

DATE: 7/12/2012

Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

City: **Brooklyn** Town: New York City

Region: County: Kings

Current Classification: 02 **Proposed Classification:** 04

Estimated Size (acres): Disposal Area: Landfill 110.00

Significant Threat: Site Type: Previously

Priority ranking Score: Project Manager: Michael Mason

Summary of Approvals

Originator/Supervisor: Gerard Burke 05/17/2012

RHWRE: Jane O'Connell: 06/26/2012

BEEI of NYSDOH: 06/25/2012

CO Bureau Director: Michael Cruden, Director, Remedial 07/09/2012

Bureau E:

07/10/2012

Assistant Division Director: Robert W. Schick, P.E.:

Basis for Classification Change

Hazardous waste disposal at this site was addressed by implementation of the remedy identified for the site by the Record of Decision (ROD). The Final Engineering Report(s) (FER) (or its equivalent) confirms that the remedy has been constructed consistent with the requirements in the ROD. The FER(s) (or its equivalent) is/are in edocs. Management of contamination remaining at the site, including any required monitoring, is and has been controlled pursuant to a Site Management Plan (SMP) (or its equivalent). Institutional controls are required to ensure the protectiveness of the site. The required control, in the form of an Environmental Notice, is in place. The site is properly remediated and requires site management; therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

Site Description - Last Review: 06/19/2012

Location: The Pennsylvania Avenue Landfill (PAL) is located at the southern end of Pennsylvania Avenue in the Borough of Brooklyn, New York City, Kings County, New York.

Site Features: The landfill site measures 110 acres and extends into Jamaica Bay. Situated over what was once a tidal marsh, the PAL is surrounded on three sides by water: Hendrix Creek to the east, Jamaica Bay on the south and Fresh Creek Basin to the west. On the north, the PAL is bounded by the Belt Parkway; farther north is Starrett City, a high-rise housing development. There is one large main fill mound in the northwest half of the PAL which rises above Jamaica Bay to an elevation of approximately 85 feet (Borough of Brooklyn





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Datum). A round shaped mound in the central portion of the southeast half of the PAL rises to an elevation of approximately 40 feet. Other fill ridges (running around the perimeter of the Site) are between 10 and 20 feet in height. Soil cover is generally thin.

Current Zoning/Use(s): The site is currently zoned Park (open space and recreation). South of the site is Jamaica Bay. To the east is a low density residential area, to the north is a area of combined commercial zoning and industrial/manufacturing. The area west-southwest is also zoned Park (Fountain Avenue Landfill).

Historic Use(s): The PAL was opened in 1956 and received residential, commercial, incinerator, street cleanings, construction and demolition (C&D) wastes, and waste oil. By 1962, the landfill was closed and filling activities had shifted to the adjacent Fountain Avenue Landfill (FAL). In 1968, the FAL was expanding more rapidly than anticipated and the dumping of CLD debris was shifted to the PAL site. The City of New York transferred ownership of the PAL to the United States Department of the Interior, National Park Service, in 1974. In 1979, all filling at the PAL ceased.

In June 1980 the site was added to the Registry of inactive hazardous waste disposal sites as a closed site requiring further surveillance. In 1983 the site classification was changed to a Class 3 site, to reflect one which did not pose a significant threat, and for which action may be deferred. In 1983, oil was observed to be seeping from the landfill along the Fresh Creek shoreline. Sorbent booms were installed in the outbreak are to absorb floating oil and contain oil migration. A 1984 study estimated the amount of oil present at the site and evaluated the feasibility of product recovery. In 1984 the site classification was changed to a Class 2 to reflect a site which poses a significant threat to public health or the environment.

Site Geology and Hydrogeology: The site area is underlain primarily by outwash plains and sediments and tidal marsh deposits. The site is bordered by wetlands on the south, east, and western sides. The stratigraphy of the site is, in order of increasing depth, municipal fill, dredged sand fill (DSF), tidal marsh deposits (TMD), and upper glacial aquifer (UGA). Below the UGA, the geology is not significant for the purposes of evaluating landfill settlement and static-conditions slope stability.

The construction of the landfill resulted in the placement of a huge thickness of man-placed fill over the TMD, the first of which was the DSF. This unit is tan, brown and grayish black fine to medium sand with a trace to some fines. Consistency of the unit varies from very loose to very dense and the sand is poorly graded.

Groundwater, referred to as leachate-mound-water, is present within the 30- to 85-foot fill. This leachate-mound-water is confined by the underlying TMD, which restricts transport of it into the UGA. The groundwater surface typically ranges between elevation 0 and 6 feet across the Site. Based on groundwater levels measured in monitoring wells during one tidal cycle, the leachate-mound-water is not strongly influenced by tidal fluctuation. In contrast to the leachate-mound-water, the UGA is strongly influenced by tidal fluctuation. Regional flow in the UGA is south-southeast toward Jamaica Bay but reverses to a northerly direction at high tide.

