A. INTRODUCTION

The proposed action would not result in significant adverse impacts related to hazardous materials. To preclude the potential for significant adverse hazardous materials impacts, (E) designations would be placed on the zoning map for ~~all~~ projected and potential development sites identified with the potential to contain hazardous materials contamination. With the (E) designations for hazardous materials and commitments by the City to fully investigate and remediate potential hazardous material contamination associated with the proposed High Line open space, no significant adverse hazardous materials impacts are anticipated as a result of the proposed action. The (E) designations would also apply to tax lots proposed to include nine potential High Line public access points located on private property. In addition, the City, acting through the NYC Economic Development Corporation (EDC) and in partnership with Friends of the High Line, is committed to completion of Phase II Environmental Site Assessments for the High Line elevated structure and four potential public access points located on City-owned property or in public rights-of-way. These four locations include 820 Washington Street, W. 14th Street and the High Line, W. 23rd Street and the High Line, and W. 30th Street and Tenth Avenue. Furthermore, these Phase II ESAs and testing protocols will be submitted for review and approval to NYC Department of Environmental Protection (NYCDEP) and EDC has committed to conduct the required remediation of the High Line structure and the four public access points. With these provisions in place, no significant adverse impacts are expected.

The proposed action would allow residential and community facility uses to locate as-of-right within areas of West Chelsea where industrial uses have historically been located. The proposed action would enable both conversion of existing non-residential floor area, and the redevelopment of sites for residential use. In addition, the proposed action would provide for the reuse of the elevated High Line structure as a public open space.

In addressing the potential for the presence of hazardous materials to affect the future use of the projected and potential development sites, the following aspects of the proposed action needed to be considered:

- The potential for residual contamination to result in an adverse health impact on residents reoccupying space formerly used by businesses that may have stored, utilized, or generated hazardous materials,
- The potential for contamination on projected and potential development sites to be redeveloped for residential use, as a result of spills, leaking underground storage tanks, and as a result of transport of contamination from adjacent off-site areas,
- The potential for the elevated High Line structure to contain asbestos, lead, and other contaminants either on structural elements or in the ballast.

In addition, this chapter presents a preliminary assessment of potential High Line access points. As shown in Figure 17-5, there are four potential public access points to be provided by the City

on City-owned properties or within the public right-of-way and up to nine potential public access points on private property. The access points on private property would be provided in order for development sites to quality for an FAR bonus.

The nine potential public access points on private property would be provided on projected development sites assessed in this chapter. As part of the preliminary screening conducted for the rezoning, these nine sites have been assessed for the potential to result in hazardous material exposure to future occupants and construction workers and, would receive (E) designations as part of the proposed action. The (E) designation would be used to ensure that further investigation (and where necessary, remediation) would be performed. The (E) designation requires that the fee owner of an (E) designated lot conduct a testing and sampling protocol, and remediate where appropriate, to the satisfaction of NYCDEP before issuance of a building permit by the Department of Buildings (pursuant to Section 11-15 of the Zoning Resolution – Environmental Requirements. The (E) designation also includes mandatory construction-related health and safety plans, which must be approved by NYCDEP. These mechanisms preclude the potential that significant adverse impacts would result from the proposed action. These sites are identified as private access points in Figure 17-5.

Accordingly, any hazardous materials issues of concern on these sites would be addressed through the (E) designation process prior to the provision of public access to the High Line. Public access easements on these sites cannot be acquired and access structures constructed, until requirements of the (E) designations have been satisfied. Most likely, this would be conducted by the property's fee owner; in the unlikely event the City proceeds with providing public access points at these locations the City has committed to completing Phase II analyses, testing protocols, subject to NYCDEP approval, and the implementation of any required remediation measures prior to construction. Accordingly, review of these sites is not necessary.

The remaining four potential public access points that would be provided by the City would be located in the public right-of-way or on City-owned property. Accordingly, an assessment of these sites was conducted to identify potential hazardous materials issues of concern.

The four potential public access points to the High Line that would be provided by the City include: 1) the City-owned building at 820 Washington Street (at the intersection of Gansevoort Street), located at the southern end of the High Line; 2) W. 14th Street where it is traversed by the High Line; 3) W. 23rd Street where it is traversed by the High Line; and 4) W. 30th Street between Tenth Avenue and Eleventh Avenue where the High Line extends parallel and north of W. 30th Street.

