SWRCY

A review of the Registered Recycling Facility List (SWRCY) has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 07/06

F. SWTIRE / Registered Waste Tire Storage & Facility List

A review of the database indicated that there are no sites within a mile radius of the subject site.

Agency Release Date: 04/04

G. LTANKS

Leaking Storage Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

A review of the Leaking Storage Tanks Incidents Reports (LTANKS) has revealed that there are twenty-nine (29) LTANKS sites within a ½ mile radius of the subject site.

Agency Release Date: 06/06

H. Historical LTANKS

A listing of leaking underground and aboveground storage tanks. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002.

A review of the Leaking Storage Tanks Incidents Reports (LTANKS) has revealed that there are twenty-five (25) LTANKS sites within a ½ mile radius of the subject site.

Agency Release Date: 06/06

I. UST

The Underground Storage Tank (UST) database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the UST list has revealed that there are five (5) UST sites within a ¼ mile radius of the subject site. The subject site is also listed as a UST site.

Agency Release Date: 06/06

The 303 Facility maintained a 1,000-gallon steel UST containing number 2 fuel oil used for heating. The tank was removed in December of 1988 due to oil to natural gas conversion for the facility. (See Appendix D)

J. CBS UST / Chemical Bulk Storage Database

Facilities that stores regulated hazardous substances in underground tanks of any size.

A review of the database indicated that there are no sites within a ¼ mile radius of the subject site.

Agency Release Date: 01/02

K. MOSF UST / Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

A review of the database indicated that there are two (2) sites within a ¼ mile radius of the subject site.

Agency Release Date: 01/02

L. Hist UST

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database is no longer updated due to the sensitive nature of the information.

A review of the database indicated that there are three (3) sites within a ¼ mile radius of the subject site.

Agency Release Date: 01/02

M. AST / Petroleum Bulk Storage Registered Aboveground Storage Tanks.

The Aboveground Storage Tanks database contains registered AST's. The data comes from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) database.

A review of the database indicated that there are seven (7) sites within a ¼ mile radius of the subject site.

Agency Release Date: 06/06

N. CBS AST / Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and /or in underground tanks of any size.

A review of the database indicated that there is one(1) site within a ¼ mile radius of the subject site.

Agency Release Date: 01/02

O. Historical AST

Historical Petroleum Bulk Storage database are facilities with storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database is no longer updated due to the sensitive nature of the information.

A review of the database indicated that the subject site is a listed site.

Agency Release Date: 01/02

P. MOSF AST/ Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

A review of the database indicated that there are two (2) sites within a ½ mile radius of the subject site.

Agency Release Date: 01/02

Q. Manifest

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility. Manifest database lists sites that have used a manifest.

A review of the database indicated that there are four (4) sites within a ¼ mile radius of the subject site. The subject site is also listed as a Manifest site.

Agency Release Date: 05/06

The Inwood Facility is a listed site due to the generation of hazardous waste. All hazardous waste being transported off-site for disposal will generate a manifest for each load.

R. NY SPILLS

Data collected on spills reported to NYSDEC, is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS), or 6 NYCRR Section 595.2 (from CBS regulations). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list has revealed that there are five NY spills sites within a 1/8 mile radius of the subject site. The subject site is also listed as a SPILL site.

Agency Release Date: 06/06

A FOIL request was sent to the NYSDEC requesting to review any records retained by the agency concerning the subject site. A review of those records indicated that on June 25, 2003 a spill was reported to the NYSDEC and spill number 0303189 was issued. The spill was caused by the pad mounted transformer leaking oil. It was estimated that ten gallons had leaked onto the concrete pad and into a containment pit. A clean-up was performed by Tradewinds under Keyspan's supervision. NYSDEC documented that approximately 10 gallons of non-PCB transformer oil was spilled and that the spill was contained in the containment pit and no drains were impacted.

S. NY Historical Spills

This database contains records of chemical and petroleum spill incidents. In 2002, the NYDEC ceased updating the original Spills Information Database.

A review of the NY Historical Spills list has revealed that there are four (4) NY Historical Spills sites within a 1/8 mile radius of the subject site.

Agency Release Date: 01/02

T. Engineering Controls

The Engineering Control is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

A review of the Engineering Control database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 05/06

U. Institutional Controls

The Institutional Controls is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, and property use restrictions and, post remediation care requirements intended to prevent exposure to contaminants remaining on site.

A review of the Institutional Control database has revealed that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 05/06

V. VCP

The Voluntary Cleanup Program (VCP) uses private monies to get contaminated sites remediated to levels allowing for the sites' productive use. The program covers virtually any kind of site and contaminations.

A review of the database indicated that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 05/06

W. Drycleaners

The Drycleaners database lists all registered drycleaning facilities. A review of the database indicated that there is one (1) site within a ¼ mile radius of the subject site.

Agency Release Date: 06/04

X. Brownfields

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

A review of the database has revealed that there are three (3) sites within a ½ mile radius of the subject site.

Agency Release Date:	07/06
*Toxic Targeting, Inc.	Provided By FRX

The Long Island Railroad (LIRR), corner of Dougherty Boulevard and Redford Avenue, had used mercury rectifiers at their substations to power their locomotive and electric passenger cars. These mercury rectifiers were in use prior to 1979. In December of 2000, LIRR submitted site assessment reports which indicated the presence of mercury contamination.

Keyspan is developing a Preliminary Assessment of the corner of Brunswick Avenue and Beach 12th Street and of West of Sheridan Boulevard and South of Nassau Avenue. Keyspan must complete a Site Characterization by 2010, until then no environmental assessments will be determined.

Y. SPDES

The State Pollutant Discharge Elimination System (SPDES) program controls wastewater and stormwater discharges in accordance with the Clean Water Act.

A review of the database indicated that the subject site is not on the database.

Agency Release Date:	08/06

Z. AIRS/Air Emission Data

A review of the database indicated that the subject site is not on the database.

Agency Release Date:	12/02

4.3 Tribal Records

A. Indian Reservations

This Indian Reservation database maintains sites that are Indian administered lands of the US that have any area equal to or greater than 640 acres.

A review of the database indicated that there are no sites within a one (1) mile radius of the subject site.