Contaminants of Concern (Including Materials Disposed)	Quantity Disposed	
OU 01 OIL SLUDGE, SOLVENTS. PCB CADMIUM LEAD		0.00 0.00 0.00 0.00





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Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

MERCURY
PHENOLS
0.00
METHYLENE CHLORIDE
0.00

Analytical Data Available for: Air, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Air, Groundwater, Surface Water

Site Environmental Assessment- Last Review: 06/19/2012

Prior to remediation:

The results from the Remedial Investigation indicated a variety of contaminants in the various media at the Site. Surface soil and subsurface soil/fill samples around the southern half of the large fill areas exhibited the greatest number and highest concentrations of contaminants.

Surface soil: Standards, Criteria, and Guidance (SCG) exceedances occurred primarily for polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals. Subsurface soil: SCG exceedances in subsurface fill samples were primarily for benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, PAHs, and metals. The TMD appears to act as a barrier layer for migration of organic contaminants into the UGA and limits the migration of inorganic contaminants. Within the TMD exceedances were primarily for PAHs and metals and within the UGA, SCGs were exceeded only for metals.

Groundwater: Groundwater samples collected from the leachate mound showed exceedances for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals. Additionally there is a free product plume which originates in the west central portion of the landfill and migrates to the southwest towards Fresh Creek. The water in leachate mound underlying the floating product plume contains BTEX and PCB compounds which replicates those detected in the product plume.

In the UGA, the number of contaminant exceedances were significantly lower.

Surface Water and Sediment: Surface water and companion sediment samples were obtained from the three water bodies - Hendrix Creek, Fresh Creek, and Jamaica Bay - adjacent to the landfill. The most contaminated surface water sample came from Fresh Creek, where 9 VOC, 12 SVOC, 2 pesticides, and 2 PCB compounds were detected in a single sample. A few of those volatile and semivolatile compounds were also detected in Hendrix Creek and Jamaica Bay, but at lower concentrations.

The sediment concentrations were significantly higher in Fresh Creek than at the other locations. The concentrations of compounds detected in surface water samples were significantly less than those detected in the nearby leachate mound. In general, VOC and SVOC concentrations in the surface water were diluted between 2-10 times while the concentrations of some metals (e.g., calcium, magnesium, potassium, and sodium) and pesticides tended to increase, reflecting probable regional contributions of these contaminants to Jamaica Bay.

Air: Ambient air sampling detected many typically urban contaminants such as Freon and spent byproducts of petroleum combustion.





DATE: 7/12/2012

Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

Post-Remediation:

The leachate collection trench now pre-treats the leachate and pumps the excess water to the 26th Ward treatment plant. The landfill cap is complete and the flare to burn the landfill gases is operational. The groundwater and landfill gases are monitored annually. The Environmental Notice restricts the property to landfill use.

Site Health Assessment - Last Update: 06/11/2012

The landfill was properly capped thus preventing contact with contaminated subsurface soils. Also, measures in place to maintain and prevent disturbance of the cap will minimize the potential for future exposure to contaminants present in the subsurface. People are not drinking the contaminated groundwater since the area is served by a public water supply not affected by this contamination. An active gas collection system vents/flares landfill gases at the site prevents soil gas from leaving the site.

071.00	Start		End	
OU 00 Periodic Review	9/30/10	ACT	12/30/10	ACT
Periodic Review	10/14/11	ACT	10/14/11	ACT
Site Management	3/26/09	ACT	3/26/39	PLN
OU 01			0 0. 0 ;	
OGC Docket - Environmental Notice	12/28/10	ACT	6/28/11	PLN
Reclass Pkg.	5/17/12	ACT	2/28/13	PLN
Remedial Action	3/1/99	ACT	3/26/09	ACT
Remedial Design	2/1/95	ACT	9/21/00	ACT
Remedial Investigation	1/1/93	ACT	2/1/95	ACT
OU 01A				
Remedial Action	7/1/93	ACT	1/1/94	ACT
Remedial Design	7/1/92	ACT	5/1/93	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

Components of completed remedy were as follows:

- A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance and monitoring of the remedial program and to resolve any uncertainties identified during the RI/FS.
- Construction of a Part 360 landfill cap, featuring a gas venting layer, synthetic membrane barrier layer, 18" soil barrier protection layer and vegetated topsoil layer.
- An active leachate collection trench in the area of the waste oil outbreak along Fresh Creek. Leachate collected in the trench was to be pumped to an on-site facility for treatment prior to





DATE: 7/12/2012

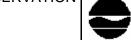
Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

discharge to surface water.

- An active gas collection system, consisting of a series of extraction wells screened in the waste and connected via blowers to an enclosed flare or energy recovery device for combustion.
- Institution controls on the property to ensure that groundwater beneath the site is not extracted for consumptive use and to ensure that any future site construction or other invasive activity is approved by NYSDEC and NYSDOH.
- A long term monitoring program will be instituted. This program will allow the effectiveness of the selected remedy to be monitored and will be a component of the Operations and Maintenance plan for the site.

