THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT
TWO GATEWAY CENTER
NEWARK, NJ 07102

September 17, 2002

Mr. Dennis J. Wolterding, P.G., C.P.G., Chief
Hazardous Waste Remediation Program
Region 2
New York State Department of
Environmental Conservation
47-40 21st Street
Long Island City, NY 11101-5407

Re: Howland Hook Marine Terminal, Port Ivory Facility
(Former P&G Site) Voluntary Cleanup Application

Dear Mr. Wolterding:

Attached for your review, please find two copies of the Voluntary Cleanup Program Application. Also included for your review is one copy of the *Site Investigation Report of Port Ivory Site, Staten Island, New York, Block 1309, Lot 10; Block 1338, Lot 1; and Block 1400, Lot 1. Volumes I-III, April 2002.* Prepared by Killam Associates. Please note that an identical package has been forwarded to the Chief of Brownfield's/Voluntary Cleanup Section in Albany NY.

If you have any questions, please call me at (973) 565-7553.

Sincerely,

Edward M. Aldrich
Sr. Environmental Analyst
Environmental Engineering Unit

Cc: R. Pruno PA
B. Stobbie PA

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

VOLUNTARY CLEANUP PROGRAM APPLICATION

NYSDEC Site No.:_____ (rev. 11/00)

STATEMENT OF CERTIFICATION

I, ARIE VAN TOL, do hereby certify and attest that the information included in this Voluntary Cleanup Program application, including any attachments, is, to the best of my knowledge and belief, accurate and complete; and that the applicant has the necessary funds to undertake the activities proposed to be implemented under this application, if approved.

7/10/02
Date

Signature

TYPE OF CONTAMINANTS: ☒ Petroleum ☒ Hazardous Substances ☐ MGP ☐ Other

I. SITE NAME AND LOCATION

SITE NAME (legal, common, or descriptive): Port Ivory Site (Former Procter & Gamble Site)

SITE LOCATION: Street or Route No.: 40 Western Avenue

CITY/TOWN: Staten Island COUNTY: Richmond ZIP: 10303

LATITUDE: 40°38'15" LONGITUDE: 74°10'50"

COUNTY TAX MAP IDENTIFIER NO(S). Block 1309, Lot 10, Block 1338, Lot 1 and Block 1400, Lot 1

II. CURRENT OWNER/OPERATOR INFORMATION

Current owner's name, address, and phone and fax nos.:

Arie Van Tol
Manager, New York Marine Terminals
The Port Authority of NY & NJ
90 Columbia Street
Brooklyn, NY 11201
Tel: 718-330-2972

Current operator's name, address, and phone and fax nos.:

Same

III. VOLUNTEER IDENTIFICATION

Volunteer's name, address, and phone and fax nos.:

Same as above

Volunteer's contact's name, address, and phone and fax nos.:

Same as above

Describe Volunteer's relationship, if any, to current owner and current operator (subsidiary, shareholder, partner, etc.). If no relationship, put "none":

Volunteer and current owner / operator are the same entity.

IV. PROPERTY'S ENVIRONMENTAL HISTORY OVER PAST 50 YEARS

A. To the extent that existing information/studies/reports/ are readily available to the applicant, attach:
- a description of the environmental history of the site that includes previous uses of the property, types of operation, chemicals used on the property, by-products or wastes produced by previous activities on-site, and a list of any orders, decrees, or other legal documents regarding violations of the Environmental Conservation Law or equivalent federal environmental statutes;
- a list of previous owners with names, last known addresses and telephone numbers (describe Volunteer's relationship, if any, to each previous owner listed. If no relationship, put "none"); and

- a list of previous operators with names, last known addresses and telephone numbers (describe Volunteer's relationship, if any, to each previous operator listed. If no relationship, put "none").

B. Is the site listed in New York State's Registry of Inactive Hazardous Waste Sites? YES ___ NO X

If yes, the Registry Site Code is __ - ____ - _____.

Please see attached letter from NYSDEC

C. Is the site listed as Class 1 or 2 in New York State's Registry of Inactive Hazardous Waste Sites? YES ___ NO X

D. Did the Volunteer generate, transport or dispose of, arrange for or cause the generation, transportation or disposal of hazardous substance on the property? YES ___ NO X

E. Is the site a treatment, storage, or disposal facility (TSDF) subject to corrective action or closure under permit or order issued under the Department's hazardous waste management regulatory ("RCRA") program? YES ___ NO X

F. Is the site a TSDF operating under interim status under the RCRA program that is subject to enforcement action leading to the issuance of an order containing a corrective action schedule? YES ___ NO X

V. INTENDED SITE USE

Briefly describe below the Contemplated Use of the site following cleanup.

The Port Authority of NY & NJ intends to utilize the Port Ivory Site for a Container Terminal and Intermodal Facility.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9564 • **FAX:** (518) 402-9557
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

March 25, 2002

Mr. Charles Springer
Killam Associates
27 Bleeker Street
PO Box 1008
Millburn, NJ 07041-1008

Dear Mr. Springer:

Re: Proctor & Gamble Site, Western Ave.
Staten Island, Richmond County, NY

This letter is to confirm our phone conversation of earlier today regarding the Proctor and Gamble Site located on Western Avenue in Staten Island, New York. The site was formerly listed on the *New York State Registry of Inactive Hazardous Waste Disposal Sites* (site # 243002). It was removed from the registry due to the lack of disposal of a consequential amount hazardous waste. In addition, the site is currently not designated a site on the *Inventory of Hazardous Substance Waste Disposal Sites.* The Proctor & Gamble site was considered for, but not included in this inventory.

Please feel free to call me at the above number or e-mail me at emzuk@gw.dec.state.ny.us. if you have any further questions.

Sincerely,

Elaine M. Zuk
Senior Engineering Geologist
Eastern Investigation Section

Appendix A

APPENDIX A
Environmental History
Port Ivory Site
40 Western Avenue
Staten Island, New York 10303

Information pertaining to the environmental history of the Port Ivory Site is included in the Environmental Site Investigation Workplan and Report (ESIWR) prepared by Killam Associates and dated April 2002, which is being provided concurrently to the New York State Department of Environmental Conservation (NYSDEC). The ESIWR provided information gained through the performance of a Phase I Environmental Site Assessment (Phase I ESA) as well as the findings from a site investigation (SI), which was implemented to evaluate issues identified through the performance of the Phase I ESA. The SI also was performed to develop a better understanding of current site conditions, including current levels of contaminants present in various environmental media (soil, groundwater, sediment and surface water) at the Port Ivory Site. A summary of the information including tables addressing specific aspects of the site's environmental history is provided as part of this VCP application. The environmental history summary is provided below and information pertaining to site buildings, environmental database listings and previous environmental investigations and reports are provided as Tables 1-3, respectively.

Prior reports identified the presence of a number of different types of contaminants at a wide range of concentrations in soil, sediment, surface water and groundwater as well as the presence of fill material at certain site areas. A summary of the investigative efforts and the findings are presented in Table 2. As stated above, the Port Authority implemented a SI at this site. Overall, the SI confirmed the presence of a variety of fill materials and identified several potential "oil" impacted areas including potential UST Areas. Analytical data have revealed the presence of contaminants at concentrations in excess of current NYSDEC regulatory guidance criteria in samples from soil, sediment/precipitate, surface water and groundwater. However, the data generally indicate that site issues are related to petroleum and non-petroleum oils, pH and to some degree, metals. To a far lesser extent, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were noted to be present at concentrations above NYSDEC guidance criteria in soil and groundwater. Generally data have shown that former site usage did not substantially impact groundwater and that groundwater quality is typical to that of urban areas. It should be noted that the Port Authority is currently delineating areas identified as potential petroleum and/or non-petroleum "hot spots".

Site/Facility History

In the early 1900s Procter & Gamble (P&G), the former site owner/operator, developed a portion of the current site for use as a consumer goods manufacturing facility. Over the years, P&G acquired additional acreage and expanded the original facility to include the current site limits. The site was utilized for consumer goods manufacturing from development until 1991. The specific consumer goods produced at the facility and the operations/activities performed at specific site areas changed based upon corporate requirements. A summary of buildings including information on former site activities at the site is presented in Table 1.

According to representatives of P&G and information provided in reports supplied by same, P&G constructed the initial Port Ivory manufacturing facility at this site in 1906-1907. The original 77 acre facility included Block 1400, Lot 1 and Block 1309, Lot 10 and was developed on an open, vegetated, marshy area. Additional acreage is reported to have been gained through the acquisition of the Block 1338, Lot 1 parcel as well as the filling of additional marshlands at all three parcels. The fill used by P&G in conjunction with site development is reported to have included the following: sand, silt, gravel mixed with debris, cinders generated from on-site coal-fired boilers, calcium carbonate and other carbonate salts generated as a by-product from soap manufacturing processes, spent diatomaceous filter earth from vegetable oil refining operations, and carbonaceous filter material from glycerin recovery operations.

Historical information sources indicate some variability in the operations performed at specific site locations throughout the operation of this facility. However, in general, the following activities were conducted on the three parcels comprising this facility: Block 1400, Lot 1 was utilized for soap and glycerin manufacturing and utility functions (i.e., boiler houses, wood processing for the boilers, locomotive maintenance, etc.); Block 1338, Lot 1 was utilized for the manufacturing of cake mixes and vegetable oil and shortening, the processing of orange juice and the warehousing of finished product; Block 1309, Lot 10 was utilized for shipping and receiving via ships, vehicle parking, bulk fuel oil storage and the landfilling of construction and demolition (C&D) debris. P&G closed the C&D Landfill in accordance with applicable NYSDEC regulations and the Port Authority has been performing post-remedial sampling, as required by NYSDEC. All three parcels are characterized by the presence of an internal railroad system, which connects to the regional system at the southern end of the site.

As previously stated, Killam performed a Phase I ESA of the subject site. This effort identified AOCs based upon several site inspections, interview of available representatives of P&G, review of historical information sources (site plans, aerial photographs, Sanborn Fire Insurance Maps) and review of an electronic database search. The SI performed by the Port Authority was based upon information gained through the performance of the Phase I ESA as well as a supplemental review of documents provided by P&G subsequent to the issuance of the Phase I ESA. The SI was designed to resolve issues identified through the performance of the Phase I ESA and to provide information on current environmental conditions at the site for the purpose of acquisition. A summary of the SI and the resultant findings are presented in the ESIWR provided along with this VCP Application.

Previous Environmental Investigation Efforts

Killam reviewed documents pertaining to site history and previous environmental investigations in conjunction with the performance of the Phase I ESA and a supplemental file review. The documents included in the review were limited to those made available by P&G. Overall, the documents identified a number of AOCs that were evaluated, to varying degrees, by the prior site owner, P&G. The AOCs involved both soil and groundwater as well as underground storage tanks (USTs) and an issue associated with Bridge Creek which runs along the western border of Block 1400, Lot 1. A listing of the documents included in the review and a brief summary of the contents of same is provided in Table 2. In addition, an environmental database report was obtained as part of the Phase I ESA. The electronic database search, performed by Environmental Data Resources, Inc. identified that the subject site was included in several American Society of Testing and Materials (ASTM) standard and non-standard environmental record sources. These sources include the following:

The United States Protection Agency (USEPA), Resource Conservation Recovery Information System (RCRIS) Facilities - Large Quantity Generators (LQG) List, December 12, 1999;
The New York State Department of Environmental Conservation(NYSDEC) Inventory of Hazardous Disposal Sites (SHWS) List, February 4, 2000 ;
NYSDEC, Leaking Underground Storage Tank Incident Reports (LTANKS) List, January 2000;
NYSDEC, Petroleum Bulk Storage Database (UST) List, January 2000;
NYSDEC, Chemical Bulk Storage Database (CBS UST) List, January 2000;
NYSDEC, Chemical Bulk Storage Database (CBS AST) List, January 2000;
NYSDEC, Major Oil Storage Facilities Database (MOSF UST) List, January 2000;
NYSDEC, Major Oil Storage Facilities Database (MOSF AST) List, January 2000;
USEPA Facility Index System (FINDS) List, dated October 1999; and,
NYSDEC Spills Information Database (Spills) List dated January 2000.