Agency Release Date:	12/02

B. Indian LUST

This database lists leaking underground storage tanks on Indian Land. A review of the database indicated that there are no sites within a ½ mile radius of the subject site.

Agency Release Date: 06/06

C. Indian UST

This database lists Underground Storage Tanks (UST) located on Indian Land. A review of the database indicated that there are no sites within a ¼ mile radius of the subject site.

Agency Release Date: 06/06

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

Orphan Site Name	Database(s)	Orphan Site Name	Database(s)
Ocean Park Co	HIST UST	NC Bridge Authority Atlantic Beach Bridge	UST
Ocean Park Co	HIST UST	Nassau County Bridge Authority	FINDS, NY Manifest RCRA-LQG
Seaview Manor HFA	HIST UST	Grapevine Store & Café	AST
Penninsula Cter. For Extended and Rehab	HIST UST	Hometown General Store	UST
Unknown	NY SPILLS	Village of Lawrence WPCF	NY Manifest
Gas Stop	NY SPILLS	Auto Maven Dent Dr Inc	AST
Exxon Mobil Jackson Road	CT MANIFEST	Baymart (Retail Store)	AST
LILCO	NY SPILLS NY Hist SPILLS	Ocean Park Co	AST
Mobil Oil	NY SPILLS, LTANKS NY Hist SPILLS HIST LTANKS	Ocean Park Co	AST
Pump Station	NY SPILLS NY Hist SPILLS	Ocean View Associates LLC	AST
Inwood Terminal	NY SPILLS NY Hist SPILLS	Rockaway Care Center	UST
UNK	NY SPILLS NY Hist SPILLS	NYC Dept of Parks & Recreation	NY Manifest, FINDS RCRA-SQG
UNK	NY SPILLS NY Hist SPILLS	NYNEX	NY Manifest
Mobil	NY Manifest RCRA-SQG	NYNEX	NY Manifest
Exxon Mobil Inwood Terminal	NY SPILLS	NYCDEP	NY Manifest
Ecrest Laboratories Inc	NY Manifest	Sanitary District #1	SWF/LF,SWRCY
South Island Industries, Inc	SWF/LF	Unknown	NY SPILLS
Town of Hempstead-Future Housing	UST		

4.4 Environmental Liens

A search for environmental liens filed in land title records was carried out by EDR. The search found no history of environmental liens for the properties.

4.5 New York State Local Records for FOIL Requests

A. New York State Department of Environmental Conservation

A FOIL request was sent to NYSDEC requesting to review any records retained by the agency concerning the subject site (See Appendix D).

A review of those records indicated that on June 25, 2003 a spill was reported to the NYSDEC and spill number 0303189 was issued. The spill was caused by the pad mounted transformer leaking oil. It was estimated that ten gallons had leaked onto the concrete pad and into a containment pit. A clean-up was performed by Tradewinds under Keyspan's supervision. NYSDEC documented that approximately 10 gallons of non-PCB transformer oil was spilled and that the spill was contained in the containment pit and no drains were impacted.

The Inwood Facility maintains a NYSDEC Air Facility Registration Certificate in accordance with 6NYCRR Part 201 issued on June 8, 1998 for the emissions resulting from fume hoods, surface coating processes and manufacturing.

B. Nassau County Fire Commission

A FOIL request was sent to NCFC requesting to review any records retained by the agency concerning the subject site (See Appendix D). A review of the records indicated that there are no concerns regarding the operation at Forest since their ownership. Additionally their records indicate that four (4) USTs were removed from 303 Prospect Street.

C. Nassau County Department of Health

A FOIL request was sent to NCDOH requesting to review the records retained by the agency concerning the subject site (See Appendix D). A review of their records did not indicate any non-compliance status.

D. Long Island Power Authority

A FOIL request was sent to LIPA requesting to review any records retained by the agency concerning the subject site (See Appendix D). A response to our FOIL request was received from LIPA regarding their records of the subject site. The response letter dated October 13, 2006 stated that 300 is serviced by a bank of transformers located on pole #5 and 303 is serviced from the same bank on pole #5 and an additional bank on pole #4. Buildings 320, 321, and 330 are all serviced by pad mounted transformers numbered 18737, 17402, and 18020, respectively. The transformers are owned by LIPA.

4.6 EDR Proprietary Records

A. Manufactured Gas Plants

The Manufactured Gas Plant database records of coal gas plants compiled by EDR. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel.

A review of the database indicated that there is one (1) site within a ¼ mile radius of the subject site.

4.7 Historical Use Information

The historical site conditions have been assessed using the available information sources and examination of the following:

- Available Sanborn Fire Insurance Maps (Appendix A – Figures 24 – 27)
- Available Aerial Photographs (Appendix A – Figures 19 – 23)
- Available Topographical Maps (Appendix A – Figures 9 – 18)

Sanborn Fire Insurance Maps

A file search of the Sanborn Maps for Inwood Facility was conducted. Copies of all available maps are compiled in Appendix A.

Sanborn maps for the years 1940-1972 (total of 4 maps) were obtained and illustrated the following description:

Site	1940	1950	1961	1972
300 Lot 205	Vacant Lot	Vacant Lot	1-Story Concrete Frame Building Barrows Chemical Co.	1-Story Fire Resistant Bldg Built in 1954 Barrows Chemical Co.
300 Lot 219	Vacant Lot	Vacant Lot	Vacant Lot	Vacant Lot
300 Lot 220	Half of a 6 Stall Building	Half of a 6 Stall Building	Vacant Lot	Vacant Lot
303	Vacant Lot	Vacant Lot	1956 1-Story Concrete Frame Building Barrows Chemical Co.	1956 1-Story Concrete Frame Building Barrows Chemical Co.
320 Lot 7	Vacant Lot	Vacant Lot	Vacant Lot	Vacant Lot
320 Lot 210	Residential	Residential	Residential	Residential
320 Lot 213	Garage	Garage	Garage	Garage
321	Vacant Lot/ Lumber Storage	Mission Building/ Lumber Storage	Mission Building 1-Story Miscellaneous Storage Lumber Storage	Vacant Lot/ Lumber Storage
330 Lot 208	Hen House Shed Garage	Hen House Shed Garage	1961 Kleer Pak Corporation	1961 Kleer Pak Corporation
330 Lot 18	Residential	Residential	Residential	Residential
330 Lot 20	Residential	Residential	Residential	Residential

Topographic Maps and Aerial Photographs

Topographic maps produced by the United States Geological Survey (USGS) dated 1903, 1918, 1947, 1954, and 1968 were reviewed as well as adjoining quadrants dated 1900, 1947, 1954, and 1969 (See Appendix A – Figures 9 – 18). Aerial maps dated 1954, 1966, 1975, 1980 and 1994 were also reviewed (See Appendix A – Figures 19 – 23).