Total Cost \$27,377,000





DATE: 7/12/2012

Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

Remedy Description for Operable Unit 01A

The IRM includes a waste oil interceptor trench, interim cover and slope stabilization and subsurface fire control measures.

Total Cost \$220,385

OU 00 Site Management Plan Approval: 03/26/2009 **Status: ACT**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION **Site Management Form**

7/12/2012

SITE DESCRIPTION

SITE NO. 224002

SITE NAME Pennsylvania Avenue Landfill

SITE ADDRESS: Pennsylvania Avenue & Shore Parkway ZIP CODE: 11239

CITY/TOWN: Brooklyn

COUNTY: Kings

ALLOWABLE USE:

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES: YES NO

} G IC/EC Certification Plan

G Monitoring Plan

G Operation and Maintenance (O&M) Plan

Periodic Review Frequency: every five years

Periodic Review Report Submittal Date:



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION

Site Classification Report



DATE: 7/12/2012

Site Code: 224002 Site Name: Pennsylvania Avenue Landfill

Description of Institutional Control

US Dept of Interior-Ofc of the Solicitor

One Gateway Center, Suite 612 Flatlands Avenue **Environmental Notice** Block: 4452 Lot: 002 Sublot:

Section: 000 Subsection: 000

S_B_L Image: 4452-002

Ground Water Use Restriction

IC/EC Plan

Landuse Restriction Monitoring Plan O&M Plan

Site Management Plan

Description of Engineering Control

US Dept of Interior-Ofc of the Solicitor

One Gateway Center, Suite 612 **Flatlands Avenue** Environmental Notice - Institutional Control Instrument Block: 4452 Lot: 002 Sublot: Section: 000 Subsection: 000 S_B_L Image: 4452-002

Cover System

Leachate Collection

PUBLIC NOTICE

State Superfund Program

August 6, 2012

Receive Site Information by Email. See "For More Information" to Learn How.

Site Name: Pennsylvania Avenue Landfill

Site No. 224002 **Tax Map No.** BK-4452-002

Site Location: Pennsylvania Avenue & Shore Parkway, Brooklyn, Kings County 11239

Inactive Hazardous Waste Disposal Site Classification Notice

The Inactive Hazardous Waste Disposal Site Program (the State Superfund Program) is the State's program for identifying, investigating, and cleaning up sites where the disposal of hazardous waste may present a threat to public health and/or the environment. The New York State Department of Environmental Conservation (Department) maintains a list of these sites in the Registry of Inactive Hazardous Waste Disposal Sites (the "Registry"). The site identified above, and located on a map on the reverse side of this page, was recently reclassified on the Registry as a Class 4 site as it no longer presents a significant threat to public health and/or the environment for the following reason(s):

Remedial actions have been implemented and the landfill has been capped and an active gas collection system was installed to prevent the off-site migration of gas/vapor generated in the landfill. In addition, a leachate collection system with treatment was constructed at the site. Human exposures to contamination remaining at the site are being addressed through land use, redevelopment, and groundwater use restrictions in the form of an Environmental Notice as well as with periodic reviews. The site is properly remediated and requires site management; therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

The Department will keep you informed throughout the investigation and cleanup of the site.

If you own property adjacent to this site and are renting or leasing your property to someone else, please share this information with them. If you no longer wish to be on the contact list for this site or otherwise need to correct our records, please contact the Department's Project Manager listed below.

FOR MORE INFORMATION

Additional information about this site can be found using the Department's "Environmental Site Remediation Database Search" engine which is located on the internet at: www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3

Comments and questions are always welcome and should be directed as follows:

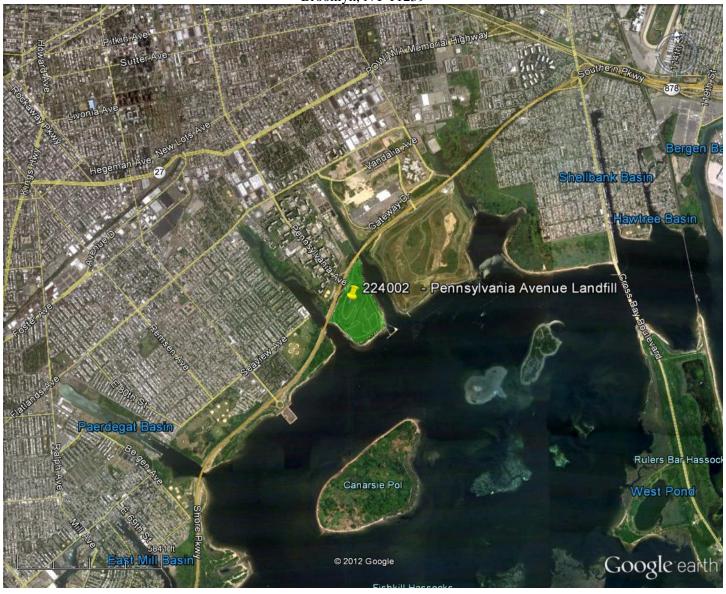
Project Related Questions

Michael Mason, Project Manager NYS Department of Env. Conservation Div.of Environmental Remediation, Bureau E 625 Broadway, 12th Floor Albany, NY 12233-7017 518-402-9814 mamason@gw.dec.state.ny.us