A summary of the listings as well as commentary regarding the basis for the listings, as feasible and appropriate, is provided in Table 3. It should be noted that Killam made inquires as to the basis for the site's inclusion on the NYSDEC Inventory of Hazardous Disposal Sites (SHWS) List and was informed that the site was no longer included in that list. The NYSDEC issued a letter responding to this inquiry and a copy of same is included along with this VCP Application.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #1/ Woodburning Boiler	This seven-story building, encompassing 50,337 square feet, was built in 1983 in response to rising oil prices. Building #1 houses a wood burning boiler and associated wood storage hopper. The boiler (south end) and storage hopper (north end) comprise the majority of the building area. The boiler is suspended from the ceiling structure to allow for the expansion and contraction of the interior steam tubes. Former storage areas for parts, materials and equipment utilized in the operation of the boiler are located on the first and second floor of the structure. Wood is reported to have been processed in a building (Building #1A) located to the northwest of Building #1 and stored in an area to the south of Building #1B. Wood is reported to have been supplied to Building #1 via a conveyor belt system. The conveyor belt initiated at the wood storage area located to the southwest of Building #1B and entered Building #1 at the northwestern corner of the seventh floor.	The building is constructed with a concrete floor and sheet metal walls and ceiling. Parts and equipment utilized in the operation of the boiler unit were stored in this building at the time of the assessment and investigation activities.
Building #1A/ Wood Process	This three-story building, encompassing 4,332 square feet, was built in 1983 in conjunction with the facility's former wood fueling system. Operations formerly conducted in this building consisted of the crushing and pulverizing of wood into wood chips. Wood is reported to have been delivered to the site and unloaded into a hopper and conveyor belt system located to the north of this building. The conveyor belt entered the building on the third floor and directed wood products into the crushing/pulverizing machine located in this building. Processed wood was loaded onto a second conveyor system which exited through the southern wall of the building. The processed wood was stored in an area to the south of the building until needed in the boiler unit.	Inspection of this building noted same to be constructed with concrete floors and sheet metal walls and ceilings.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #1B/ Wood Reclaim	This one-story building, encompassing 1,070 square feet, was built in 1983 in conjunction with the operation of the facility's former operation of a wood fueling system. Wood chips are reported to have been transferred to a blow pipe system located within this building. The wood chips were loaded into the building through a doorway along the western side of the building. The building is reported to have housed a "blower" system which was used to transfer wood chips, via a 14" diameter pipe, to Building #1 (i.e., the Wood Burning Boiler). According to P&G, the "blow pipe" system of moving the wood chips was replaced with the previously described conveyor belt system associated with Building #1.	Inspection of the building noted same to be constructed with a concrete floor, a combination of concrete and metal walls and a metal deck ceiling. An electric room was accessed via the eastern exterior of the building. The electric room was noted to house several pad mounted switch boxes and breaker panels.
Building #5/ Railroad Scale House	This one-story building was built in 1957 and occupies 132 square feet. This building is reported to have housed the equipment utilized in the operation of a railroad scale. The scale is reported to have been located underneath the railroad siding situated east of the scale house. According to a representative of P&G, the scale is electronic and is enclosed in a pit constructed with concrete base and walls.	The building was noted to be constructed with brick walls, a concrete ceiling and a vinyl floor with 12"x 12" tiles.
Building #12/ Machine Shop	Building #12 is a two-story building which occupies 15,128 square feet and was built in 1918. According to P&G, this building was utilized as the "central" machine shop for the facility, contained typical equipment for a machine shop (i.e., grinders, lathers, saws, presses, etc.) and was used (2^{nd} floor) for the storage of parts, equipment, and machinery.	The first floor and the eastern portion of the second floor are constructed with a concrete floor, brick walls and a concrete ceiling. The western portion of the second floor (i.e., the Locker Room) is constructed with a ceramic tile floor, a combination of sheet rock and ceramic tile floors and a drop panel (2' x 2' tile) ceiling. Overhead loading dock doors providing access to the exterior are located along the northern and western walls of Building #13.
Building #13/ Engineering	This two-story 6,040 square foot building was built in 1916 to have been used solely for office/administrative purposes including, in particular, housing the Engineering Department.	The building is constructed with a combination of ceramic tile/linoleum or concrete flooring, sheet rock walls and a drop (2' x 2' tile) panel ceiling. An Electric Room is located on the second floor of this building. Inspection of this room noted the presence of several wall-mounted transformer units and electrical panels. This room was constructed with a 9"x 9" vinyl tile floor. Two office trailers, formerly utilized for additional office space, were noted to be situated in the area located immediately north of Building #13.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #S-16/ Bar Soap Shop	This one-story 2,700 square foot building was built in 1977 and was utilized as a machine shop for the bar soap process.	This building is constructed with a concrete floor and sheet metal walls and ceilings. Several floor drains, including a floor drain set in a concrete diked area are located within this building. According to a representative of P&G, these floor drains, as well as the remainder of the floor drains located in the facility, are either connected to the sanitary sewer system, or in the case of drains that collect liquids from process operations, are connected back into the process. No septic systems or dry wells are reported to be present at the subject site. Visual inspection of the underlying concrete flooring noted the integrity of same to be intact.
Building #17/ Offices @STU Shop	This two-story 13,362 square foot building was built in 1930 and was utilized as a machine shop (first floor) and administrative offices (second floor) for the manufactured soap granules process.	The first floor of this building is constructed with a concrete floor, brick walls and a concrete ceiling. A single overhead door is located along the southern wall of the facility and provides access to the southern exterior of the building. Visual inspection of the underlying concrete flooring noted minor staining. However, the floor appeared to be intact and free of breaches in its integrity. Two floor drains are located on the first floor of this building. Refer to Building #16 information for comments on facility floor drains.
Building #19/ Fire Pump House	This one-story 252 square foot building was built in 1962, and was utilized to house pumps associated with the facility's fire suppression system. Fire suppression water is maintained in a 2.5 million gallon reservoir located immediately adjacent to (east of) this building. This building is reported to be connected, via underground piping, to a second water reservoir and pump house (i.e., Building #30). According to P&G, no chemicals were added to the fire suppression system. The 2.5 million gallon water storage reservoir is reported to be filled on an as-needed basis through pipe connections to the City of New York water supply system.	Building #19 is constructed with concrete floor and walls and a metal deck ceiling. Inspection of this building noted the presence of an oil-fired (diesel) generator. Staining was noted along the underside of the generator and the underlying concrete floor. Inspection of the underlying concrete floor noted same to be intact and free of breaches in its integrity. Based on the construction of the building and the fact that the floor is set at a lower elevation than the doorway, it is unlikely that discharges, if any, from the generator could migrate to the exterior area surrounding this building. Diesel fuel utilized in the operation of the generator unit is stored in a 500-gallon AST located along the southern exterior of the building. The AST is situated inside of a containment dike constructed with a concrete floor and masonry walls. Visual inspection of the containment dike did not reveal the presence of any indications that a discharge has occurred within same.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #20/ Locomotive House	This one-story 3,4000 square foot building was built in 1913 and was used as a maintenance garage for the facility's railroad locomotives.	Building #20 is constructed with a combination concrete and bare soil flooring, brick walls and a concrete ceiling. The building is divided into three bays with overhead doors along the southern wall of the building providing access to the railroad sidings at the exterior. Inspection of the soil floor in the eastern and western bays noted the presence of staining in several areas. A subsurface maintenance pit constructed of concrete is located in the central bay of this building. At the time of the assessment and investigation activities, snow removal equipment, an air compressor, hoses and parts as well as several small containers (i.e., five-gallons or less) of various lubricants, oils and other petroleum products were noted to be present in this building. Concrete pads are located along the western and northern sides of this building. A non-paved, gravel covered area measuring approximately 50 feet by 100 feet was noted on the eastern side of Building #20. No staining was noted on the gravel surface.
Thirty Series Buildings		
Building #30/Fresh Water Pump House	This one-story, 740 square foot structure was built in 1915 and formerly functioned as one of the two, on-site pump houses associated with the facility fire suppression system. The building is located immediately to the north of a concrete lined water reservoir with a reported capacity of approximately 50,000-gallons. This pump house is reported to be connected, via underground piping, to the main pump house, Building #19.	Building #30 is constructed with a concrete floor, a combination of concrete and brick walls and a concrete ceiling. The building is divided into two levels, separated by a metal grate floor/ceiling. Metal steps provide access to the lower level of Building #30. Visual inspection of the building noted the presence of a diesel oil-fired generator and two large pump units. Diesel oil associated with the generator unit is stored in a 1,000-gallon (approximate) AST suspended underneath the metal grate floor. The fill and vent pipe system associated with the AST extends through the eastern wall of the building. Staining was noted on the generator unit as well as on the underlying concrete pad. However, staining was noted to be limited to the concrete pad.
Building #31	This one-story, 9,000 square foot building was constructed in 1909 and was utilized for storage.	The building was constructed with a concrete floor, brick walls and wood ceilings. Due to potential safety concerns, no access to this building was provided to Killam. This building, as well as Building #33 and #33A did not have a roof.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #31A/ Glycerine House	This two-story building occupies 8,000 square feet and was constructed in 1909. According to a representative of P&G, this building was utilized as a storage area for equipment and parts associated with the boiler house. The first floor of the building was used for miscellaneous storage and the second floor of the building was utilized for office space.	Building #31A is constructed with a concrete floor, brick walls and a wooden roof. A fenced-in storage area is located along the exterior of the western wall of Building #31A. The storage area is underlain with concrete and separated into storage areas via masonry walls. Based on the signage on the fencing, this area was formerly utilized to store (empty and full) pressurized gas cylinders (i.e., acetylene, oxygen, etc.). A pad-mounted compactor is located along the exterior of the southwestern corner of this building. Inspection of same proved unremarkable.
Building #32/ Boiler House	This two level (one floor and a basement), 29,860 square foot building was built in 1909 and was utilized to house two boiler units (i.e., natural gas and diesel oil) as well as the main and two secondary generator units. The generators are reported to be powered by steam manufactured during the operation of the boiler units. According to P&G, the two boiler units were removed from the northern portion of this building (the floor cut-out was noted at the time of the inspection). Natural gas is reported to be provided by Con-Edison. Diesel fuel is reported to have been stored in an UST formerly located along the eastern exterior of the building.	Building #32 is constructed with a concrete floor, brick walls and a metal deck ceiling. Reportedly, the cut-outs present in the flooring/ceiling were to allow for equipment clearance. The main electric room for the facility is situated in Building #32. This room is constructed with a concrete floor, a combination of concrete and brick walls and a metal deck ceiling. Inspection of this room noted the presence of several pad-mounted switch and breaker box units. Four 55-gallon drums of Sunoco TH Fluid were noted to be stored along the eastern wall of the electric room. The main generator (7500 kva) and two secondary generators (1500 kva) are located in Building #32. These generators are seated on the concrete floor in the basement and protrude through to the first floor via the floor cut-outs.
Building #32A/ Boiler House	This two level (one floor and a basement), 3,200 square foot building was built in 1909 and was utilized to house a diesel oil-fired generator unit used on weekends and during maintenance of the boilers located in Building #32. Diesel fuel is reported to have been stored in an UST formerly located along the eastern exterior of the building.	Inspection of the building noted similar construction to Building #32. Some staining was noted on the concrete flooring. However, the flooring was noted to be intact. A 3,000-gallon AST (approximate) is located in the northwestern corner of the basement of this building. The AST is reported to be associated with a cooling tower located on the roof of this building.
Building #33/ Kettle House #1	This three-story, 54,000 square foot building was built in 1909 and was utilized in soap manufacturing. Specifically, a large kettle utilized in the melting of soap was located in this building. The kettle was heated via steam generated in the Boiler House (i.e., Buildings #32 and #32A). The kettle was described as a large tank that extended to the second floor of the building. The upper floors were utilized for storage purposes as well as to monitor the kettle operations.	Due to potential safety concerns, Killam was not provided access to this building. This building as well as Buildings #31 and #33A did not have a roof. The building was noted to be constructed with a concrete floor, brick walls and wood ceilings.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #33A/ Comet Making (Kettle House #3)	This three-story, 20,100 square foot building was built in 1909 and was utilized for activities associated with soap and Comet cleanser manufacturing. A large kettle utilized in the melting of soap and the manufacture of Comet cleanser was formerly located in this building. The kettle was heated via steam generated in the Boiler House (i.e., Buildings #32 and #32A). The kettle was described as a large tank that extended to the second floor of the building. The upper floors were utilized for storage purposes as well as to monitor the kettle operations.	Killam was not provided access to this building. This building as well as Building #31 and #33 did not have a roof. The building was noted to be constructed with a concrete floor, brick walls and wood ceilings.
Building #34/ Comet Warehouse	Building #34, a one-story 8,568 square foot structure, was built in 1929 and was utilized for the storage of cardboard packaging for Comet cleanser.	Inspection of this building noted same to be constructed with concrete floors, brick walls and a wood ceiling.
Building #35/ Comet Packing	This three-story (two floors and a basement) 25,336 square foot structure was built in 1909 and was utilized for packaging activities for Comet cleanser. A bridge, located in the southeastern corner of the second floor, connects this building to Building #42C. This bridge was utilized to transfer manufactured liquids stored in this building (manufactured in Building #38) to the packaging facility located in Building #42C. An elevated area located in the southwestern corner of the second floor is reported to have been utilized for the storage of packaging materials as well as spare parts for the packaging machinery.	Visual inspection of this building noted same to be constructed with a combination of concrete and wooden floors, brick and masonry walls and wooden ceilings.
Building #S-35/ North Gate House	This one-story 336 square foot building was constructed in 1930 and was utilized as a Guard House (security station).	Visual reconnaissance of the building noted the northern portion to be utilized as a Guard House and the southern portion to be utilized to house electrical equipment (i.e., transformers, switch boxes, breaker boxes, etc.)
Building #36/ Comet Warehouse	This five-story (plus partial basement) 26, 390 square foot building was built in 1923 and was utilized to warehouse packaging materials associated with the Comet cleanser line. According to P&G, a conveyor system in a tunnel in the the basement was utilized to transport finished Comet product to Building #43A.	Visual inspection of this building noted that all five floors were constructed with wooden floors, brick walls and wooden ceilings.
Building #38/Liquids Making (HSC)	This two-story 2,992 square foot building was built in 1927 and was utilized for the manufacturing of Solo liquid detergent. The manufacturing process is reported to have consisted of blending operations. Mixing vats are reported to have been situated on the first floor of the building and to have protruded, through "cut-outs", to the second floor of the building.	This building is constructed with wooden floors, brick walls and a wooden ceiling. Inspection of the building noted two circular "cut-outs" in the second floor. These "cut-outs" appear to denote the locations of the former blending vats.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Forty Series Buildings		
Building #40/ Cafeteria	Building #40 is a three-story (i.e., two floor plus a basement) 25,608 square foot structure constructed in 1916 and utilized for cafeteria activities, office/administrative tasks and for employee training activities (i.e., classrooms/ demonstration rooms).	The building is constructed with a ceramic tile floor (some portions), concrete walls and wooden ceilings. A sump pump system and a gas-fired heating unit were noted in the basement. The sump system is reported to discharge, via aboveground piping and hoses, to the southeastern exterior of the building and eventually, Western Avenue.
Building #41/Offices	This two-story 21,500 square foot building was constructed in 1907 and was utilized for office/administrative purposes as well as locker rooms (northeastern corner of the first floor).	The building is constructed with carpeted and linoleum floors, sheet rock walls, and drop panel ceilings. A HVAC room with a single HVAC unit and transformer is located on the second floor of Building #41.
Building S-41/ Natural Gas Meter House	This one-story 588 square foot structure was built in 1955 and formerly housed components of the natural gas entry system. The system was shut down and replaced by new connections from the street into the individual buildings.	Inspection of this structure noted same to be constructed of concrete (i.e., floor, walls and ceiling). The structure is divided into two rooms (north and south) which contain the natural gas piping, valves and meters.
Building S-42/ Transformer Shelter	This one-story 315 square foot structure was built in 1927 and houses the main electrical switches and breaker boxes.	This building is constructed with a concrete floor, brick walls and a concrete ceiling. At the time of the May 2000 site reconnaissance, this structure contained six breaker boxes, several switch boxes and several back-up batteries. A concrete dike system is located along the southern exterior of Building #42. This dike contains five exterior transformer units. No staining was noted on the units or the concrete base of the containment dike.
Building #42A/ Bar Soap Storage	This four-story 63, 200 square foot structure was built in 1918 and was utilized for the manufacture and packaging, including the storage of packaging materials, of Coast Soap.	Building #42 was noted to be constructed with a combination of tile, wood and concrete floors, masonry and brick walls and wood and/or concrete ceilings. Two circular "cut-outs" in the ceiling of the first floor of Building #42A denote the locations of two former ASTs or circular storage vessels. The tanks are reported to have been utilized to store scrap soap which was collected for re-use. A floor drain was noted in the southwestern corner of the first floor of Building #42A. According to P&G, all interior drains were/are connected into the sanitary sewer system or, in the case of drains that collected materials from process operations, connected to process systems.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #42B/Bar Soap Processing/Packaging	This three-story 81,300 square foot structure was built in 1908 and was utilized for the processing and packaging of finished bars of Ivory Soap and a machine shop for packaging equipment. A "dry house" was located on the eastern side of this floor. The "dry house" consisted of a conveyor belt system that traversed through a heat enclosure. After exiting the "dry house", the bars were cut, stamped and packaged.	Inspection of this building noted same to be constructed with concrete floors, masonry walls and wooden ceilings. A machine shop, utilized to maintain the packaging machines located in Buildings #42A, #42B and #42C was formerly located along the eastern side of the first floor of this building. The northern side of this building is open to the second story and formerly housed a large storage tank which contained liquid Ivory soap. The liquid soap was transferred to this location from the Hydrolizer Building which was formerly located to the north of Building #16; the Hydrolizer was demolished prior to the May 2000 site reconnaissance. The liquid soap was then pumped from this AST to the third floor of the building for drying, shaping, cutting and packaging. Several floor drains were noted on the third floor of this building. These drains were utilized to collect water from the plotter stamps which transferred the "Ivory" stamp onto the soap bars. This representative added that water collected via these drains was re-blended and recycled.
Building #42C/ Liquids/Solo Packing and Storage	This three-story 81,300 square foot structure was built in 1908 and was utilized for the storage of cardboard packaging for the finished soap products and for packaging activities for Mr. Clean products.	The building is constructed with concrete floors, a combination of masonry and brick walls and wooden ceilings. An electrical room containing a transformer unit and other wall-mounted electrical panels is located in this building. Inspection of the third floor of this building noted the presence of several square pads surrounded by trench drain systems. According to P&G, machinery associated with the packaging of Mr. Clean cleaning solution was formerly located on these pads. The trench drain systems were utilized to collect any spilled cleaning solution and transfer same back into the process.
Building #43/ LSP Granules	This three-story 37,380 square foot structure was built in 1927 and was utilized for the packaging of synthetic granule type soaps and detergents (i.e., Ivory Snow and Ivory Flakes). Soap granules were separated based on their size and then placed into the buggies which dumped same, through floor openings in the northern portion of this building, into hoppers located on the second floor. The various sized granules were blended together to prepare Ivory Snow and Ivory Flakes.	Inspection of this building noted same to be constructed with a concrete floor, masonry walls and combination of steel and wood ceilings. Inspection of the first floor of Building #43 noted the presence of a concrete pad along the northern wall of the building and a trench drain situated on the southern side of the pad. Further, the entrance/exit of a subsurface tunnel was noted in the northern portion of the building. According to a representative of P&G, the tunnel formerly housed a conveyor belt system which was utilized to transfer raw product from the "forty series" buildings to Building #43 for packaging.
Building #43A/ LSP Granules	This three-story 55,296 square foot structure was built in 1927 and was utilized for the packaging of synthetic granule type soaps and detergents (i.e., Ivory Snow and Ivory Flakes).	Inspection of this building noted same to be constructed with a concrete floor, masonry walls and combination of steel and wood ceilings.