5.0 Site Reconnaissance and Interviews

The purpose of the interview process is to collect unrecorded information from present owners, operators and occupants of the site for the purpose of gathering information indicating recognized environmental conditions in connection with the property.

Interviews with neighboring property owners may be carried out if the property is abandoned and there is evidence of potential unauthorized uses of the abandoned property or uncontrolled access to the abandoned property.

On-site observations were performed on October 25, 2006, by ESPL personnel. ESPL has been providing environmental assistance to Forest in various areas and is familiar with activities on-site.

Mr. Al Osani president of Gibson Maintenance was interviewed. Gibson Maintenance has been on site for 30 years, in charge of the buildings' maintenance, renovation, and new construction at the Prospect Street Facility.

Mr. Osani stated that all USTs/ASTs were removed from site as indicated in the records including a cesspool that was identified at 300 Prospect Street during the building renovation. All excavated material was removed from the site and disposed of properly. He did not know of any past or potential releases of toxic or hazardous materials at the site.

The subject site was thoroughly inspected and photographs taken of each associated structures (See Appendix B) and any indication of an environmental hazard noted.

5.1 Exterior Observations

5.1.1 Storage Sheds

Two storage sheds are maintained in the rear of 303 Facility. One is used for the storage of raw chemicals and the other for the storage of hazardous waste prior to transportation to a regulated disposal facility. A review of the NCDH records indicated that the storage sheds were reviewed and approved for use by the NCDH in 1991.

5.1.2 Waste Water Discharge

The Environmental Protection Agency (EPA) has become concerned with the discharge of pollutants into the waters of the United States. Direct and indirect discharges are to be closely monitored, to assure compliance with discharge limitations. According to 40 CFR Part 439 the USEPA has regulated all the pharmaceutical products manufacturing covered by SIC Code 2834. The EPA has directed the State and local governments to implement and maintain the discharge regulations.

The NCDPW, is the local agency responsible for monitoring all discharges to the Cedar Creek Sewage Treatment facility. Since Forest is located within this sewage treatment district, they have required the Inwood Facility to obtain a waste water discharge permit. This permit is renewed every three

years and requires semi-annual reporting. The 303 Building maintains Permit #62, the 321 Building Permit #63 and the 330 Building Permit #65 (See Appendix D). Waste water discharges are monitored and are randomly sampled for compliance by a representative from NCDPW.

The 300, 320 and 321 facilities have 1,000-gallon underground holding tanks and the 330 Facility has a 500-gallon underground holding tank. These holding tanks isolate the process waste water discharge and to provide a representative sampling point prior to discharge to the municipal sewer. The 303 Facility has a 2-gallon waste water sampling port on the East side of the building prior to discharging to the municipal sewer.

There are floor drains within all five (5) buildings used for cleansing and sanitization of the equipment and production rooms. All floor drains are connected to the sewer.

5.1.3 Sanitary Disposal System

A review of the NCDH records indicated that the 300 Building connected to the sewer system in 1975. The building had previously utilized cesspools for their waste water. Sanitary sewage is currently discharged to the municipal sewer system District 1, Inwood, which is maintained by the NCDPW. This sewage is treated by the Cedar Creek Treatment Facility. There is no indication of any on-site sewage structures on the subject property (i.e., septic tank, leaching pools, etc.) at none of the facilities within Inwood Facility.

5.1.4 Site Drainage – Storm water Discharge and Drywells

The surrounding topography is nearly level. Storm water from the building's rooftop and parking areas is directed to on-site drywells located in the front and rear part of the building for the underground disposal of clear rainwater and surface water runoffs. The parking facility is moderately used with minimal trucks or heavy equipment traffic.

During a fence line inspection of the adjacent properties, a shallow drywell/pit was observed north of 320 Prospect Street facility. Observed activities at the residential neighboring property included some automobile repairs.

5.1.5 Utilities

Long Island Power Authority (LIPA) provides the electricity and Keyspan provides gas. The 300 Building is serviced by a bank of transformers located on pole #5 and 303 Building is serviced from the same bank on pole #5 and an additional bank on pole #4. Buildings 320, 321, and 330 are all serviced by pad mounted transformers numbered 18737, 17402, and 18020, respectively. The transformers are owned by LIPA. The following is a list of transformers within the Inwood Facility:

- 480V transformer 500 KVA in front of 330 Building
- 208V transformer 500 KVA in front of 320 Building

- 208V transformer 500 KVA in front of 300 Building
- Dry Square D, 208V transformer 500 KVA in front of 330 Building
- Dry Square D, 5 transformer inside 321 Building
- 480V transformer by the maintenance department at 321 Building

Heating is provided by numerous gas fired roof top heating units and boilers at each building. Boiler specifications are as follows:

321 Building	320 Building	330 Building
Boiler: Rockmills Model: MP 70 Manufactured Date: 1990 Burner Type: Power Flame dual fuel (Natural Gas & No. 2 Oil)	Boiler: Rockmills Model: MP 20 Manufactured Date: 1987 Burner Type: Power Flame Natural Gas	Boiler: Rockmills - 2 Identical Boilers Model: MP 90 Manufactured Date: 1995 Burner Type: Power Flame dual fuel (Natural Gas & No. 2 Oil)

The Long Island Water Authority (LIWA) provides potable water to the buildings. No drinking water wells were identified on the property.

5.1.6 Indication of Underground Injection Control (UIC)

The EPA's Underground Injection Control (UIC) Program is mandated under the Safe Drinking Water Act (SDWA) OF 1974. The Program is designed to prevent contamination of underground sources of drinking water (USDWs) by injection wells.