The Department is sending you this notice in accordance with Environmental Conservation Law Article 27, Title 13 and its companion regulation (6 NYCRR 375-2.7(b)(6)(ii)) which requires the Department to notify all parties on the contact list for this site of this recent action.

Approximate Site Location

Pennsylvania Avenue Landfill Site ID# 224002 Pennsylvania Avenue & Shore Parkway Brooklyn, NY 11239



Receive Site Updates by Email

Have site information such as this public notice sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: www.dec.ny.gov/chemical/61092.html. It's *quick*, it's *free*, and it will help keep you *better informed*.



As a listsery member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

You may continue also to receive paper copies of site information for a time after you sign up with a county listsery, until the transition to electronic distribution is complete.

Note: Please disregard if you received this notice by way of a county email listserv.

Electronic copies:

- R. Schick, Director, Division of Environmental Remediation
- A. English, Director, Bureau of Technical Support
- K. Lewandowski, Chief, Site Control Section
- M. Cruden, Director, Remedial Bureau E
- J. O'Connell, RHWRE, Region 2
- J. Cryan, Regional Permit Administrator, Region 2
- T. Panzone, Regional CPS, Region 2
- K. Anders, NYSDOH
- L. Ennist, DER, Bureau of Program Management
- M. Mason, Project Manager
- B. Anderson, Site Control Section

New York State Department of Environmental Conservation

Division of Environmental Remediation Bureau of Technical Support, 11th Floor

625 Broadway, Albany, NY 12233-7020

Phone: (518) 402-9553 • Fax: (518) 402-9547

Website: www.dec.ny.gov



July 16, 2012

US Department of the Interior
Office of the Solicitor
One Gateway Center, Suite 612
Newton, MA 02458-2881

Dear Sir/Madam:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (Department) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that this Department notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

DEC Site No.: 224002

Site Name: Pennsylvania Avenue Landfill

Site Address: Pennsylvania Avenue & Shore Parkway

Classification change from: Class 2 to Class 4

The reason for the change is as follows:

Hazardous waste disposal at this site was addressed by implementation of the remedy identified for the site by the Record of Decision (ROD). The landfill has been capped and an active gas collection system was installed to prevent off-site migration of gas/vapor generated in the landfill. Management of contamination remaining at the site, including any required monitoring, is and has been controlled pursuant to a Site Management Plan (SMP) (or its equivalent). Institutional controls which include land use are required to ensure the protectiveness of the site. The required control, in the form of an Environmental Notice, is in place. The site is properly remediated and requires site management; therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

Enclosed is a copy of the Department's Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry. An explanation of the site classifications is available at http://www.dec.ny.gov/chemical/8663.html. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition.

Such petition may be addressed to:

Honorable Joseph J. Martens
Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

For additional information, please contact Michael Mason, the project manager at (518) 402-9814.

Sincerely,

Kelly A. Lewandowski, P.E.

Chief

Site Control Section

KAL/BA/sls Enclosure

ec:

R. Schick

D. Weigel

A. English

K. Lewandowski



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF ENVIRONMENTAL REMEDIATION Inactive Hazardous Waste Disposal Report



Site Code 224002

Site Name Pennsylvania Avenue Landfill Address

Pennsylvania Avenue & Shore Parkway

Classification

City

Brooklyn

Zip 11239

Region

2

County

Kings

Town New York City

Estimated Size

110.0000

Latitude

40 degrees, 38 minutes, 27.25 seconds

Longitude

-73 degrees, 52 minutes, 28.50 seconds

Site Type

Disposal Area Landfill

Site Description

Location: The Pennsylvania Avenue Landfill (PAL) is located at the southern end of Pennsylvania Avenue in the Borough of Brooklyn, New York City, Kings County, New York.

Site Features: The landfill site measures 110 acres and extends into Jamaica Bay. Situated over what was once a tidal marsh, the PAL is surrounded on three sides by water: Hendrix Creek to the east, Jamaica Bay on the south and Fresh Creek Basin to the west. On the north, the PAL is bounded by the Belt Parkway; farther north is Starrett City, a high-rise housing development. There is one large main fill mound in the northwest half of the PAL which rises above Jamaica Bay to an elevation of approximately 85 feet (Borough of Brooklyn Datum). A round shaped mound in the central portion of the southeast half of the PAL rises to an elevation of approximately 40 feet. Other fill ridges (running around the perimeter of the Site) are between 10 and 20 feet in height. Soil cover is generally thin.