Table 1
Summary of Site Buildings
Port Ivory Site
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Building Identification	Reported Information	Observations/Comments
Building #44/ LSP Granules	This four-story 24,176 square foot structure was built in 1912 and was utilized for the packaging of synthetic granule type soaps and detergents.	Inspection of this building noted same to be constructed with a combination concrete and ceramic tile floor, masonry walls and concrete ceilings.
Building #45/Main Gate Guard House	Building #45, a one-story 344 square foot structure, is utilized as a security house for the main gate of the facility. The structure was built in 1982.	Inspection of this building noted same to be constructed with non-slip floor tiles over concrete, a combination of masonry and glass walls and a drop panel ceiling (2' x 2' tiles).
Building #46/ Sewage Pump Station	This structure was built in 1970. Although given a building designation, the Sewerage Pump Station is a covered concrete pit. The structure was never occupied by employees. The pump station is utilized to house the piping, pumps and valves associated with the transfer of sanitary sewage from the facility and to the New York City sanitary sewer system.	The facility's sanitary sewage holding and pre-treatment system is located immediately west of Building #46. Sanitary flow from the facility, via gravity flow, is directed to two concrete pits. From these pits, the sanitary wastes are pumped into two 71,000-gallon holding tanks which are located within a concrete dike. Pretreatment of the wastes by P&G is reported to consist of pH adjustment and correction via the addition of either sulfuric acid or sodium hydroxide. These materials were noted to be stored in three 250-gallon plastic tote-type storage tanks (one for sulfuric acid and two for sodium hydroxide). The tote-type tanks are located over a sloped concrete pad which leads into the diked area. After pre-treatment, the wastes are pumped to the New York City sanitary sewer system via the piping located within Building #46. According to a representative of P&G, Building #46 contains a mechanically actuated valve system which detects pH and closes the system in the event of a problem.
Building #300/ Water Treatment	This two-story 3,268 square foot structure (one floor and a basement) wasconstructed in 1929. Operations in this building are reported to have consisted of the treatment of water utilized in process operations.	This building is constructed with a concrete floor, brick walls and a metal deck ceiling. Equipment utilized in the water treatment operations was noted to be present in this building. Two ASTs, located in a concrete containment area along the southern exterior wall of this building, and a third AST, situated on a concrete pad along the southwestern corner of the building, were also noted to be present. The two tanks, located within the containment area are reported to contain acid and caustic utilized in the water treatment process. The third AST is reported to be utilized to store treated "neutralized" water. A sump is located within the concrete containment berm associated with the two exterior tanks. Several floor and trench drains were noted around the water treatment equipment. These drains are reported to transfer collected liquids to the sanitary sewer system.

Table 1
Summary of Site Buildings
Port Ivory Site
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Building Identification	Reported Information	Observations/Comments
Fifty Series Buildings		
Building #52/ Finished Products	This three-story 96,948 square foot building was constructed in 1926. Former operations in this building are reported to have consisted of the packaging of manufactured food oils (i.e., Crisco) and the storage of packaging materials.	The building was noted to be constructed of concrete floors, walls and ceilings. Inspection of the first floor of the facility noted overhead loading dock doors along the northern, eastern and southern sides of same. A conveyor system located in this building was formerly utilized to transfer finished and packaged products from this building to Buildings #74 and #75.
Building #53/ Food Office/Locker Room	This two-story 9,700 square foot structure was built in 1926 and was formerly utilized as a locker room/break room for P&G employees (first floor) and as an office/administrative area for an outside company, Everything Yogurt. Prior to use by Everything Yogurt, the office/administrative area was utilized by P&G.	Inspection of the first floor of the facility noted ceramic tile floors, brick walls and a drop panel ceiling (2' x 4' tiles). The first floor was noted to contain a large shower/bathroom facility. The second floor of Building #53 was constructed with linoleum floors, sheet rock walls and a drop panel ceiling (2 'x 4' tiles).
Building #S-53/ Temporary Storage	This one-story 2,100 square foot building was built in 1926 and was utilized for storage of miscellaneous parts and equipment. No petroleum products or hazardous materials are reported to have been stored in this building.	Inspection of this building noted same to be constructed with a concrete floor and sheet metal walls and ceiling. Staining was noted on the concrete floor. However, the flooring was noted to be intact.
Building #54/ Deodorizer	This two-story 9,216 square foot structure was built in 1926 and was utilized in deodorizing operations for food oils. It should be noted that at the time of the May 2000 site reconnaissance, the building had only one floor. The building appeared to have undergone some demolition activities which removed the second floor of same.	The building was constructed with a concrete floor, brick walls and a concrete ceiling. Inspection of this building noted that the eastern wall of same had been removed. As such, the building was open to the outside environment. The concrete floor appeared to extend beyond the limit of the former eastern wall. It was not possible to determine if the concrete extension represented an additional structure or a storage or loading area. Visual reconnaissance of the building noted several concrete foundations, discolored areas and drains indicating the former presence of tanks, equipment, machinery, etc. However, no visual indications of discharges to exterior surfaces were observed.
Building #55/ Hardening	This two-story 17,444 square foot structure was built in 1926 and was utilized for oil hardening processes associated with the formulation of food oils.	The building was noted to be constructed with concrete floors, brick walls and concrete ceilings. Inspection of the northern portion of the first floor noted the presence of two tank foundations. In addition several tank foundations and cradles (supports) were noted in the eastern portion of the first floor. Several floor drains were noted to be present throughout the facility. According to P&G, all interior drains were/are connected to the sanitary sewer system or, in the case of drains that collected materials from process operations, connected to process collection systems. A concrete loading dock is located along the eastern exterior of this building.