EPA divides the types of injection wells into five (5) Classes. Class I wells inject fluid beneath the lower most USDW. Class II wells are utilized in enhanced oil or natural gas production operations and to dispose of produced water. Class III wells are used to inject fluids for the extraction of minerals. Class IV wells dispose of hazardous or radioactive waste into or above an aquifer. The EPA has subsequently banned this type of injection well. The final category is Class V. Class V is a catch all classification that includes all wells that are not included in the above categories.

Generally, Class V wells in New York State are shallow wells, such as cesspools, drywells and septic systems, used to inject fluids into or above a USDW.

There are injection wells in the form of drywells within the perimeter of the 300, 303, 320, 321, 330 Prospect Street property receiving storm-water from the subject sites.

5.1.7 Indication of PCBs

Polychlorinated biphenyls (PCBs), a hazardous group of chlorinated aromatic hydrocarbons, were used in a wide range of products including hydraulic and electrical equipment. PCB-containing equipment has the potential to cause soil and groundwater contamination.

According to LIPA Environmental Department, LIPA's inventory of transformers typically is expected to either contain no PCB's or low levels of PCB's (<0.01%). The presence of low levels of PCBs could have been caused by manufacturer processes that fabricated mineral oil transformers in close proximity to transformers manufactured to specifically contain PCB's.

A response to our FOIL request was received from LIPA regarding their records of the subject site. The response letter dated October 13, 2006 stated that 300 is serviced by a bank of transformers located on pole #5 and 303 is serviced from the same bank on pole #5 and an additional bank on pole #4. Buildings 320, 321, and 330 are all serviced by pad mounted transformers numbered 18737, 17402, and 18020, respectively. The transformers are owned by LIPA.

5.1.8 Indication of Solid Waste Disposal

Solid waste is collected by Waste Management, Inc. on a scheduled basis. There are two containers, 20 yards each, located in 303 and 320 parking lots.

5.2 Interior Observations

5.2.1 Hazardous Substances Use, Storage, Handling and Disposal

The activities performed at the Inwood Facility did require the use of hazardous materials and generation of hazardous waste. Buildings 300, 303, and 321 housed maintenance, production, and PRD and Q/C laboratories.

<u>300 Facility</u>

This facility housed PRD Laboratory and maintained several fume hoods and raw chemical storage cabinets. The hazardous waste generated was in the form of diluted acids and flammables contained in 30-gallon plastic drums. Most chemicals used at this building were as a result of experiment and product research and development generated from HPLC units in the lab generating flammable waste, dissolution process where it generated corrosive acid, and chemist experiments that generated lab-packs, chlorinated and non-halogenated solvents. A permit for the storage of toxic or hazardous materials was issued by the NCDH in 1987 and renewed several times. Routine inspection of the waste storage area by NCDH revealed compliance with the hazardous waste storage requirements and limitations.

The following hazardous waste materials were generally stored at the site:

Waste Stored	Quantity
Medical Waste	varied
Chlorinated Solvent	1-5 gallon plastic drum
Non-halogenated Solvent	1-55 gallon plastic drum
Lab Packs	varied
Spent Corrosive	2-55 gallon plastic drum

303 Facility

This facility housed manufacturing equipment that made solid dosage form pharmaceuticals (tablets and capsules). The manufacturing operations stored isopropyl alcohol used for production and for sanitization of the equipment. Pharmaceutical grade Shellac was mostly used during coating operation. This generated a diluted alcohol/shellac mixture for disposal as a flammable waste. A permit for the storage of toxic or hazardous materials was issued by the NCDH in 1987 and renewed several times. This building generally stored 1-55 gallon steel drum flammable waste (Isopropyl alcohol) inside a flammable cabinet near the process rooms.

321 Facility

This facility is a two story building utilized for the manufacturing of solid dosage form pharmaceuticals (tablets and capsules), offices, maintenance department and a Q/C Department. The manufacturing operations stored isopropyl alcohol used to wipe down the equipment after each batch of pharmaceuticals were manufactured. This generated a diluted alcohol/shellac mixture for disposal as a flammable waste. The Maintenance Department used a Safety Kleen degreaser tub which was maintained by Safety-Kleen and the used degreasing agent was taken away to the recycling facility as hazardous waste. The Q/C Department housed PRD Laboratory and maintained several fume hoods and raw chemical storage cabinets. The hazardous waste generated was in the form of diluted acids and flammables contained in 30-gallon plastic drums. This facility maintains numerous dust collectors above the production rooms (second floor). A dust collector was identified as unit #6 used to collect dust particles from manufacturing process were labeled as hazardous waste.

All waste generated on site was transported off-site to a regulated disposal facility by Veolia ES Technical Solutions (EPA ID # NJD080631369) a licensed hazardous waste transporter.

The following hazardous waste materials were generally stored at the site:

Waste Stored	Quantity
Chlorinated Solvent	1-5 gallon plastic drum
Non-halogenated Solvent	1-55 gallon plastic drum
Lab Packs	varied
Spent Corrosive	2-55 gallon plastic drum
Safety-Kleen	30 gallons

5.2.2 Hazardous Substances/Unidentified Substance Containers (Storage, Handling and Disposal)

The nature of business and activities conducted at the subject sites did require the storage of chemicals and did generate hazardous waste. All containers were identifiable and stored in compliance with NCDH permit issued for such operation.

5.2.3 Storage Tanks

There is no UST/AST within the perimeter of the subject site, except for the wastewater storage tanks that are described in section 5.1.2 of this report.

5.3 Physical Setting Analysis/Chemical Staining and Stressed Vegetation

A surface spill of petroleum hydrocarbon products or other chemicals may be absorbed into the soil particles and retained in the near-surface sediments. Plant life near a spill will often be killed or will suffer stress from the contamination of the soil with these products. The condition of vegetative growth can be an indicator of near-surface soil conditions.

There was no evidence of chemical staining or stressed vegetation within the accessible areas of the subject sites.

6.0 Findings

ESPL has performed a Phase I ESA in conformance with the scope of work and the limitations of the ASTM Designation E 1527-05 and the EPA AAI Rule for the Inwood Facility located on Prospect Street, Inwood, New York 11096. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report.