Current Zoning/Use(s): The site is currently zoned Park (open space and recreation). South of the site is Jamaica Bay. To the east is a low density residential area, to the north is a area of combined commercial zoning and industrial/manufacturing. The area west-southwest is also zoned Park (Fountain Avenue Landfill).

Historic Use(s): The PAL was opened in 1956 and received residential, commercial, incinerator, street cleanings, construction and demolition (C&D) wastes, and waste oil. By 1962, the landfill was closed and filling activities had shifted to the adjacent Fountain Avenue Landfill (FAL). In 1968, the FAL was expanding more rapidly than anticipated and the dumping of CLD debris was shifted to the PAL site. The City of New York transferred ownership of the PAL to the United States Department of the Interior, National Park Service, in 1974. In 1979, all filling at the PAL ceased.

In June 1980 the site was added to the Registry of inactive hazardous waste disposal sites as a closed site requiring further surveillance. In 1983 the site classification was changed to a Class 3 site, to reflect one which did not pose a significant threat, and for which action may be deferred. In 1983, oil was observed to be seeping from the landfill along the Fresh Creek shoreline. Sorbent booms were installed in the outbreak are to absorb floating oil and contain oil migration. A 1984 study estimated the amount of oil present at the site and evaluated the feasibility of product recovery. In 1984 the site classification was changed to a Class 2 to reflect a site which poses a significant threat to public health or the environment.

Site Geology and Hydrogeology: The site area is underlain primarily by outwash plains and sediments and tidal marsh deposits. The site is bordered by wetlands on the south, east, and western sides. The stratigraphy of the site is, in order of increasing depth, municipal fill, dredged sand fill (DSF), tidal marsh deposits (TMD), and upper glacial aquifer (UGA). Below the UGA, the geology is not significant for the purposes of evaluating landfill settlement and static-conditions slope stability.

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7/16/2012		
OIL SLUDGE, SOL	VENTS.	0.00
PCB	MOLTAVARREDO	0.00
CADMIUM		0.00
LEAD		0.00
MERCURY		0.00
PHENOLS		0.00
METHYLENE CHL	ORIDE	0.00

Analytical Data Available for:

Air, Surface Water, Soil, Sediment

Applicable Standards Exceeded for:

Air, Groundwater, Surface Water

Site Environmental Assessment

Prior to remediation:

714010040

The results from the Remedial Investigation indicated a variety of contaminants in the various media at the Site. Surface soil and subsurface soil/fill samples around the southern half of the large fill areas exhibited the greatest number and highest concentrations of contaminants.

Surface soil: Standards, Criteria, and Guidance (SCG) exceedances occurred primarily for polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals.

Subsurface soil: SCG exceedances in subsurface fill samples were primarily for benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, PAHs, and metals. The TMD appears to act as a barrier layer for migration of organic contaminants into the UGA and limits the migration of inorganic contaminants. Within the TMD exceedances were primarily for PAHs and metals and within the UGA, SCGs were exceeded only for metals.

Groundwater: Groundwater samples collected from the leachate mound showed exceedances for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals. Additionally there is a free product plume which originates in the west central portion of the landfill and migrates to the southwest towards Fresh Creek. The water in leachate mound underlying the floating product plume contains BTEX and PCB compounds which replicates those detected in the product plume.

In the UGA, the number of contaminant exceedances were significantly lower.

Surface Water and Sediment: Surface water and companion sediment samples were obtained from the three water bodies - Hendrix Creek, Fresh Creek, and Jamaica Bay - adjacent to the landfill. The most contaminated surface water sample came from Fresh Creek, where 9 VOC, 12 SVOC, 2 pesticides, and 2 PCB compounds were detected in a single sample. A few of those volatile and semivolatile compounds were also detected in Hendrix Creek and Jamaica Bay, but at lower concentrations.

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Air: Ambient air sampling detected many typically urban contaminants such as Freon and spent byproducts of petroleum combustion.

Post-Remediation:

The leachate collection trench now pre-treats the leachate and pumps the excess water to the 26th Ward treatment plant. The landfill cap is complete and the flare to burn the landfill gases is operational. The groundwater and landfill gases are monitored annually. The Environmental Notice restricts the property to landfill use.

Site Health Assessment

The landfill was properly capped thus preventing contact with contaminated subsurface soils. Also, measures in place to maintain and prevent disturbance of the cap will minimize the potential for future exposure to contaminants present in the subsurface. People are not drinking the contaminated groundwater since the area is served by a public water supply not affected by this contamination. An active gas collection system vents/flares landfill gases at the site prevents soil gas from leaving the site.