Table 1
Summary of Site Buildings
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Building Identification	Reported Information	Observations/Comments
Building #56/ Oil Refinery	This three-story 24,456 square foot structure was built in 1926. Operations in this building consisted of the refining of various types of oils to formulate consumer food quality oils.	Building #56 is constructed with concrete floors and ceilings and brick walls. Inspection of the first floor noted the presence of approximately nine, fifteen foot diameter, former tank locations/pads. These locations were noted to be filled with sand. In addition, supports for other various machinery and equipment was noted in this area. Inspection of the second floor of the facility noted four additional sand filled former tank location and machine supports. Inspection of the third floor of Building #56 noted openings in the underlying concrete floor which correspond to the locations of the former tanks located on the second floor.
Sixty Series Buildings		
Building #60/ Warehouse Building	This two-story 98,000 square foot structure (plus basement) was built in 1916 and was utilized for the warehousing and distribution of a variety of products.	Inspection of this building noted same to be constructed with a combination of concrete, wood and ceramic (bathrooms only) floors, brick and masonry walls and wooden ceilings. Several overhead loading dock doors located along the western wall provide access to the exterior loading/unloading areas. The northern portion of Building #60 is currently utilized by RPM Trucking for warehouse purposes. Cocoa beans, coffee and miscellaneous equipment were noted to be stored at the time of the site inspection. RPM Trucking also performs tasks associated with the rehabilitation of pallets. This tenant also occupies Buildings #67N, #67S and #80. Two large openings in the northern portion of the building floor were observed. These openings are to allow for the hoisting/lowering of products between the first and second floors of this building. Doorways were noted along the eastern and western walls of the second floor of Building #60. The eastern doorway provides access to a bridge which connects Building #60 to Building #66. The western doorway provides access to a bridge which connects Building #60 to the "forty series" buildings located on the western side of Western Avenue. These bridges were reportedly utilized for the transfer of finished products.
Building #60A/ Warehouse Building	This two-story 60,00 square foot structure was built in 1925 and was utilized for the warehousing and distribution of products.	This building is constructed with a combination of concrete and wood floors, brick walls and wooden ceilings. Inspection of the second floor of Building #60A noted a doorway along the eastern wall of same. This doorway provides access to a bridge which connects Building #60A to Building #64. This bridge was utilized for the transfer of finished products.

Table 1
Summary of Site Buildings
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Building Identification	Reported Information	Observations/Comments
Building #60B/ Warehouse Building	This two-story 24,600 square foot structure (plus basement) was built in 1926 and was utilized for the warehousing and distribution of products.	This building is constructed with a combination of concrete and brick walls, concrete and wooden floors, and wooden ceilings. Several overhead loading dock doors are located along the western wall of the first floor of this building. These doors provide access to exterior loading/unloading areas
Building #64/ Warehouse Building	This two-story 59,200 square foot structure (plus basement) was built in 1934 and was utilized for the warehousing and distribution of products.	This building is constructed with concrete floors, brick walls and wooden ceilings. Inspection of the first floor of this building noted a former battery charging area which included raised concrete platforms and an overhead three ton crane. The crane was utilized to move the batteries around the charging area. Inspection of the concrete noted same to be stained and pitted in several areas. However, the pitting did not appear to be sufficient to compromise the integrity of the concrete flooring.
Building #65/ Warehouse Building	This two-story 36,000 square foot structure was built in 1934 and was utilized for the warehousing and distribution of products.	This building is constructed with concrete floors, brick walls and wooden ceilings. A large opening in the floor, formerly utilized for the lifting of equipment and materials between floors, is located in the central portion of the second floor
Building #66/ Warehouse Building	This two-story 40,000 square foot structure was built in 1934 and is reported to have been utilized for the warehousing of products.	This building is constructed with concrete floors, brick walls and wooden ceilings.
Building #67N/ Warehouse Building	This one-story 56,420 square foot structure was built in 1958 and is reported to have been utilized for warehousing or products.	This building is constructed with concrete floors, a combination of masonry and brick walls and metal deck ceilings. The building is currently occupied by RPM Trucking which utilizes same for the warehousing and distribution of cocoa beans, coffee beans and cases of marinated mushrooms. This building is not reported to be heated.
Building #67S/ Warehouse Building	This one-story 43,440 square foot structure was built in 1958 and was utilized for the warehousing of products.	This building is constructed with concrete floors, a combination of masonry and brick walls and metal deck ceilings. Eight overhead loading dock doors, which supply access to the exterior concrete loading dock area, are located along the southern exterior wall of this building. This building is currently occupied by RPM Trucking and includes a bulking station consisting of a metal frame hopper and concrete scale. Beans, stored in the hopper, are reported to be removed from the hopper, bagged and weighed. The scale is electronic and is situated directly on the underlying concrete floor. No pit is associated with the scale.
Seventy Series Buildings		
Building #70/ Citrus Office	Building #70 is a one- story 8,000 square foot structure built in 1959 and utilized for office/administration activities for Citrus Hill and Duncan Hines Bake Mix (DHBM) Division.	Inspection of this building was impeded by lack of lighting. The building appeared to be constructed with concrete floors, masonry walls and a concrete ceiling. Floor drains in the bathroom, locker room and shower areas are reported to be connected to the sanitary sewer system.

Table 1
Summary of Site Buildings
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Building Identification	Reported Information	Observations/Comments
Building #70A/ DHBM Making	This one-story 1,220 square foot structure was built in approximately 1959 and was utilized for the blending and mixing the various dry ingredients used in the formulation of Duncan Hines Bake Mixes. The dry ingredients (i.e., sugar, flour, etc.) are reported to have been transferred to the building via a rail siding located along the southern side of this building. The ingredients were "blown" into the building and placed into large mixing vats.	This building is constructed with concrete floors, masonry walls and concrete ceilings. The building contains a mezzanine level which is reported to have been utilized to fill and monitor the blending vats. Several sealed overhead doorways were noted along the northern wall of this building. These doorways were formerly utilized to transfer the blended cake mixes into the adjacent building, Building #70B, for packaging. A large pad-mounted transformer unit as well as other pad-mounted electrical equipment was noted along the southwestern corner of this building. A concrete truck ramp is located along the southeastern corner of Building #70A. Tank saddles were noted along the western side of the ramp. No indications of staining were noted on or adjacent to the tank saddles.
Building #70B/ DHBM Packing	This two-story 14,140 square foot building was built in 1959 and was used for the packing of the cake mixes and the storage of cardboard packing materials.	Building #70B is constructed with a combination of concrete and vinyl tile flooring, masonry walls and a concrete ceiling. The eastern portion of this building was noted to consist of a single floor which included a hoist system. The system is reported to have been used to transfer packaging materials from the second floor storage area to the first floor packing area. Inspection of the second floor of the facility noted several floor drains and a mop well. These drains are reported to be connected to the sanitary sewer system servicing the subject site. Minor staining was noted on the concrete flooring in these areas. However, the flooring was noted to be intact.
Buildings #70C and #70D	These two building designations are combined into a single one-story warehouse structure reported to have been built in 1959. Building #70C occupies 14,271 square feet and #70D occupies 34,829 feet. These building are reported to have been utilized for warehousing purposes as well as the packaging of Citrus Hill orange juice (eastern portion of the warehouse area).	This building is constructed with concrete floors, masonry walls and a metal deck ceiling. Electrical equipment, a hot water heater and a transformer are located along the western wall of this area. Several trench drains are located in the eastern portion of this building. According to P&G, these trench drain systems formerly surrounded the packaging equipment associated with the packaging of Citrus Hill orange juice. These floor drains, as well as the remainder of the floor drains located in the facility, are either connected to the sanitary sewer system, or in the case of drains that collect liquids from process operations, are connected back into the process.
Building #70F/ DHBM Kitchen	This one-story structure was constructed in 1978 and occupies 644 square feet. According to a representative P&G, this building was utilized for the testing of the DHBM.	This area was constructed with a ceramic tile floor, masonry walls and a metal deck ceiling. Inspection of this building noted counter top areas along the eastern side of this area.
Building #70G/ DHBM Cotactor Building	This two-story 1,804 square foot structure was constructed in 1978 and was utilized for the storage of compressors associated with the operations formerly conducted in Building #70A.	This building designation appears to correspond with an alcove located along the southern wall of Building #70A. Construction of this area proved similar to that noted in Building #70A.

Table 1
Summary of Site Buildings
Port Ivory Site
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Building Identification	Reported Information	Observations/Comments
Building #70I/ Personnel	This one-story 1,941 square foot structure was built in 1986. No information regarding the former usage of this building was provided by P&G.	Inspection of this area noted same to be divided into individual office areas constructed with sheet rock walls. The overall construction of this structure was noted to be similar to that noted in Building #70D.
Building #70J/ Citrus Shop	This one-story 2,880 square foot structure was built in 1988. P&G did not provide any information regarding the former operations conducted in this area.	Inspection of this area noted similar construction to Building #70D.
Building #72/ DHBM Loading Dock	This one-story 3,100 square foot loading dock structure is reported to have been built in 1962. Building #72 is not actually a building as it does not maintain any exterior walls. The north side of the structure is bounded by the southern wall of Building#70A. The southern side is open to allow for the loading and unloading of materials associated with the making of the Duncan Hines Bake Mixes.	The structure was constructed of concrete. No indications of staining were noted with regard to the concrete loading dock.
Building #74/ Warehouse Building	This one-story 103,400 square foot building was constructed in 1980 and is reported to have been utilized for the warehousing of various P&G manufactured (finished) products.	This building was noted to be constructed with a concrete floor, masonry walls and a metal deck ceiling. Three overhead doors, providing access to the adjacent warehouse building to the east (i.e., Building #75), are located along the eastern wall of this building. An elevated mezzanine area is located in the western portion of this building. In addition, a raised concrete pad with a masonry room is located immediately to the east of this mezzanine area. These areas are reported to have been associated with the packaging operation of the Citrus Hill orange juice conducted in the adjacent Buildings #70C and #70D. Inspection of these areas noted the presence of air chilling/handling equipment to be located on the second floor mezzanine area. This equipment appeared to have been utilized to supply cold air to the aforementioned masonry room. A large switch box/breaker box is located west of the masonry/cold room. Floor drains were noted to be present in a concrete diked area in the northeastern corner of the raised concrete area. The floor drains are reportedly tied to the sanitary system.

Table 1
Summary of Site Buildings
Port Ivory Site
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Building Identification	Reported Information	Observations/Comments
Building #75/ Warehouse Building	This one-story 103,400 square foot building was constructed in 1980 and is reported to have been utilized for the warehousing and distribution of the various P&G manufactured products.	This building is constructed with a concrete floor, masonry walls and a metal deck ceiling. Approximately twenty overhead loading dock doors are located along the eastern wall of this building. These doors provide access to the loading/unloading dock area located to the east of Building #75. In addition, three overhead doors are located along the western wall of this building and provide access to the adjacent warehouse building (i.e., Building #74). A transformer unit is mounted on a metal support bracket in the southwestern corner of this building. A masonry room is located in the northeastern corner of this building. According to P&G, this room was utilized as a climate control room in the Crisco food oils manufacturing process. A concrete sub-level is located in the southwestern corner of Building #75. Inspection of this area noted the presence of an electric hot water heater, an approximately 3,000-gallon AST and a sump and pump system servicing an adjacent bathroom facility. The AST is utilized to store hot water heated by a solar panel on the roof of the building.
Building #78/ Compressor Building	This one-story 384 square foot structure, was built in 1984 and was utilized to house a former air compressor.	Building #78 is constructed with a concrete floor, masonry walls and a metal deck ceiling. A large pad-mounted transformer unit is located along the northern exterior of this building. Electrical service from this transformer unit is reported to have been utilized to power the former compressor unit.
Building #79/ Office	This one-story 2,040 square foot building was constructed in 1981 and was utilized as a loading dock for incoming freight. The freight was formerly transferred to the "forty series" building by an elevated conveyor belt system which extended across Western Avenue from this location.	This building is constructed with vinyl tile floors (12"x 12" tiles), sheet rock walls and a drop panel ceiling (2 'x 2' tiles). Three former (currently sealed) overhead loading dock doors are located along the southern side of the building. The doors formerly provided access to a concrete loading dock area situated to the south of this building. This building is currently utilized as an office area for RPM Trucking, Inc.. This tenant also occupies Buildings #67N, #67S, #80 and the northern portion of the first floor of Building #60. Two additional office trailers were noted to the south of this building. These trailers are also utilized by RPM Trucking for administrative office areas.