The subject area is located in a residential/light industrial section of Inwood, NY. Location, topographic and Sanborn maps are listed in Appendix A.

The subject sites consisted of the following structures:

Bldg.	Usage	Lot Acreage	Bldg. Sq. Ft.	Construction Year
300	PRD	0.4886	9,700	1958
303	Production	0.2626	6,700	1957
320	Shipping, Receiving, Warehousing, Production	0.5719	14,400	1987
321	Offices, Production, Maintenance, Warehousing, Q/C Lab	1.12	48,000	1990
330	Production	0.8313	22,000	

Photographs of the subject sites activities and neighboring properties are included in Appendix B.

LIPA provides the electricity and Keyspan provides gas. The Long Island Water Authority provides the drinking water. The sanitary sewage generated on-site is directed to the Nassau County municipal sewer system.

Raw chemicals were stored within the subject area. The federal, state and local record search did indicate the use, generation, storage, or disposal of hazardous materials or hazardous waste on-site.

The Facility is considered a LQG and maintained a No. 2 fuel oil UST which was removed in 1988.
There was no evidence of stressed vegetation or chemical staining on the accessible areas of the flooring or walls of the subject sites. There were no ecological sensitive areas located within the general vicinity of the subject sites.

There were no transformers belong to the Facility, but LIPA does own several transformers; 300 is serviced by a bank of transformers located on pole #5 and 303 is serviced from the same bank on pole #5 and an additional bank on pole #4. Buildings 320, 321, and 330 are all serviced by pad mounted transformers numbered 18737, 17402, and 18020, respectively.

A spill was documented for the Facility. On June 25, 2003 a spill was reported to the NYSDEC and spill number 0303189 was issued. The spill was caused by the pad mounted transformer leaking oil. A clean-up was conducted under Keyspan. It was estimated that ten gallons had leaked onto the concrete pad and into a containment pit. A clean-up was performed by Tradewinds under Keyspan's supervision. NYSDEC documented that approximately 10 gallons of non-PCB transformer oil was spilled and that the spill was contained in the containment pit and no drains were impacted

Correspondence from NYSDEC, NCDOH, NCFC, and LIPA is listed in Appendix D.

All releases identified in the record search were represented as minimal potential for hazard by the reporting agency.

7.0 Opinion

To further assess the risk for environmental damage, potential financial exposure and associated liabilities related to ownership of the property, it is ESPL opinion that the following actions to be performed:

Storm water Drywell

- The storm water drywells within the perimeter of 300, 303, 320, 321, and 330 buildings must be cleaned. Special attention must be given to the drywell between the 320 Prospect Street building and the northern property line due to the fence line observation of a drywell/pit at the abutting property.

- The cleaning of the wells shall begin with visual examination of the well contents. The liquid content in the drywells must be sampled and pumped-out. Sample the sludge/sediments at the bottom of the wells for waste characterization. Remove the sediment from the drywell until the condition of visually clean is achieved. Dispose of sludge and waste generated from cleaning in compliance with NYSDEC, USEPA requirements and standards. Upon completion of cleaning, end point samples must be collected. If the results of the endpoint sample are clean, replacement of the removed soil from the bottom of the drywell with clean sand is recommended.
- All collected samples must be analyzed for Total Petroleum Hydrocarbons (USEPA method 8015), VOC(USEPA method 8260), SVOC (USEPA method 8270), RCRA Metals (USEPA method 6010) for disposal compliance with NYSDEC, NCDPW, and USEPA standards.
- **If contamination is encountered, NCDOH must be notified.**

Waste-water holding tank

- The liquid contents of the four (4) wastewater holding tanks must be sampled and analyzed for discharge limitation compliance. The liquid content must be pumped-out and the tanks to be cleaned without entry. The rinse water generated from the tank cleaning must be characterized for proper disposal.
- **If contamination is encountered, NCDPW and NCDOH must be notified.**

Hazardous Waste Storage

- Remove all hazardous waste drums within the storage shed and throughout the buildings and dispose of accordingly.

8.0 Conclusion

ESPL has performed a Phase I Environmental Site Assessment in conformance with the

scope and limitations of ASTM Practice E-1527-05 for the Inwood Facility. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This report has revealed no evidence of recognized environmental conditions in connection with the property.

Opinions and conclusions are submitted based on the careful consideration of the results of the site inspection and the scope of work. The information provided in this report has been obtained during interviews and field inspections, and database search, review of geographical location, geology and hydrogeology of the site including the physical evidence.

It should be noted that when a Phase I ESA completed without subsurface exploration of chemical screening of the soil and the groundwater beneath the site, no statement of certainty can be made regarding the subsurface conditions that may result from on-site or off-site sources. The possibility always exists for contamination to migrate through surface water, air and/or groundwater. However, ESPL believes that the assessment was sufficient to provide a reasonable characterization of the environmental condition of the property, and that the preliminary identification of potential environmental concerns/problems can be made on the information procured.

9.0 Additional Services

In addition to the ASTM Standard, ESPL has included information regarding radon and a limited visual inspection of 303, 320, 321, 330 Buildings and a sampling investigation of the 300 Building for asbestos containing material and lead based paint.

9.1 Asbestos-Containing Material (ACM)

Asbestos is a group of naturally formed minerals that readily separate into tiny fibers. Chrysotile, a type of serpentine (curved-fiber) asbestos, which accounts for over 90 percent of the world's production of asbestos. Amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite, and actinolite are all types of amphibole (straight-fiber) asbestos. All of these substances, whether in a pure or altered state, are commonly called "asbestos". Of the six fibers, the minerals chrysotile, mesite, and crocidolite have been most commonly used in building materials. Because asbestos is often mixed with other materials, the term "Asbestos-Containing Material" or ACM is often used. It generally refers to any material containing one percent or more of an asbestos substance.

Of particular concern is friable asbestos, that is, asbestos that can be crumbled by hand pressure. Friable asbestos poses the greatest risk of being released into the air in work areas. Asbestos, when not friable, such as when it is contained in undamaged floor tiles or shingles is not considered hazardous unless it is disturbed and becomes friable. Building renovations or repairs can create a health hazard by disturbing ACM.