7/16/2012

Owners

Current Owner(s)

Office of the Solicitor

US Department of the Interior

One Gateway Center

Newton

MA 02458-2881

Operators

Current Operator(s)

NYC SANITATION DEPARTMENT

125 WORTH STREET

NEW YORK

NY

10013

Previous Owner(s)

CITY OF NEW YORK

INTERIOR BLDG.

WASHINGTON

DC 20001

Disposal Owner(s)

CITY OF NEW YORK

NY

Current Owner(a)

US Department of the Interior Office of the Solicitor One Gateway Center, Suite 612 Newton, MA 02458-2881

NYC Department of General Services 2 Lafayette St.

Starrett City Inc. 150 E. 58th St., Fl 23 New York, NY 10155

New York NY 10007

AmandaBurden, Chair, NYC Planning Commission 22 Reade St. New York, NY 10007-1216

Carter H.Strickland, Jr. Commissioner, NYC DEP 59-17 Junction Blvd. Flushing, NY 11373 United States of America Dept. of Transportation Fegeral Highway Administration 1200 New Jersey Ave., SE Washington, DC 20590

Camba Gateway Housing Dev Fund Corp 1720 Church Ave. Brooklyn, NY 11226

Parks & Recreation (General) Arsenal West 16W 61st St. New York, NY 10023

Marty Markowitz Brooklyn Borough President 209 Joralemon St. Brooklyn, NY 11201

Adrian Benepe, Commissioner NYC Dept of Parks & Recreation 830 Fifth Avenue The Arsenal, Central Park New York, NY 10065 NYC Department of Citywide Administrative Services 2 Lafayette St., Fl 17 New York, NY 10007

Spring Creek Recreational Fund 150 E. 58th St., Fl 23 New York, NY 10155

The Honorable MichaelBloomberg, Mayor, New York City City Hall New York, NY 10007

New York City Water Board - Brooklyn 250 Livingston St., 8th Floor Brooklyn, NY 11201



Nirav R. Shah, M.D., M.P.H. Commissioner

Sue Kelly Executive Deputy Commissioner

June 25, 2012

Mr. Michael Cruden, Director Remedial Bureau E Division of Environmental Remediation NYS Dept. of Environmental Conservation 625 Broadway – 12th Floor Albany, NY 12233

Re: Site Reclassification Package

Pennsylvania Avenue Landfill Site #224002 Brooklyn, Kings County

Dear Mr. Cruden:

Per your request, we have reviewed the New York State Department of Environmental Conservation's (NYSDEC's) proposal to reclassify the referenced site from Class 2 to Class 4 on the NYSDEC's Registry of Inactive Hazardous Waste Disposal sites. Specifically, we have reviewed the proposal to determine whether this reclassification is protective of public health. I understand that remedial actions have been implemented and the landfill has been capped and an active gas collection system was installed to prevent the off-site migration of gas/vapor generated in the landfill. In addition, a leachate collection system with treatment was constructed at the site. I also understand that human exposures to contamination remaining at the site are being addressed through land use, redevelopment, and groundwater use restrictions, as well as with periodic reviews.

Based on this information, I believe the proposal is protective of public health and concur with the Class 4 (requires continued site management) classification. If you have any questions, please contact me or Mr. Joseph Crua at (518) 402-7860.

Sincerely,

Krista M. Anders, Acting Director

Kiista H. anders

Bureau of Environmental Exposure Investigation

ec: A. Salame-Alfie, Ph.D.

J. Crua / M. Schuck / A. DeMarco / File

B. Devine - NYSDOH MRO

C. D'Andrea - NYCDOH

K. Lewandowski - NYSDEC Central Office

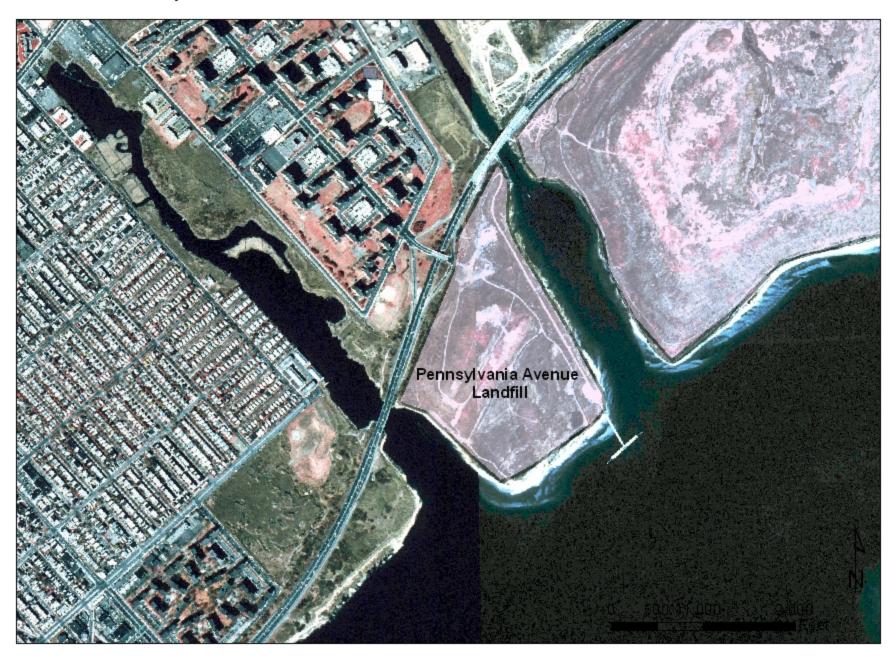
J. O'Connell - NYSDEC Region 2

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HEALTH.NY.GOV facebook.com/NYSDOH twitter.com/HealthNYGov