Table 1
Summary of Site Buildings
Port Ivory Site
Staten Island, New York

Building Identification	Reported Information	Observations/Comments
Building #80/ Warehouse Building	This one-story 87,890 square foot structure was built in 1969 and was reported to have been utilized for a variety of warehousing activities.	This building is constructed with concrete floors, masonry walls and metal deck ceilings. Nine overhead loading dock door are located along the southern exterior wall of this building and supply access to the exterior concrete loading dock area. The building is currently occupied by RPM Trucking which utilizes same for the warehousing and distribution of imported items such as cocoa beans, coffee beans, marinated mushrooms, liquors and wines, candy, containers, etc. These items were noted to be stored on pallets placed on metal racks or directly on the underlying concrete floor. The building is not equipped with a heating system. A fenced maintenance area is located along the western side of this building. Visual inspection of this area noted various tools, equipment and parts associated with the maintenance of the forklifts utilized in this area. In addition, four five-gallon containers of hydraulic oil, and propane (empty and full cylinders), utilized to power the facility's forklifts were stored in a secured bin located along the exterior of the southwestern of this building.

NOTES:

(1) All facility buildings are reported to have been heated by steam fired heating units. Steam was provided to the individual buildings by the facility's boiler houses.

(2) Several of the facility buildings contain freight elevators. All of the facility elevators are reported to be cable operated and do not contain any hydraulic pistons. The cable operation system is reported to be located on the roofs of the respective buildings.

(3) Several floor drains and trench drain system were noted in several of the on-site buildings. According to P&G, all floor/trench drain systems are either connected into the sanitary sewer system servicing the subject site or direct collected materials back (recycled) into the process operations.

(4) All bathrooms are reported to be connected into the sanitary sewer system servicing the subject site. According to P&G, no septic systems or dry wells are currently or have ever been located on the subject site.

(5) The subject site buildings are to be serviced via sprinkler systems for fire protection. According to a representative of P&G, the fire suppression system is a "water-only" system. Water utilized in this system is stored in two reservoirs located adjacent to Building #19 and Building #30. The reservoirs are supplied with water via the New York City water supply system.

(6) The P&G representative who accompanied Killam on the site inspection was unable to provide any information with regard to the storage and/or usage of petroleum products and/or hazardous materials in subject site buildings.

Table 2
Historical Environmental Reports and Information
Port Ivory Site
Staten Island, New York

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Phase II Environmental Assessment - Wood Yard, McLaren Hart/Hart Environmental Engineering Corp., prepared for Owl Energy Resources, Inc., November 19, 1991	A 1 to 2 acre wood yard is reported to have been present at the site prior to the 1950s. Further, a water gas holder, four gas purifiers and a coke storage area are reported to have been located at the wood yard. The area is reported to contain coal tars and residues. This report describes an investigation of soil and groundwater at the former wood yard and an attempt to identify the presence of an underlying clay "liner/layer" at this portion of the site.	The investigation included the installation and sampling of four soil borings and the completion of three of the four borings as monitoring wells. Also, four borings were installed for geotechnical purposes. The soil borings did not identify the presence of a clay "liner" beneath the Wood Yard area. TPHC and BN compounds, mostly TICs, are reported to have been detected in one or more soil samples one from soil boring. Also, VO compounds and/or VO TICs, below regulatory criteria were detected in samples from this boring. The report references that the TPHC detected in soil may be from a leaking hydraulic lift. Di-n-butyl phthalate is reported to have been detected in all soil samples. According to the report, this compound is often detected in soils high in organics and therefore does not pose a threat. The investigation revealed the presence of wood as well as cinder fill. Some elevated readings were recorded on field instrumentation. Analytical results from groundwater samples identify TPHC and BN TICs in the sample from one well; the same location as the elevated soil results. A sheen was noted on water in this well. Also, all groundwater samples are reported to have revealed elevated concentrations of phenols.	The levels of contaminants detected in soil and groundwater were not regarded as an area of concern. Elevated field readings were attributed to the presence of marshlands and underlying peat. The report noted a potential reporting requirement with regard to TPHC. No additional actions are proposed with regard to soil and additional sampling is recommended to further evaluate phenols in groundwater.
Final Report, Tax Block 1400, Dames & Moore, January 24, 1992	This report presents a summary of investigative activities performed to address nine AOCs identified on this parcel: Area A West Tank Field (southwest of building 16), Area B S&S Tank Field, Area C Oleum Tank Field, Area E S&S Fat Trap, Area F1 Spent Nickel Catalyst, Area F2 Waste Oil Drum Storage, Area H Former Rosin Area, Area R Northwest Corner of Soap Manufacturing Area (suspected calcium carbonate fill area), and Area P Former Product Unloading Pit. This report also provides information pertaining to the placement of fill materials at Block 1400. The by-products identified at this parcel include the following: spent zinc and nickel catalyst recovered from fat processing operations (hydrolyzer); spent carbonaceous filter material from glycerine purification; turpentine from recovery of resin from tree soap; coke ash from hydrogen making operations; waste oils from servicing vehicles, locomotives and equipment, and, kettle bottoms. The report also identifies that a site plan notes a "rosin storage area" at the northwest corner of the soap manufacturing area. The area identified as the "rosin storage area" is noted to be unpaved at the time of the investigation. Waste oil is reported to have been used to lubricate rail switches on this parcel. There is some reference but no resolution to UST issues.	Installed and sampled soil borings and wells to investigate the listed areas. The investigation is reported to have revealed the presence of fill material from 2 to 17 feet at areas on this portion of the site. A geophysical survey is reported to have been unsuccessful due to metal interference. A groundwater mound is noted along the northwest portion of this parcel in the area of GW-8, GW-14, CS1 and CS3. Groundwater flows radially off the mound. The mounding is attributed to the presence of a thick layer of low permeability calcium carbonate.	No specific conclusions are provided in report.
	Area A: ASTs containing caustics and vegetable oil were formerly located southwest of Building #16.	Installed and sampled soil borings and one well to evaluate this area. During drilling, indications of fat, oil, grease (FOG) and TPHC are noted to extend to the groundwater table. Analytical results confirm the presence of varying concentrations of FOG and TPHC in soil. pH was recorded at levels ranging from above 9 to almost 12. pH of the calcium carbonate material was recorded at 9.99 for all sampled intervals.	No specific conclusions are provided in report.

Table 2
Historical Environmental Reports and Information
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Staten Island, New York

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Continued - Final Report, Tax Block 1400, Dames & Moore, January 24, 1992	Area B: ASTs containing vegetable oils, tallow and tailings/soap bottoms from hydrolyzer were located south of hydrolyzer and east of west tank field. The tank field area was not equipped with a containment berm and surface runoff from this area flowed to unpaved areas including overflowing of a zipper drain located along the western boundary. An AST containing phenol alkane was formerly located southwest of the S&S tank field.	Installed and sampled 6 soil borings and one well to evaluate this area. Elevated levels of FOG and TPHC are reported to have been detected in all borings, extending to groundwater. A floating hydrocarbon layer is was noted at GW-14 and a sheen was noted with regard to GW-7. Zinc is reported to have been detected in soil samples. No calcium carbonate materials is reported to have been identified in borings from this area.	Report identifies a railroad siding and former oil tanks as potential sources of petroleum in soil. Catalyst material is identified as the likely source of the zinc.
	Area C: An AST used for oleum, waste sulfuric acid and acid wastewater was located northwest of Building #17. A former toluene tank (closed in place in December 1989) is reported to be located in the vicinity of Area C.	Installed and sampled 2 soil borings and 1 well to evaluate this area. Calcium carbonate detected at this area. pH levels are reported to increase with depth, over 8 to over 12.	Conclude washwater did not impact area. pH levels are attributed to migration from upgradient sources.
	Area E: A steel UST designed to collect and trap oil and grease present in wastewater stream is located southwest of the S&S Tank Field, near the phenol storage area. Historical information indicates elevated zinc concentrations in wastewater flowing to this trap.	Installed and sampled 3 borings and a well. Investigation indicates that vegetable oil is visibly present in the saturated zone and that FOG and TPHC were detected at varying concentrations in soil samples. Nickel and zinc were detected above background concentrations in soil samples. pH is reported to have been recorded at slightly acidic levels in soil samples.	Conclude that FOG, TPHC and metals are likely to be associated with trap usage. No conclusion is provided for slightly acidic pH.
	Area F1: Open drums containing spent nickel catalyst and an unknown liquid were noted northwest of Building #16. The asphalt surface in this area was noted to be cracked, stained and deteriorated. A paint shed is reported to have been located west of the drum storage pad.	Miscellaneous fill including calcium carbonate fill is reported to have been identified at this area. pH is recorded between 9 and slightly over 12. FOG and TPHC are reported to have been detected in samples from unsaturated zone. PCBs are reported to have been detected in at least one soil sample.	FOG, TPHC, pH attributed to former activities including caustics/alkaline zones found in the calcium carbonate. Recommend excavation to address PCBs.
	Area F2: Open drums were noted to be present on an asphalt storage pad located east of product unloading terminal and south of fatty acid storage tanks. The asphalt surface in this area was noted to be cracked, stained and deteriorated.	Investigation revealed black staining of soil and elevated readings were recorded during field screening. FOG and TPHC are reported to have been detected in soil samples from the unsaturated zone.	The report concludes that waste oil storage may have impacted this area.
	Area H and Area R (Area H/R): Site plans reportedly identified an area at the northeast corner of the main soap manufacturing area as a rosin storage area. Rosin was produced through the separation of resin from turpentine. A surface water body was originally located at this area and filled with calcium carbonate.	Calcium carbonate material was identified ranging in thickness from 15.5 to 17 feet. Elevated pH levels were recorded in samples and were noted to increase with depth. No turpentine related compounds are reported to have been detected and nickel concentrations are reported to be consistent with background.	Conclude that the highly alkaline zones were the cause of the elevated pH.
	Area P: Pits, used for unloading raw materials from tankers and rail cars, are reported to have been located in alleyways next to the main soap building. The pits are reported to have been closed.	FOG is reported to have been detected and slightly elevated pH levels (approximately 9) recorded in soil samples.	Conclude that the levels of FOG and pH may be from former transfer operations conducted at this area.
	Groundwater: Groundwater was identified as an issue with regard to the southern portion of Block 1400.	Installed and sampled monitoring wells at various locations on Block 1400. FOG and TPHC reported to have been detected in samples from Areas A, B, C, E, F1, F2 & H/R. Free product is reported to have been noted at GW-14 and a sheen was noted on the water surface of GW-10, 13, 14, 17 and CS-1. An elevated pH level was recorded in the sample from CS-1. Lead, nickel and zinc were reported to have been detected in samples from certain wells.	Recommend a groundwater treatment system including pH adjustment, oil/water separation to remove free product, clarification and settling to remove solids and precipitates, and liquid phase carbon adsorption to reduce PHC levels.