The EPA has published rules that ban almost all manufacturing, importing, and processing of asbestos-containing products in the United States, by 1997. This ban will not require the removal of ACM currently in place, however if it is located in places generally accessible to the public where fibers can become airborne if they are damaged, worn out or cut, they should be removed by a licensed asbestos abatement contractor.

This section describes the findings of ESPL's limited visual surveys conducted during the site inspection, and is not to be used as a complete asbestos inspection, which would be required by the New York State Department of Labor regulations (12 NYCRR Part 56) prior to renovation, construction or demolition activities.

Sampling and laboratory analysis of suspected ACM (SACM) at 300 Building was undertaken as part of ESPL's Phase I ESA.

9.1.1 Purpose and Scope

The purpose of this investigation was to determine the presence of asbestos containing materials (ACM) within all accessible areas of the 300 Prospect Street building in compliance with United States Environmental Protection Agency (USEPA) in the Guidance for Controlling Asbestos Containing Materials in the Buildings, Office of Pesticides and Toxic Substances; 40 CFR Part 763, Asbestos Hazard Emergency Response Act (AHERA); 40 CFR Part 763, National Emissions Standards for Hazardous Air Pollutant (NESHAP).

A targeted survey of the potential presence of ACM was developed. At the discretion of the asbestos investigator, representative sample material from suspected areas of the buildings was collected and forwarded to a New York State approved and accredited laboratory for analysis. Suspect asbestos containing materials (SACM) collected was analyzed using polarized light microscopy (PLM) and/or transmission electron microscopy for non-friable Organically Bound (NOB) materials. The sampling procedure is outlined below. The following areas were identified to be affected by the proposed renovation and were inspected for ACM:

1. Roofing Material
2. Floor Coverings
3. Wall Sheetrock & Joint Compound
4. Ceiling Tile

9.1.2 Field Procedure and Analysis Methodology

Victor Khanin, a Certified Asbestos Investigator (Cert. # 96814), conducted an asbestos survey of the subject site on November 10, 2006. The purpose of this survey was to assess the presence or absence of ACM. Field information was organized as per AHERA concept of homogeneous area. The building materials were grouped into homogeneous sampling areas A -

D. All floor areas of the 300 Building was surveyed for visual presence of ACM and bulk samples were collected and placed in a sealed container and labeled. All samples were analyzed by a New York State Laboratory, EMSL Analytical, Inc. NY ELAP # 11506, using a Polarized Light Microscopy (PLM) point counting methodology in accordance with EPA Method 600/M4-82-020 and 600/R-93/116 and NYS-DOH Guidelines (method 198.1). Laboratory results and chains of custodies are located in Appendix C. The State of New York ELAP has determined that the analyses of NOB are not reliably performed by PLM. Therefore, if PLM analysis of NOB yields negative results, it must be further confirmed by quantitative Transmission Electron Microscopy (TEM) before this material considered or treated as non-asbestos containing. Consequently, samples which produced a negative PLM and which are classified as a NOB were then re-analyzed utilizing the TEM methodology.

9.1.3 Findings

Table 1 summarizes the sampling location and quantifies the results of ACM within the suspect materials at 300 Building. The review of the results indicated that the roof flashing contains asbestos. The roofing material and flashing are in good condition. A management program should be developed to monitor identified areas. The ACM must be removed prior to any demolition or renovation activities which may impact the material. All asbestos abatement activities must be performed by a licensed asbestos contractor in accordance with federal, state and local regulations.

Table 1
300 Building/Summary ACM Laboratory Results (PLM & TEM)

HA	Sample #	Sample Location & Description	Appearance	PLM Results			TEM Results
				% Fibrous	% Non-fibrous	% ACM	
A	Rf 01	Roofing Material @ middle of the Roof	Black/ Non-Fibrous			Inconclusive	<1% Chrysotile
A	Rf 02	Flashing Material/AC Unit	Black/ Non-Fibrous			Inconclusive	1.8% Chrysotile
A	Rf 03	Flashing Material/Roof	Black/ Non-Fibrous			Inconclusive	2% Chrysotile
A	Rf 04	Flashing material/Base & Vent	Black/ Non-Fibrous			Inconclusive	4.2% Chrysotile
B	01	General Lab Area/Ceiling Tile	Tan/Fibrous	30% Cellulose 36% Glass	34% Non-fibrous	ND	
C	02	General Lab Area/Drywall	Tan/Fibrous	20% Cellulose	80% Non-fibrous	ND	
C	03	Mechanical Room/Drywall	White/ Fibrous	10% Cellulose	55% Gypsum 35% Non-fibrous	ND	
D	04	Analytical Lab/Floor Tile				Inconclusive	ND
C	05	Warehouse/Drywall	Gray/ Fibrous	16% Cellulose	60% Gypsum 24% Non-fibrous	ND	
B	06	Warehouse/Ceiling Tile	Gray/ Fibrous	26% Cellulose 12% Glass	62% Non-fibrous	ND	
C	07	General Lab area/Drywall	White/non-Fibrous	12% Cellulose 3% Glass	60% Gypsum 10% Mica 15% Non-fibrous	ND	

HA: Homogeneous Area
ND: Not Detected
Lt 1% Chrysotile : Less than 1% Chrysotile. (Results greater than 1% Chrysotile is considered positive for asbestos)

: Not Analyzed

See Appendix A - Figures 36 & 37 for Sampling Locations

9.2 Lead Based Paint

Since the Inwood Facility 300, 303 and 330 Buildings were constructed prior to the lead-based paint ban in 1978, there is a potential that the paint used may contain lead. Based on our visual inspection of the building's interiors the paint surfaces are in good condition.

9.2.1 Purpose and Scope of Work

A targeted survey of the potential presence of lead containing paint (LCP) of the 300 Building was performed. The survey focused on surfaces at where lead paint might have been applied within the walls, ceilings, painted surfaces and columns of the 300 Building.