Site #: 224002

Site Name: Pennsylvania Avenue Landfill



ENVIRONMENTAL NOTICE

THIS ENVIRONMENTAL NOTICE is made the 16th day of MAY 2012, by the New York State Department of Environmental Conservation (Department), having an office for the transaction of business at 625 Broadway, Albany, New York 12233.

WHEREAS, a parcel of real property indentified as Fountain Avenue Landfill (Site 224003), located on Fountain Avenue and Shore Parkway and Pennsylvania Avenue Landfill (Site 224002), located on Pennsylvania Avenue and Shore Parkway in the City of Brooklyn, County of Kings, State of New York, which is part of lands conveyed by the City of New York, a municipal corporation of the State of New York to the United States of America by Memorandum of Understanding dated March 1, 1974 and recorded in the Kings County Clerk's Office on July 22, 1974 in Reel 724 of Deeds at Page 369 and being more particularly described in Appendix "A", attached to this noticed and made a part hereof, and hereinafter referred to as "the Property" is the subject of a remedial program executed by the Department as part of the Department's State Superfund Program; and

WHEREAS, the Department approved a cleanup to address contamination disposed at the Property and such cleanup was conditioned upon certain limitations.

NOW, THEREFORE, the Department provides notice that:

FIRST, the Property's subject to this Environmental Notice is as shown on a map attached to this Notice as Appendix "B" and made a part hereof.

SECOND, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the Sate and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results or may result in a significantly increased threat of harm or damage at any site as a result of exposure to soils. A violation of this provision is a violation of 6 NYCRR 375-1.11(b)(2).

THIRD, no person shall disturb, remove, or otherwise interfere with the installation, use, operations, and maintenance of engineering controls required for the Remedy, including but not limited to those engineering controls described in the SMP and listed below, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency.

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FOURTH, the remedy was designed to be protective for the following uses: **its current** use as a landfill. Therefore, any use for purposes other than as a landfill without the express written waiver of such prohibition by the Relevant Agency may result in a significantly increased threat of harm or damage at any site.

FIFTH, no person shall use the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency. Use of the groundwater without appropriate treatment may result in a significantly increased threat of harm or damage at any site.

SIXTH, it is a violation of 6 NYCRR 375-1.11(b) to use the Property in a manner inconsistent with this environmental notice.

IN WITNESS WHEREOF, the undersigned, acting by and though the Department of Environmental Conservation as Designee of the Commissioner, has executed this instrument the day written below.

By: Robert W. Schick, P.E,
Acting Director
Division of Remediation

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the _______ day of _______, in the year 2012 , before me, the undersigned, personally appeared Robert Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which individual acted, executed the instrument.

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 20

Environmental Notice

Notary Public - State of New York

Appendix A

METES and BOUNDS Description Pennsylvania Avenue Landfill

A certain tract of land situated in the Borough of Brooklyn, County of Kings, State of New York, and more particularly bounded and described as follows:

Beginning at the point of intersection of the U.S. Pierhead and Bulkhead Line with the southerly boundary of the Shore Parkway, the coordinates of which point are S 71,180.241 and E 49,844.627;

- 1) thence along said line of Shore Parkway N 08° 29' 13.5" W, 800.00 feet to a point;
- 2) thence N 81° 30' 46.5" E, 400.00 feet;
- thence N 08° 29' 13.5" W, 1,817.63 feet to a point;
- thence S 58° 31' 21.3" E, 2,995.96 feet to a point on the U.S. Pierhead and Bulkhead Line;
- 5) thence S 20° 39' 14.7" W, 1,919.02 feet;
- thence N 69° 19' 51.5" W, 2,017.35 feet to the point of Beginning, containing 117.593 Acres, more or less.