Table 2
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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Final Report Soil Environmental Investigation, Tax Block 1309, Dames & Moore, April 20, 1992	This report presents a summary of investigative activities performed to address two AOCs identified on this parcel: Area D Oil Pump House (Bldg S-29) and Area I Fly Ash Storage Area. This report also identifies a 1988 Memorandum of Understanding (MOU) which was executed between Procter & Gamble and the NYSDEC regarding the discharge from the pipe rupture and the referenced "oil lens". This report also provides historical information including information pertaining to the placement of fill materials at Block 1309, Lot 1.	Installed and sampled soil borings installed at Area D and test pits at Area I. Analytical results are compared to "background levels". Groundwater encountered from 2.2 to 9 ft bsg. Generally the groundwater noted to exist in fill material and silt layers.	No specific conclusions provided in report.
	Area D is located south of two fuel oil ASTs in dock area. The ASTs are located in a diked area described as being lined with a synthetic geotextile material. Area D is in the vicinity of previously performed investigation associated with a leak in fuel oil transfer piping at the eastern portion of dock. This report references a BB&L Report describing the efforts undertaken to address the fuel oil rupture. The pipe is reported to have been repaired and the contamination associated with the pipe rupture to have been addressed.	Area D: Samples were analyzed for TPHC, FOG, nickel and pH. Nickel and pH were included in the analyses due to information indicating that the pump house area was filled with diatomaceious earth from vegetable oil operations at the site. Results indicated varying concentrations of FOG and TPHC in both unsaturated and saturated zone. Nickel detected in samples. pH recorded at the 8 to 9 range.	Report noted higher concentrations of TPHC and FOG present in upper two feet. Nickel referenced as being at concentrations below levels of concern.
	Area I is located at the northern portion of this parcel and is the location of a temporary fly ash stockpile area. Investigation initiated in response to elevated concentrations of lead (exceeded extraction procedure toxicity) in samples from fly ash. Assert that the elevated lead is from demolition debris containing lead based paint.	Test pits were installed from surface to 3 ft bsg. Fill material (silt, sand mixed with ash, gravel, bricks overlying calcium carbonate) was noted in test pits from this area. Samples from the test pits were analyzed for pH, zinc and lead. pH was recorded at levels of 9 to 10 in fill samples. Zinc and lead also were detected in soil samples.	Zinc and lead referenced as being at concentrations below levels of concern. Elevated pH attributed to fill, including calcium carbonate.
Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338S, Dames & Moore, April 20, 1992	This report presents a summary of investigative activities performed to address 6 AOCs identified on the southern portion of the Block 1338 parcel: Area G Former Vegetable Oil Tank Farm, Area K Fill Area and Coal Storage, Area M Area East of Edible Oils Buildings #52-56, Area N Former Vegetable Oil Fat Trap, Area P1 Former Product Unloading Pit and Area Q1 Existing Scale Pit. The report also provides historical information including information pertaining to the placement of fill materials at the southern portion of Block 1338 and identifies that spent diatomaceous earth from edible oil refining and spent nickel catalyst from edible oils are the by-products of the "food area". The report references a geophysical survey performed by Blackhawk Geosciences which identified USTs at Area M, specifically east of Buildings #53/54 and east of Building #56.	Soil and groundwater investigation consisting of the installation and sampling of soil borings and wells is reported to have been performed at each of these AOCs. Based on the groundwater investigation performed at the southern portion of Block 1338, groundwater at this portion of the site is reported to exist at depths ranging from 2.2 to 9 feet bsg and to flow toward Bridge Creek	No specific conclusions provided in report.
	Area G: ASTs containing vegetable oil and caustics were formerly located at this area. Nickel catalyst was stored in this area after tanks were dismantled. An investigation is reported to have been undertaken due to cracking and expansion joints in the concrete pad at this area.	Investigative efforts did not reveal any free phase vegetable oil but did identify black staining of soil in this area. Nickel, lead and zinc are reported to have been detected below background levels. pH was recorded at levels of 9 to 10 in surface and subsurface samples.	No specific conclusions provided in report.
	Area K: Fill is reported to have been placed in the southeastern portion of this parcel in the area of Buildings #74 and #75. In addition, this area is reported to have been used for coal storage. Also, an unknown black material was found during the foundation investigation for Buildings #74 and #75.	Installed and sampled soil borings and wells.	No specific conclusions provided in report.

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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Continued - Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338S, Dames & Moore, April 20, 1992	Area M: ASTs containing vegetable oil and caustics were present at the area east and southeast of Buildings #52 and #56. Also, unloading pits and railroad sidings are reported to have been present at this area. Fill is reported to have been placed at this area. UST(s) may also have been present in this area.	Installed and sampled 5 soil borings and 1 well at this area. Analytical results revealed the presence of low levels of TPHC and FOG in soil samples. Nickel is not reported to have been detected at an elevated concentration and pH was recorded at levels ranging from 8 to above 10. The report does not identify the location(s) of any UST(s) at this area.	No specific conclusions provided in report.
	Area N: A vegetable oil fat trap, "super fat trap", is located south of Building #56. An oil/water separator system including a UST, now filled with coarse aggregate, also is located in this area.	Installed and sampled soil borings which revealed the presence of black staining of soil. FOG was detected in soil samples and pH was recorded at relatively neutral levels. Nickel was detected below background.	No specific conclusions provided in report.
	Area P1 - Concrete pits were formerly located at the bottom of the rail siding unloading area, east of the Edible Oils Building. The pits were filled in and capped with asphalt/concrete.	Area P1: Low concentrations of TPHC and FOG were detected in soil samples. pH was recorded at levels ranging from almost 7 to slightly over 9.	No specific conclusions provided in report.
	Area O: This area is an existing scale pit and includes equipment for weighing trailers and rail cars at the site. Construction records indicate that the pit is constructed of concrete and is 10 feet deep.	Area O: TPHC and FOG were detected in soil samples and pH was generally recorded in the 7 to slightly above 8 range.	No specific conclusions provided in report.
	Groundwater was considered of concern with regard to the southern portion of Block 1338.	Groundwater: Installed and sampled 5 wells at the southern portion of Block 1338. Samples were analyzed for TPHC, FOG, zinc, lead, nickel, and pH. Report identifies isolated incidences of elevated TPHC concentrations and notes that higher concentrations are away from the production areas of this portion of Block 1338. Elevated concentration of lead and zinc.	States that the presence of TPHC in wells upgradient of production areas suggests that contaminants may be from off -site sources. State that TPHC has had a limited impact on groundwater. Overall Remedial Approach included in report states that the tar-like material with elevated levels of TPHC may be impacting groundwater.
Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338N, Dames & Moore, April 20, 1992	This report presents investigative actions performed at two AOCs: Area L Filled Area (southeast of Building #64) and Area Q2 Former Scale Pit located at the northern portion of Block 1338. The report indicates that paints and solvents were likely used in refurbishing operations at an old copper shop. Recent operations are identified as warehousing in Buildings #80, #60, #67N and #67S.	Investigation included the installation and sampling of soil borings and wells. Also performed a geophysical survey to identify USTs. The survey is not successful due to metallic interference from railroad tracks, metal piping, etc. Groundwater at the portion of the site occurs at 5.5-8.5 feet bsg and primarily in miscellaneous fill. Groundwater flow is reported to be to the southwest.	No remedial action is proposed to address either AOC or the northern portion of Block 1338.

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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Continued - Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338N, Dames & Moore, April 20, 1992	Area L: A sludge pond is reported to have been located south of Building #67 and southeast of Building #64. The report indicated that investigation was necessary to evaluate the type of materials utilized to fill the sludge pond. Also, investigation efforts were undertaken to evaluate impacts from a copper shop.	Installed and sampled two soil borings and a monitoring well. Some petroleum staining of soil is noted in one boring. The report references the recording of elevated pH levels in soil samples.	The report concludes that the investigation did not identify impacts to the area from former uses and did not support that the areas had been used as a sludge pond. Also concludes that the elevated pH may be associated with caustics.
	Area Q2: A truck scale was previously operated at the area west of Building #60. The scale is reported to be constructed of concrete.	Results do not identify the presence of TPHC or FOG and pH was recorded in the 6 to 8 range.	No remedial action is proposed based on analytical results.
	Groundwater was considered an area of concern with regard to the northern portion of Block 1338.	Wells were installed and sampled. TPHC and FOG were not detected at elevated concentrations in groundwater. Nickel, lead and zinc were detected in one site monitoring well (GW-5) from this area.	No remedial action proposed for groundwater.
Results of Sampling for Toluene and Metals, Recon Systems, Inc., December 11, 1992	The report presents and summarizes sampling performed to delineate toluene and TPHC contamination in groundwater and to supplement a previously completed feasibility study.	In December 1992 samples were collected from 10 wells: GW-7, GW-10, GW-11R, GW-12, GW-14, GW-17, RS-1, CS-3, Code Well and MW-5 (across Richmond Terrace). Samples from 5 wells (GW-10, GW-11R, RS-1, Code Well and MW-5) were analyzed for VO. Field measurements (pH, temperature and conductivity) were recorded for all 10 wells and dissolved oxygen was recorded for five wells.	This report concludes that this round of sampling confirms the results of previous sampling rounds and states that the presence of toluene will be addressed as part of the groundwater treatability study. No further action is proposed for metals as concentrations are below NYC sewer discharge levels.
	VO analysis of groundwater samples.	Toluene was detected in samples from 3 of the well samples tested for VO compounds.	The report states that the December 1992 sampling round indicates that toluene contamination is centered at GW-11R.
	Metals analysis of groundwater samples.	Samples from all 10 wells were analyzed for cadmium, chromium, copper, cyanide, lead, mercury, nickel and zinc. Low concentrations of copper and zinc are reported to have been detected in all wells. Chromium and nickel are reported to have been detected in some of the wells.	All concentrations of metals are reported to have been below NYC sewer discharge levels.
	pH assessment of groundwater samples.	The level of pH is reported to have been outside the acceptable federal drinking water range of 6.5-8.5 in four wells: Code Well, RS-1, CS-3 and GW-14.	The results are reported to confirm previous sampling rounds with regard to pH.
	TPHC analysis of groundwater samples.	Samples from two wells, GW-12 and GW-17 were analyzed for TPHC. TPHC was detected in the sample from GW-12 and was not detected in the sample from GW-17.	The level and extent of the TPHC is reported to be consistent with results of previous investigations.

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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
UST Storage Tank Removal and Site Assessment Report, Recon Systems, Inc., February 19, 1993 (Draft Version)	This report provides a summary of removal efforts for nine USTs. The report also includes an Appendix which consists of information associated with five of the nine tank removals performed by CODE Environmental. The CODE report is listed as a separate report in this table. The Recon report also includes a letter from Recon to the NYSDEC informing them of the intended removal of three tanks (one 8,000 gallon tank at Building #20 and two 10,000 gallon tanks at Building #56) which had never been included on the tank registration for the facility. These tanks are reported to have been identified through a review of historical site plans. It appears likely that these tanks identified in the letter were removed as part of the closure effort described in this report. It should be noted that the two 10,000 gallon tanks identified in the letter to NYSDEC were the 12,500 gallons described in this report. According to the report a representative of the NYSDEC Water Program witnessed the closure efforts for all tanks.	The following USTs are reported to have been closed: one 8,000 gallon No. 6 oil UST at Building #20; two 8,000 gallon No. 6 oil USTs and one 8,000 gallon No. 2 oil UST at Building #56; one 1,000 gallon diesel fuel UST at Building #1B (Excavation A); one 2,000 gallon unleaded gas UST at Building #12 (Excavation B); one 3,000 gallon diesel UST at Building #32 (Excavation C); and, one 12,500 gallon No. 6 oil UST and one 12,500 gallon No. 2 oil UST at Building #32A (Excavation D). The closure included removal of tanks, removal of soil (based on field screening), the collection and analysis of post-excavation samples and the restoration of each tank area via the placement of clean fill. Some dewatering is reported to have been performed and resultant materials collected and transported from the site for disposal at an appropriate facility.	The report states that all accessible contaminated soil was removed from tank areas. No exceedences are reported with regard to VO compounds and only a few exceedences are reported with regard to CPAH compounds.
	Removal of one 8,000 gallon UST containing No. 6 oil from the Building #20 Area.	Building #20 Excavation: A 8,000 gallon UST formerly containing No. 6 oil located in a concrete vault was removed. Based on the presence of stained soil and free product around the supply line, 200 tons of soil were removed from the tank area. Soil was excavated to groundwater but due to the proximity of the building, a portion of the vault and some contaminated soil was left in place. The matter was assigned NYSDEC Number 920-3451. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15. Analytical results revealed the presence of CPAH compounds in excess of NYSDEC standards in three of the four samples.	No additional actions were recommended for this area.
	Removal of two 8,000 gallon UST containing No. 6 oil and one 8,000 gallon tank containing No. 2 oil from the Building #56 Area.	Building #56 Excavation: Two 8,000 gallon USTs containing No. 6 oil and one 8,000 gallon UST containing No. 2 oil were removed. Based on the presence of stained soil and oil sheen on the groundwater, 325 tons of soil were removed from the tank area. Due to the presence of electric lines, some contaminated soil was left in place. The matter was assigned NYSDEC Number 920-3754. Six post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15. Analytical results from the sample collected below the electric line revealed the presence of CPAH compounds in excess of NYSDEC standards. BN compounds were either not detected or were detected below cleanup standards in the other samples.	No additional actions were recommended for this area.
	Removal of one 1,000 gallon UST containing diesel fuel from the Building #1B Area.	Building #1B Excavation: A 1,000 gallon UST containing diesel fuel was removed. Contaminated soil was encountered during the removal effort and approximately 50 tons of soil is reported to have been removed from the tank area. The matter was assigned NYSDEC Number 920-3697. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. Analytical results revealed the presence of CPAH compounds in excess of NYSDEC standards in two of the four samples.	No additional actions were recommended for this area.