9.2.2 Field Procedure and Analysis Methodology

At the discretion of the lead inspector, Joel Deutsch, Cert. # NY-R-1064-1, representative painted areas (walls, ceilings, painted surfaces, etc.) were screened using a Niton XRF analyzer. The principle of XRF operation is outlined below:

When a sample is measured via XRF, each element present in the sample emits its own unique fluorescent x-ray energy spectrum. By inducing and measuring a wide spectrum of the range of different characteristic fluorescent x-rays emitted by the different elements in the sample, XRF hand-held analyzers rapidly determine the elements present in the sample and their relative concentrations. It is important to note that, except in special circumstances, light elements cannot be measured directly with portable XRF analyzers, simply because x-rays with energies below 2 eV - including the characteristic x-rays of all elements lighter than sulfur (element 16) - are largely absorbed in air within a short distance. However, XRF analyzers automatically compensate for many other effects that would otherwise bias or distort sample analyses. These effects include:

A. Geometric effects caused by the sample's shape, surface texture, thickness and density.

B. Spectroscopic interferences and other sample matrix effects.

C. Critical absorption of the characteristic x-rays of one element by other elements in the sample, and secondary and tertiary x-ray excitation of one or more elements by other elements in the sample.

The calibration results of the XRF device are listed in the data chart reporting the sample results (See Appendix D). The first and last three (3) readings in the chart are the XRF calibration tests readings. These tests are taken in order to insure that XRF device is operating accurately. The calibration is considered successful if reads OK on the data chart. The Lead paint used as a reference sample is provided by Niton (XRF Manufacturer) and utilized for the unit calibration.

The "side" listed in the chart is always the wall in which the room is entered with sides B, C & D following clockwise.

The action level for lead in paint in NYC is as set forth by the USEPA and the Department of Housing and Urban Development (HUD), is 1.0 milligram per square centimeter (mg/cm^2). Results below 1.0 mg/cm^2 are negative and those equal or above is considered positive for lead.

9.2.3 Findings

The inspection and sampling of the painted surfaces of the 300 Building for lead concentration, using a portable XRF scanner was performed by collecting a total of forty (40) readings (See Appendix A – Figure 38). There were no positive readings within the building. Tabulated results of the readings are listed below:

Table 2
300 Building/Summary LBP Sampling Results

No.	Time	Duration	Compnt.	Sub strate	Side	Cond	Room	Results.	Depth Index	PbC	PbC Error
2	10/25/06 11:13	9.12	XRF Calib.					Pos.	1.05	1.1	0.1
3	10/25/06 11:13	1.82	XRF Calib.					Neg.	1	0	0.02
4	10/25/06 11:13	1.52	XRF Calib.					Neg.	1.02	0.3	0.17
5	10/25/06 11:15	2.12	Wall	Conc.	WEST	Fair	Waste Rm.	Neg.	2.48	0.02	0.06
6	10/25/06 11:15	1.21	Wall	Conc.	WEST	Fair	Waste Rm.	Neg.	1	0	0.02
7	10/25/06 11:15	2.43	Wall	Conc.	WEST	Fair	Waste Rm.	Neg.	1	0	0.02
8	10/25/06 11:16	2.12	Wall	Conc.	WEST	Fair	Waste Rm.	Neg.	1	0	0.02
9	10/25/06 11:16	1.21	Column	Conc.	WEST	Fair	Prod. Area	Neg.	4.78	0.04	0.14
10	10/25/06 11:16	1.21	Column	Conc.	WEST	Fair	Prod. Area	Neg.	2.13	0.01	0.05
11	10/25/06 11:18	2.73	Wall	Conc.	NORTH	Fair	Prod. Area	Neg.	2.65	0.01	0.05
12	10/25/06 11:18	2.13	Wall	Conc.	NORTH	Fair	Prod. Area	Neg.	1.01	0	0.02
13	10/25/06 11:19	1.21	Wall	Conc.	NORTH	Fair	Prod. Area	Neg.	1	0	0.02
14	10/25/06 11:19	1.22	Wall	Conc.	NORTH	Fair	PRD	Neg.	1	0	0.02
15	10/25/06 11:20	1.21	Wall	Conc.	NORTH	Fair	PRD	Neg.	1	0	0.02
16	10/25/06 11:21	2.12	Wall	Conc.	NORTH	Fair	Warehouse	Neg.	1	0	0.02
17	10/25/06 11:21	2.12	Wall	Conc.	NORTH	Fair	Warehouse	Neg.	5.39	0.04	0.14
18	10/25/06 11:22	2.43	Wall	Conc.	NORTH	Fair	Warehouse	Neg.	2.44	0.02	0.05
19	10/25/06 11:22	1.52	Column	Conc.	NORTH	Fair	Warehouse	Neg.	5	0.04	0.14
20	10/25/06 11:24	1.52	Column	Conc.	NORTH	Fair	Warehouse	Neg.	5.31	0.05	0.18
21	10/25/06 11:25	1.82	Wall	Conc.	NORTH	Fair	Warehouse	Neg.	1	0	0.02
22	10/25/06 11:25	1.82	Wall	Conc.	NORTH	Fair	Warehouse	Neg.	1	0	0.02
23	10/25/06 11:26	2.74	Column	Conc.	NORTH	Fair	Office	Neg.	1	0	0.02