METES and BOUNDS Description Fountain Avenue Landfill

A certain tract of land situated in the Boroughs of Brooklyn and Queens, Counties of Kings and Queens, State of New York, respectively, and more particularly bounded and described as follows:

Beginning at the point of intersection of the westerly line of the reservation with the southerly line of the Shore Parkway, the coordinates of which point are S 68, 039, 263 and E 49, 623, 776;

- 1) thence along said line of Shore Parkway on a curve to the right having a radius of 5,255.88 feet, 1,542.36 feet to the point of tangency,
- 2) thence N 25° 57' 22.4" E, 1,592.49 feet to the point of curvature;
- 3) thence on a curve to the left having a radius of 16,763.04 feet, 1,483.14 feet to a point on curve;
- 4) thence S 54° 03' 53.7" E, a distance of 1,947.65 feet to a point:
- 5) thence S 10° 45' 45.6" E, 1,099.97 feet;
- 6) thence S 54° 45' 33.2" E, a distance of 1,337.86 feet to a point on the U.S. Pierhead and Bulkhead Lines;
- 7) thence along said line S 50° 14' 27.2" W, 1,712.23 feet to a point;
- 8) thence S 20° 39' 15.6" W, 1,903.53 feet to a point on the westerly line of the reservation;
- 9) thence N 58° 31' 21.3" W, a distance of 3,086.88 feet to the point of Beginning, containing 316.883 acres, more or less.

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Appendix B



ZONING SOURCE: NYC PLANNING COMMISSION MAPS AERIAL SOURCE: GOOGLE* IMAGERY DATE: JUNE 18, 2010

DATES: MAY 19, 2009 & JUNE 30, 2009 NOT TO SCALE

ZONED - RESIDENTIAL AND COMMERICAL: SPRING CREEK TOWERS APARTMENT COMPLEX AND RELATED FACILITIES, PS 346 SCHOOL BUILDINGS, ETC.

AREA 2 ZONED - MANUFACTURING: NYCDEP'S 26TH WARD WATER POLLUTION CONTROL PLANT, ETC.

AREA 3 ZONED - RESIDENTIAL: UNDEVELOPED

AREA 4 ZONED - RESIDENTIAL: NEHEMIAH HOUSING DEVELOPMENT TOWNHOUSES

AREA 5 ZONED - COMMERCIAL: UNDEVELOPED

AREA 6 ZONED - COMMERCIAL: HOME DEPOT. TOYS "R" US. BJ'S WHOLESALE, BEST BUY, OLIVE GARDEN, RED LOBSTER, ETC.

AREA_7 ZONED - RESIDENTIAL: NEW YORK STATE MENTAL HYGIENE LEGAL SERVICES

AREA 8: ZONED - PARK: FRESH CREEK PARK, SPRING CREEK PARK

AREA 9: ZONED - COMMERCIAL/PARK: UNNAMED PARKS



MAP SHOWING ADJACENT LAND USE IN THE VICINITY OF THE PENINSYLVANIA AVENUE AND FOUNTAIN AVENUE LANDFILLS US Department of the Interior Owner One Gateway Center Office of the Solicitor Suite 612 Newton, MA 02458-2881

NYC Department of General Services 2 Lafayette St. New York, NY 10007

Starrett City Inc. 150 E. 58th St. Fl 23 New York, NY 10155

Amanda Burden Chair, NYC Planning Commission 22 Reade St. New York, NY 10007-1216

Nathan Bradley Community Board Chair Brooklyn Community Board - 5 127 Pennsylvania Ave. Brooklyn, NY 11207

New York City Water Board - Brooklyn 250 Livingston St. 8th Floor Brooklyn, NY 11201

NYC DEP 96-05 Horace Harding Expressway 2nd Floor, Low-Rise Building Corona, NY 11368-5107 United States of America 1200 New Jersey Ave., SE Dept. of Transportation Fegeral Highway Administration Washington, DC 20590

Camba Gateway Housing Dev Fund Corp 1720 Church Ave. Brooklyn, NY 11226

Parks & Recreation (General) Arsenal West 16W 61st St. New York, NY 10023

Marty Markowitz Brooklyn Borough President 209 Joralemon St. Brooklyn, NY 11201

Walter Campbell Community Board District Manager Brooklyn Community Board - 5 127 Pennsylvania Ave. Brooklyn, NY 11207

The Brooklyn Paper One Metrotech Center Suite 1001 Brooklyn, NY 11201

Adrian Benepe, Commissioner NYC Dept of Parks & Recreation 830 Fifth Avenue The Arsenal, Central Park New York, NY 10065 Administrative Services 2 Lafayette St. Fl 17 New York, NY 10007

NYC Department of Citywide

Spring Creek Recreational Fund 150 E. 58th St. Fl 23 New York, NY 10155

The Honorable Michael Bloomberg Mayor, New York City City Hall New York, NY 10007

Nancy T. Sunshine Kings County Clerk Supreme Court Building 360 Adams St., Rm 189 Brooklyn, NY 11201

Department of Environmental Protection 59-17 Junction Boulevard, 13th Floor Flushing, NY 11373

Carter H. Strickland, Jr. Commissioner, NYC DEP 59-17 Junction Blvd. Flushing, NY 11373

Dr. Thomas Farley, Commissioner, NYC Dept of Health and Mental Hygiene 42-09 28th Street Long Island City, NY 11101