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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Continued - UST Storage Tank Removal and Site Assessment Report, Recon Systems, Inc., February 19, 1993 (Draft Version)	Removal of one 2,000 gallon UST containing unleaded gas from the Building #12 Area.	Building #12 Excavation: A 2,000 gallon UST containing unleaded gasoline was removed. No contaminated soil or holes were observed during the removal. Four post-excavation samples were collected (three from the excavation and one from along the supply line) and analyzed for VO. The concentrations are reported to have been below cleanup standards.	No additional actions were recommended for this area.
	Removal of one 3,000 gallon UST containing diesel fuel from the Building #32 Area.	Building #32 Excavation: A 3,000 gallon UST enclosed in a vault was removed and approximately 50 tons of soil were removed from the tank area. The matter was assigned NYSDEC Number 920-3697 (same number as Building 1 Excavation). The excavation was extended to groundwater and is reported to have been limited by the presence of an electric line along the eastern portion of the tank area. Two post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. No targeted BN or VO compounds were detected. Low concentrations of VO TICs were detected.	No additional actions were recommended for this area.
	Removal of one 12,500 gallon UST containing No. 6 oil and one 12,500 gallon UST containing No. 2 oil from the Building #32A Area.	Building #32A Excavation: Two 12,500 gallon USTs were removed and approximately 75 tons of soil were removed from the area surrounding the tank. The matter was assigned NYSDEC Number 920-4269. The excavation was extended to groundwater and is reported to have been limited by the presence of buildings on three sides and an electric line. All accessible contaminated soil is reported to have been removed. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. No targeted BN compounds were detected. Low concentrations of target VO compounds, below regulatory levels, were detected in one sample.	No additional actions were recommended for this area.

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Site Assessment Summary Report Closure of Underground Storage Tank Systems, CODE Environmental Services, September 1992 (included in Appendix 1 of Recon UST Report, dated February 19, 1993)	This report provides a summary of the removal efforts undertaken for 5 USTs: one 1,000 gallon UST formerly used to store diesel oil; one 2,000 gallon UST storing gasoline; one 3,000 gallon UST containing diesel oil; one 12,500 gallon UST containing fuel oil; and one 12,500 gallon UST containing fuel oil. This report references a different sampling regime than described in the February 1993 Recon report. The report identifies a closure approval dated June 22, 1992. This report is provided as an appendix to the February 1993 Recon report.	Tanks and impacted soil, if any, were removed from five site locations in June/July 1992. One 1,000 gallon steel tank formerly used to store diesel fuel was removed. Approximately 160-170 gallons of diesel fuel and sludge present in the vault encasing the UST were removed and drummed for disposal. Samples are reported to have been collected from the sides and bottom of the excavation and analyzed for TPHC. One 2,000 gallon steel tank located at Building #12 and used to store gasoline was removed. The tank was encased in concrete with concrete and soil overlying same. Samples are reported to have been collected from the sides and bottom of the excavation and analyzed for TPHC and BTEX. The NYSDEC ordered the excavation backfilled in July 1992. One 3,000 gallon steel tank located at Building #32 and used to store diesel fuel was removed. During excavation activities, it was determined that a leak from the feed lines had impacted surrounding soil. The NYSDEC was notified (920-3697) of the discharge and the excavation was backfilled at the direction of the NYSDEC No reference to sampling is included in the discussion. Two 12,500 gallon steel tanks, one used to store No. 2 fuel oil and one used to store No. 6 oil, were removed. The tanks were encased as well as being horizontally cross-braced with large steel I beams. The No. 6 oil tank was grouted and embedded in the building abutment.	No conclusions were provided in the report.
Area F Soil Remediation Report, Recon Systems, Inc., March 16, 1993	This report describes soil excavation and sampling performed to address previously delineated PCB contamination in soil at Area F. The report states that Area F was first identified as an area of concern during a SI performed by Dames & Moore and subsequently the extent of the PCB contamination was delineated through a soil boring investigation performed by Recon in 1992. A report documenting the delineation activities is reported to have been prepared and submitted to P&G in June 1992.	Excavation activities were performed in February 1993. The excavation boundaries are reported to have been based upon the results of a soil boring investigation performed in 1992 and to have been centered about sample FB-3 which reported the highest PCB concentration of 150 ppm. The excavation was extended to a depth of approximately 3 feet bsg. Approximately 150 cubic yards (221 tons) of soil was excavated and nine post-excavation samples were collected from the resultant excavation area. PCBs were either not detected or were detected below the minimum detection limit in 5 samples. Detectable levels of Aroclor-1254 were identified in the remaining four samples with the highest concentration recorded at 0.49 ppm, below the NYSDEC standard for PCBs of 1 ppm.	No further action was proposed for Area F.

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Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Site Assessment, Soils Delineation and Impact to Groundwater in Area K at the Port Ivory Facility, Recon Systems, Inc., October 15, 1993	Report describes a groundwater investigation undertaken to determine if groundwater in monitoring wells (GW-16 and GW-1) near Area K had been impacted by industrial activities. The report states that soil investigations performed by Dames & Moore and Recon identified the presence of TPHC, VO compounds and BN compounds in soil samples from Area K. This report references a November 1992 report by Recon *Results of Soil Investigation in Areas F and K.* This report was not included in the materials provided for Killam's review. However, the October 1993 report states that the November 1992 report provides a summary of delineation efforts at Area K. With regard to the delineation efforts at Area K, Recon is reported to have installed 54 test pits, performed field screening and collected and analyzed 17 soil samples. The delineation effort reportedly revealed the presence of "elevated" levels of TPHC in soil samples collected from areas exhibiting a black tar-like substance. The October 1993 report reiterated the conclusion of the 1992 report and stated that the noted hydrocarbons were likely to be immobile due to their high viscosity but indicated that a groundwater investigation was necessary to confirm this conclusion.	In December 1992, Recon obtained samples from wells GW-16 and GW-1. Samples were analyzed for PP+40 including cyanides and phenols. Analytical results are reported to have been below NYSDEC action levels except for cyanides, 2(1,1-dimethyl)phenol, arsenic, chromium, copper, lead and zinc. The levels of the above listed contaminants are reported to have been within one order of magnitude of corresponding NYSDEC action levels. To confirm results, the wells were re-sampled in March 1993 for cyanide, arsenic, chromium, copper, lead and zinc. Analytical results revealed similar levels of the noted contaminants.	The report asserted that residential exposure from the subsurface contamination would be minimal so long as the soil was not disturbed. Also, stated that soil bound petroleum hydrocarbons have not impacted groundwater at this portion of the site. Further, states that the metals in groundwater may be from fill rather than industrial activities. No further action is proposed for groundwater since it is not used for potable purposes.
Environmental Site Assessment Summary Report of Tax Block 1400, Recon Environmental Group, October 18, 1994	According to this report, environmental due diligence studies were performed to characterize environmental conditions of this parcel and that all issues have been addressed at this parcel. The report states that P&G has completed several projects to eliminate site contamination and that the one remaining active project is a groundwater remediation project which is described in this report. The report indicates that the proposed groundwater recovery system would induce a constant flow across the site thereby mobilizing compounds that are adsorbed to soil. These mobilized compounds can be recovered and treated thereby remediating soil.	The previously identified concerns and response actions, as presented and described in this report, are as follows: Bridge Creek Calcium Deposits; Former Raw Product and By-product AST Areas; Wastewater Treatment; Drum Storage; Former Rosin Storage Area; Representative Railroad Switch and Equipment Areas; Product Unloading Areas; Closure of UST Systems; Wood Yard; Building 20; and Groundwater Sampling and Analysis.	Groundwater remediation is the only proposed action.
	Bridge Creek Calcium Deposits	Two investigations were performed to determine the sources and extent of the white precipitate in Bridge Creek. Studies involved sediment and groundwater sampling and analysis. Results of both studies revealed high pH levels and the conclusion was that the material was calcium carbonate.	This report states that the high pH will be addressed through the proposed groundwater remediation program.
	Former Raw Product and By-product AST Areas	Three AST Areas (Areas A, B & C) were investigated by Dames & Moore in 1992. Each area is reported to have been investigated with soil borings and at least one monitoring well. Analytical results from soil samples are reported to have indicated levels of FOG, TPHC, pH and zinc. Groundwater results are reported to have indicated elevated levels of FOG, TPHC, pH, zinc and lead. All ASTs are reported to have been removed. This report also comments that a UST used to hold toluene near Area C was closed in place and filled with concrete in 1989.	The report states that elevated concentrations of contaminants in groundwater will be addressed through the proposed groundwater remediation program.

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	Wastewater Treatment Drum Storage	The S&S Fat Trap (Area E) handled wastewater from the hydrolyzer building. Soil borings and a well were installed at this area. Analytical results revealed the presence of elevated concentrations of FOG, TPHC, nickel and zinc.	The report states that elevated concentrations of contaminants in groundwater will be addressed through the proposed groundwater remediation program.
	Drum Storage	Area F1 (Spent Nickel Catalyze Drum Storage Area) and Area F2 (Waste Oil Drum Storage Area) were evaluated through the installation and sampling of soil borings and wells. Analytical results from Area F1 revealed the presence of elevated levels of pH, TPHC, FOG, zinc and PCBs. Analytical results from Area F2 revealed elevated levels of FOG and TPHC. Additional sampling was performed to delineate the extent of the PCBs detected in soil at Area F1. Subsequently, soil excavation was performed to address the PCBs.	PCB contaminated soil was removed and no further action is necessary based on post-excavation sampling.
	Former Rosin Storage Area	This area, Area H, was investigated through the installation and sampling of soil borings and a well. Elevated pH is reported to have been recorded in soil and groundwater.	This report states that the high pH will be addressed through the proposed groundwater remediation program.
Continued - Environmental Site Assessment Summary Report of Tax Block 1400, Recon Environmental Group, October 18, 1994	Representative Railroad Switch and Equipment Areas	Representative railroad switch, tie and equipment (Area O) is reported to have been sampled by Dames & Moore. Reportedly, the investigation did not identify any negative impact associated with the railroad equipment.	No actions are proposed for railroad equipment on this parcel.
	Product Unloading Areas	Concrete lined pits which have been filled in and capped with asphalt or concrete were formerly used for unloading raw product from tankers and rail cars. These pits were evaluated through the collection of soil samples. Analytical results indicated elevated levels of FOG and pH.	Conclude that induced groundwater flow from the groundwater treatment system will remediate these soils.
	Closure of UST Systems	The report states that Recon and CODE supervised and documented the decommissioning of the following USTs: 1,000 gallon diesel (B1B), 2,000 gallon gasoline (B12), 3,000 gallon diesel (B32), 12,500 gallon #2 (353) 12,500 gallon #6 (354) and a 8,000 gallon #6 (Building #20). Impacted soil is reported to have been removed from the former B1B, B32, 353, and 354 and some impacted soil is reported to have been left in place adjacent to Buildings #20, #32, #32A and #56 due to the presence of buildings and/or utilities.	Conclude that no further action is necessary given that the source(s) and the majority of the contaminated soil was removed.

Table 2
Historical Environmental Reports and Information
Port Ivory Site
Staten Island, New York

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
	Wood Yard	Historical maps are reported to identify a 1 to 2 acre wood yard which had contained a coal gasification raw material storage area prior to the 1950s. This is reported to be discussed in a 1991 McLaren Hart report which was not provided to Killam during the document review. The area is reported to have been investigated to determine if any coal tar residue had impacted soil or groundwater. The investigation revealed elevated levels of TPHC, VO and BN in soil and TPHC, BN and phenols in groundwater.	Groundwater quality will be addressed in the proposed groundwater remediation program.
	Building #20	Building #20 is reported to have been utilized as a locomotive repair shop. Analysis of samples from the stained soil floor indicated elevated levels of TPHC, VO, BN, metals and low levels of PCBs. A McLaren Hart report (1992) is reported to have concluded that the sampling results did not contain any contaminants above cleanup guidance values or that would pose a threat to human health. The 1992 McLaren Hart report was not provided to Killam during the document review.	No actions were proposed for this area.
	Groundwater Sampling and Analysis	Floating product is reported to have been observed on the water surface of wells on Block 1400 and elevated levels of pH are reported to have been recorded with regard to groundwater samples. Reportedly, Dames & Moore and McLaren Hart recommended a groundwater investigation and remediation program (free-phase product removal and pH neutralization) and, Recon performed an investigation which included testing to delineate the high pH, toluene and product plumes on this parcel and a pump test to evaluate hydraulic parameters for use in a preliminary design.	Conclude that groundwater remediation (coalescing oil/water separator, air stripper and acid addition to address TPHC, toluene and high pH) is warranted.
Continued - Environmental Site Assessment Summary Report of Tax Block 1400, Recon Environmental Group, October 18, 1994	Groundwater Contamination	Groundwater remediation: This report states that Recon was going to develop a preliminary treatment design to be utilized in permit negotiations with New York City. The proposed design scheme was to include 10 recovery wells pumping water to 3 input wells in the treatment system. Water from three wells contaminated with TPHC was to be pumped to an oil/water separator and water from the two wells exhibiting elevated levels of toluene was to be pump to an equalization tank. The effluent from the oil/water separator and the air stripper was to be mixed, in an equalization tank, with water from the wells from the area with high pH. From the equalization tank, the water was to be pumped to an existing pH control system. An inline static mixer was to be added along with an acid addition system as the primary pH control and the existing pH control system was to be used as a backup. It was proposed to discharge the treated effluent to the sewer.	Report concludes that groundwater remediation is needed to address PHC, toluene and pH.