Table 2 (Cont.)
300 Building/Summary LBP Sampling Results

No	Time	Duration	Compnt.	Sub strate	Side	Cond	Room	Reslts.	Depth Index	PbC	PbC Error
24	10/25/06 11:27	2.73	Wall	Conc.	NORTH	Fair	Office	Neg.	1	0	0.02
25	10/25/06 11:28	1.82	Wall	Drywall	NORTH	Fair	Office	Neg.	1	0	0.02
26	10/25/06 11:28	1.52	Wall	Drywall	NORTH	Fair	Office	Neg.	1	0	0.02
27	10/25/06 11:29	1.52	Wall	Conc.	NORTH	Fair	Vault	Neg.	1	0	0.02
28	10/25/06 11:29	2.43	Wall	Conc.	NORTH	Fair	Vault	Neg.	2.2	0.01	0.04
29	10/25/06 11:32	1.21	Wall	Drywall	NORTH	Fair	Analytical Lab Office	Neg.	1	0	0.02
30	10/25/06 11:33	2.12	Wall	Conc.	SOUTH	Fair	Mech. Rm.	Neg.	2.61	0.02	0.06
31	10/25/06 11:33	2.12	Wall	Conc.	SOUTH	Fair	Mech. Rm.	Neg.	1.53	0.01	0.03
32	10/25/06 11:33	1.82	Wall	Conc.	SOUTH	Fair	Mech. Rm.	Neg.	1	0	0.02
33	10/25//06 11:34	1.52	Wall	Conc.	EAST	Fair	Mech. Rm.	Neg.	1	0	0.02
34	10/25/06 11:34	2.12	Wall	Conc.	EAST	Fair	Mech. Rm.	Neg.	1	0	0.02
35	10/25/06 11:35	1.52	Chimney	Conc.	SOUTH	Fair	Mech. Rm.	Neg.	1	0	0.02
36	10/25/06 11:35	1.82	Chimney	Conc.	SOUTH	Fair	Mech. Rm.	Neg.	6.76	0.07	0.22
37	10/25/06 11:37	1.24	Column	Conc.	EAST	Fair	Mech. Rm.	Neg.	2.62	0.02	0.07
38	10/25/06 11:40	1.21	Column	Conc.	EAST	Fair	Analytical Rm.	Neg.	1	0	0.02
39	10/25/06 11:40	2.13	Column	Conc.	EAST	Fair	Analytical Rm.	Neg.	1	0	0.02
40	10/25/06 11:41	3.34	Closet Door	Wood	EAST	Fair	Tel.	Neg.	1	0	0.02
41	10/25/06 11:43	1.82	Column	Metal	EAST	Fair	Gen. Lab	Neg.	1	0	0.02
42	10/25/06 11:47	1.52	Ceiling	Metal	EAST	Fair	Gen. Lab	Neg.	1	0	0.02
43	10/25/06 11:47	1.82	Ceiling	Metal	EAST	Fair	Gen. Lab	Neg.	6.04	0.05	0.17
44	10/25/06 11:48	4.86	XRF Calib.					Pos.	1.13	1.2	0.1
45	10/25/06 11:49	1.21	XRF Calib.					Neg.	1.43	0	0.03
46	10/25/06 11:49	1.21	XRF Calib.					Neg.	1	0.3	0.18

9.3 Radon

Radon is a heavy colorless, odorless, radioactive gas formed by the radioactive decay of radium in rocks and soil. Radon is associated with specific geologic formations which contain granite, uranium minerals, certain shales and phosphate related minerals. Radon, being a gas, can migrate to and accumulate in confined spaces such as building basements. Continued exposure of radon gas has been associated with increased lung cancer risk and possible genetic damage.

The USEPA has set a maximum action level of 4 picocuries per liter (pci/l) for air. Remedial action to lower any levels above this concentration is recommended by the USEPA.

The New York State Department of Health, Bureau of Radiation Protection monitors radon levels throughout the state. According to this monitoring data, Nassau and Suffolk Counties have the lowest radon average (less than 2 pCi/L) within the state. Given this information, Radon is not considered a significant environmental concern within the subject site.

However, A Radon Zone should not be used to determine if individual buildings need to be tested for radon. The EPA's office of Radiation and Indoor Air recommends that all buildings be tested for radon, regardless of geographic location or the Radon Zone designation in which the property is located.

10.0 References

1. ASTM Environmental Site Assessments for Commercial Real Estate E 1527-05 and AAI
2. Nassau County Department of Health
3. Nassau County Fire Commission
4. New York State Department of Environmental Conservation
5. Long Island Power Authority
6. Topographic Maps dated 1903, 1918, 1947, 1954, and 1968
7. Aerial Maps dated 1954, 1966, 1975, 1980 and 1994
8. Environmental Data Resources, Inc.
9. Sanborn maps for the years 1940, 1950, 1961, 1972
10. Mr. Al Osani, owner's representative
11. EMSL Analytical, Inc.

11.0 Signature of Environmental Professional

This report was prepared under the supervision of Ray Kahn, P.E., the authorized signatory of ESPL and Director of Environmental Technology.

Ray Kahn, P.E.
Director of Environmental Technology

ACRONYMS

ACM - Asbestos Containing Material
AST - Above Ground Storage Tank
ASTM - American Society for Testing and Materials
CBS - Chemical Bulk Storage
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System
CFR - Code of Federal Regulations
CORRACTS Facilities Subject to Corrective Action under RCRA
DEC - Department of Environmental Conservation
DEP - Department of Environmental Protection
DOCKET - Civil judicial cases filled on USEPA's behalf by the US Department of Justice
DOH - Department of Health
DPW- Department of Public Works
EPA - Environmental Protection Agency
EPCRA - Emergency Planning and Community Right-to-Know Act
ERNS - Emergency Response Notification System
ESA - Environmental Site Assessment
FINDS - Facilities regulated or tracked by the USEPA
FOIA - U.S. Freedom of Information Act
FOIL - Freedom of Information Letter
FR - Federal Register
HWS - Hazardous Waste Disposal Sites
LRST - Leaking Storage Tank
LUST - Leaking Underground Storage Tank
MOSF - Major Oil Storage Facilities
MSDS - Material Safety Data Sheet
NCP - National Contingency Plan
NFRAP - No Further Remedial Action Planned Report
NPDES - National Pollutant Discharge Elimination System
NPL - National Priority List
NUCLEAR - Facilities with permit to handle radioactive materials
NYSDEC - New York State department of Environmental Conservation
PBS - Petroleum Bulk Storage
PCB - Polychlorinated Biphenyl
PRP - Potentially Responsible Party
RCRA - Resource Conservation and Recovery Act
RCRIS-CA - Resource Conservation and Recovery Information System – TSD's Subject to Corrective Action
RCRIS-LG - Resource Conservation and Recovery Information System – Large Quantity Generator
RCRIS-SG - Resource Conservation and Recovery Information System – Small Quantity Generator
RCRIS-TS - Resource Conservation and Recovery Information System – Non-Corrective Action TSD Facilities

REC - Recognized Environmental Conditions
SACM - Suspect Asbestos Containing Material
SARA - Superfund Amendments and Re-authorization Act
SPILLS - Listing of all hazardous material spills reported to NYSDEC
SWF - Solid Waste Facility
TRI - Toxic Release Inventory
TSD- Treatment, Storage, or Disposal Facility
USC - United States Code
USGS - United Sates Geological Survey
UST - Underground Storage Tank