Table 2
Historical Environmental Reports and Information
Port Ivory Site
Staten Island, New York

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Landfill Closure Construction Certification Report, Levine-Fricke-Recon (LFR), July 18, 1997	Documents the field procedures implemented to achieve physical closure of the P&G landfill in accordance with 6 NYCRR Part 360 and the landfill closure plan dated January 1997. This report also includes permits, correspondence, disposal documentation and cover material certification associated with the landfill closure. The report states that P&G previously demonstrated the non-hazardous condition of the landfill and, as allowed on a case-by-case basis, P&G had demonstrated that specific landfill closure requirements in Section 360-2.15 Landfill Closure and Post Closure Criteria were not applicable. Therefore, NYSDEC is reported to have addressed the closure according to Section 360-2.14 Industrial/Commercial Waste Monofills which allows for closure requirements to be modified based on pollution potential of waste.	The approved closure activities included site clearing to remove surface debris, brush clearing, placement of one foot of cover and the establishment of vegetation. Materials removed from the landfill area included the following: scrap metal, tires, telephone poles, railroad ties, vegetative debris and one box of sharps.	No additional actions are proposed for the landfill with the exception of the post-closure groundwater monitoring and maintenance.
Landfill Cover Maintenance Manual and Groundwater Monitoring Plan, LFR, April 14, 1998	Describes maintenance and groundwater monitoring for closure of the C&D Landfill located on Block 1309. This report provides maps which depict the landfill area, the locations of 7 wells and groundwater contours.	No investigative actions are included in this report. The report sets forth a five year sampling and maintenance program including all 7 monitoring wells (MW-1,2,3,4,5,6 and DW-1) located within the landfill. The proposed maintenance plan includes a semi-annual inspection to ensure the integrity of soil cover and vegetation.	No conclusions are provided in this report.
Landfill Closure Plan, LFR, April 14, 1998	This report documents the closure of the landfill at the Port Ivory facility in accordance with NYCRR Part 360. The report states previous investigation(s) revealed that soil and groundwater are free of significant contamination and therefore do not pose a threat to human health or the environment.	No activities performed in conjunction with this report.	Closure will include a deed restriction

Table 2
Historical Environmental Reports and Information
Port Ivory Site
Staten Island, New York

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results	Report Conclusions
Update on the Report on the Recommended Treatment System for Groundwater Contaminated with NAPL, Toluene and High pH, Recon Systems, Inc. March 28, 1995 *Amendment to Remove Economic Information*, May 13, 1999	The report presents updated information pertaining to the proposed treatment system for groundwater contaminated with NAPL, toluene and high pH.	The report does not include any additional testing activities. Rather, the report provides an updated design based on data generated since issuance of previous design report in 1993. The changes to the design system include fewer recovery wells due to a reported NAPL dissipation (one area of concern remaining) and diminished extent of the high pH area as well as increased water hardness.	The report concludes that recent sampling results necessitate revision to the previously described treatment system. The revised design calls for fewer recovery wells, elimination of the oil/water separator , addition of a sludge thickening system (if needed due to recent high hardness measurements) and a scaled down stripper system. Also, economic information is referenced as having been removed from this report.
Investigation of Calcium Deposits, Blasland, Bouck & Lee, September 1999	According to this report an area on the western side of the site, along Bridge Creek, was formerly occupied by calcium carbonate drying beds. In addition, several ASTs containing caustic materials were located approximately 250 feet east of Outfall G. White precipitate is reported to have been noticed several times along the banks. In response to the noted precipitate, P&G is reported to have initiated a pH level monitoring program. The purpose of this investigation was to identify and map the extent of the precipitate occurrences in Bridge Creek and attempt to determine the source area of the precipitate.	The investigation/study included the following: collection and analysis of sediment samples from the bed of Bridge Creek; collection of water samples from selected outfalls that intermittently discharge to the creek; installation and sampling of 7 wells; water table measurements hydraulic conductivity testing; hydrochemical sampling (pH, conductivity and temperature); and review of previously recorded pH values. Samples collected as part of this investigation were analyzed for indicator inorganic constituents (chloride, sulfate, nitrate, fluoride, chromium, arsenic, barium, cadmium, calcium, cyanide, iron, lead, manganese, mercury, copper, silver, sodium, zinc and selenium). The report also includes calculations estimating potential rate of discharge to groundwater into Bridge Creek. Two areas of elevated pH were identified through this study, Outfall G Area and an area 500 feet north of Outfall G. The second area is presumed to be associated with a groundwater seepage point. The levels of pH recorded between 1986 and 1989 were generally similar. Investigation revealed that pH of Bridge Creek was historically elevated and that the levels had been declining since 1985/6 due to a delayed response to the installation of an underground piping system at the AST area in 1984. Given the similarity in pH levels between 1986 and 1989, it was concluded that the precipitate either stabilized or is forming at a slow rate.	The report concludes that groundwater with an elevated pH exists over much of the study area and that the flow of the high pH groundwater through the subsurface lime deposits has resulted in the dissolution of the deposits and the release of calcium products. The discharging of this calcium enriched groundwater into surface water exhibiting a lower pH may cause the precipitation and deposition of calcium salts. Furthermore, the soils and groundwater reflect many of the chemical parameters indicative of the saline to brackish waters natural to Bridge Creek.

Note: Information provided in this table is as presented in the listed reports.

Table 3
Summary of Environmental Database Listings
Port Ivory Site
Staten Island, New York

Database	Database Date	Additional Information
USEPA, Resource Conservation Recovery Information System (RCRIS) Facilities - Large Quantity Generators (LQG) List	December 12, 1999	The subject site is listed on the USEPA, RCRIS Facilities - LQG List dated December 12, 1999. Review of this site listing notes that P&G is permitted as a LQG (Record Date August 13, 1980) and assigned USEPA ID Number NYD000249961. One violation appears to be associated with this site listing and is associated with the requirements Compliance Evaluation Inspection. P&G is reported to have complied with these requirements on September 25, 1986. Based on review of the site listing, it appears that no outstanding violations are associated with the site's listing as a LQG.
The NYSDEC Inventory of Hazardous Disposal Sites (SHWS) List	April 1999	The subject site's inclusion on NYSDEC, HSWDS List dated April 1999 is associated with the presence of the C&D Landfill on Block 1309. This listing also identifies that P&G maintains an USEPA Identification Number NYD980507537 and operates a wastewater treatment system to control pH in the sanitary waste stream. After some acidulation occurs, the sludge from the treatment system is reported to be removed from the subject site. No other off-site disposal activities are identified in this listing. The listing comments that the abandoned landfill reported to be on-site does not have a liner or a leachate collection system and that P&G disposed of wastes, generated from their manufacturing processes, on-site. A consent order, executed in March 1992, is identified in this listing. Further, the consent order is reported to have required site investigation and closure (in accordance with Part 360) of the landfill. This investigation is reported to be currently under review. Although information provided by representatives of DEC have confirmed that the landfill was closed in accordance with prevailing regulations and that the case is considered closed by the Department. Post-monitoring requirements were performed by P&G and are currently being performed by the Port Authority. **The NYSDEC issued a letter to the Port Authority of NY & NJ stating that the site was no longer included on the NYSDEC HSWDS. A copy of the letter is included along with this submission.**
NYSDEC, Petroleum Bulk Storage Database (UST) List	April 2000	The listing identifies three USTs (PBS Number 2-600767) formerly located on the subject site. One 8,000 gallon and two 10,000 gallon USTs containing 1,2 or 4 fuel oil are reported to have been closed/removed in August 1992. Tanks are reported to have been constructed of steel/carbon and associated piping is reported to have been constructed of steel/iron.
NYSDEC, Chemical Bulk Storage Database (CBS UST) List	January 2000	This listing notes that P&G formerly utilized one 10,000-gallon UST, was registered under CBS Registration Number 2-000128, for the storage of toluene. The tank is reported to have been installed in January 1950 and its current status is noted as "temporarily out of service/closed in place". No date for the closing of the tank was provided in the EDR Listing. The tank and piping are reported to be constructed of steel/carbon steel and situated within a secondary containment vault. According to P&G, contamination was identified in conjunction with the former toluene tank area. Please note, the toluene tank was not specifically evaluated as part of the site investigation since P&G indicated it was a closed issue with the NYSDEC. However,

Table 3
Summary of Environmental Database Listings
Port Ivory Site
Staten Island, New York

Database	Database Date	Additional Information
		investigation actions were performed in the vicinity of the former toluene tank.
NYSDEC, Chemical Bulk Storage Database (CBS AST) List	January 2000	This listing notes the subject site formerly maintained nine ASTs under CBS Registration Number 2-000128. All tanks are reported to have been closed.
NYSDEC, Major Oil Storage Facilities Database (MOSF UST) List	January 2000	This listing notes the subject site formerly maintained eight USTs under MOSF Facility Identification Number 2-2160. The facility status is listed as inactive. The tanks ranged in size from 550 gallons to 12,000 gallons and all are reported to have contained petroleum products (fuel oil, diesel or unleaded gasoline). The listing indicates that all of the USTs were removed with NYSDEC oversight and does not identify any outstanding required actions.
YSDEC, Major Oil Storage Facilities Database (MOSF AST) List	January 2000	This listing notes the subject site formerly maintained five ASTs under MOSF Facility Identification Number 2-2160. The facility status is listed as inactive. Three tanks with capacities of 550, 275 and 250 gallons are reported to have contained diesel fuel and two tanks, each with a capacity of 42,000 gallons are reported to have contained No. 1, 2 and 4 fuel oil.
USEPA Facility Index System (FINDS) List	October 1999	The FINDS List typically contains "pointers" and information indicating that the site is listed on other database sources within RCRIS. Review of this site listing notes other pertinent environmental site listings to include listings on the Aerometric Information Retrieval System , Facility System (AIRS/FS), Enforcement Docket System (DOCKET), National Compliance Database (NCDB) and Section Seven Tracking System (SSTS).
NYSDEC Spills Information Database (Spills) List	January 2000	The site is listed on the NYSDEC SPILLS three times. The first case, Spill Number 8907474, is associated with a discharge that occurred on October 26, 1989. The spill is reported to be associated with the detection of toluene contamination discovered during the analysis of soil samples obtained from the toluene tank area during closure of the UST. The listing identifies that the NYSDEC was informed of the discharge and that this agency closed the spill case citing that same did not pose an immediate danger to health and the environment; the spill case was closed on August 14, 1990. The listing comments that P&G asserted that the contamination was confined to an upper aquifer situated on top of a limestone layer. The second spill, Spill Number 8605160, occurred on November 28, 1986 and involved the discharge of an unreported amount of an unreported material from a vessel into the Kill Van Kull. A cleanup contractor is reported to have been called to the site and handled the remediation of same. The spill case was closed by the NYSDEC on November 28, 1986. The third spill, Spill Number 8906834, was noted to be associated with a simulated exercise involving P&G, the New York City Police Department and the NYSDEC conducted on October 12, 1989. No actual materials are reported to have been discharged to environmental media. The spill case was closed the same day. As all three of the above spill cases were reported to the NYSDEC, investigated by same and eventually closed by this agency, no site investigation activities appear to be warranted with regard to the spills. Please note, this workplan includes the performance of investigative activities in the area of the former toluene tank.

Notes: Database information is provided in an electronic database search, performed by EDR in May 2000.

Appendix B

APPENDIX B

Previous Owners/Operators

Port Ivory Site
40 Western Avenue
Staten Island, New York 10303

Current Owner/Operator:
The Port Authority of NY & NJ
EADD Environmental Engineering Unit
2 Gateway Center
14th Floor, Southwest
Newark, New Jersey 07102

Mr. Robert Pruno, PE
Assistant Chief Environmental Engineering
Phone: 973-565-7620
Fax: 973-565-7649

Previous Owner/Operator:
Procter & Gamble Manufacturing Co.
40 Western Avenue
Staten Island, NY 10303

Colleen M. Greaney, Ph.D.
Site Manager
Phone: 718-727-7197
Fax: 718-727-7598

Relationship to Volunteer: None