The presence of hazardous materials threatens human health or the environment only when exposure to those materials can occur. Even then, the presence of or exposure to such materials does not necessarily constitute a risk to human health. Rather, a health risk requires a complete exposure pathway to the contaminants and a sufficient dose to produce adverse health effects. For these reasons, further investigation would be necessary to determine appropriate health and safety and/or remedial measures that would precede or govern soil disturbance activities in known or potentially contaminated areas. Investigative measures would include preliminary assessments to identify potential contaminants of concern on development sites. Subsurface testing programs would be governed by site-specific Health and Safety Plans, which would include provisions to protect the health and safety of on-site workers and the community from

potential contaminants of concern during the investigative activities. The range of remedial and health and safety measures that would be employed prior to and/or during construction would vary with types, levels and extent of contamination identified during the testing program. Site-specific Health and Safety Plans would also govern remedial and construction activities.

For contaminants such as metals (except mercury), PCBs, and SVOCs found in the soil or groundwater, volatilization is not anticipated to occur. Therefore, the greatest potential for exposure to these contaminants would be via direct contact with contaminated soil or groundwater or via inhalation of contaminated dust. The focus of health and safety measures on these sites would be to reduce the potential for direct contact with contaminants and reduce the generation of dust during investigative, remedial and/or construction activities. Similarly, post-construction, it is unlikely that special vapor barriers or venting measures would be required for new buildings on a site with these contaminants. However, if these contaminants were to remain in the surface post-construction, any areas of the site not occupied by structures could be capped by two feet of clean fill material to eliminate exposure pathways.

For contaminants such as VOCs (including gasoline and perchloroethylene) and mercury, in addition to the exposure pathways above, inhalation of vapors and movement of vapors through subsurface pathways and the air can also be of concern. Therefore, these types of contaminants require more specialized remedial and health and safety measures to ensure the safety of the site workers and the community. The design of a new building at such a site may need to account for the possibility that volatile compounds would remain in the subsurface following construction. As such, the design for a building at such a site might need to incorporate vapor barriers or venting systems, in addition to capping landscaped areas with two feet of clean fill material.

Contaminated groundwater, which could be encountered during dewatering, is another potential pathway to exposure, particularly for the construction workers inside the excavation. Consequently, remedial and/or health and safety measures would include protocols for the proper handling of groundwater.

B. EXISTING CONDITIONS

Rezoning Area

The hazardous materials assessments were conducted, following the screening procedures outlined in the *CEQR Technical Manual*. In accordance with the *CEQR Technical Manual* guidelines, an assessment was conducted to determine whether the proposed action could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant public health impacts or environmental damage. ~~All 143~~ Tax lots on the 53 ~~projected and potential~~ development sites identified as likely to be developed as a result of the proposed action were evaluated pursuant to the preliminary screening criteria contained in Title 15, rules of the City of New York, Chapter 24, Section 4, and Hazardous Materials Appendix 5 of the *CEQR Technical Manual* Appendices.

In accordance with these procedures, a land use survey and site history investigation were undertaken to determine whether past or current uses on any of the 143 tax lots on the 53 projected and potential development sites are listed in the land use inventory contained in Appendix A of the rules.

The descriptions of existing conditions on the projected and potential development sites as well as the potential High Line public access points described below represent a "snapshot in time" reflecting uses existing at the time of field inventory. West Chelsea is a dynamic area and uses continues to change over time.

It should be noted that several potential development sites located along the W. 23rd Street corridor received (E) designations as a result of the Chelsea Rezoning adopted in 1999. This includes Potential Development Sites 46 through 53 (refer to *Chelsea Rezoning EAS*, March 1999, CEQR No. 99DCP030M). As these sites are being rezoned as part of the proposed action, they will include new (E) designations.

Based on the results of the land use survey and site history investigations conducted for the projected and potential development sites, (E) designations would be placed on the zoning map in connection with adoption of the zoning map and text amendments. For these sites, a Phase I Environmental Site Assessment (ESA), pursuant to Section 24-05 would not be required. The results of the preliminary screening assessment for the projected and potential development sites are contained below. The (E) designation would require that the fee owner of such a site conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the Department of Environmental Protection (NYCDEP) before the issuance of a building permit by the Department of Buildings (pursuant to Section 11-15 of the Zoning Resolution – Environmental Requirement). The (E) designation also includes a mandatory construction-related health and safety plan which must also be approved by NYCDEP. The (E) designation therefore eliminates the potential for significant adverse hazardous materials impacts.

In order to establish existing and past land uses the following resources were consulted:

- 1897 Bromley Map
- 1934 Bromley Map
- Manhattan Address Directory (August 1934)
- Manhattan Address Directory (January 1955)
- Land Use Survey (2004)

The sites to be mapped with (E) designations are shown in Table 10-1. As part of the proposed zoning map amendment, these sites would receive an (E) designation for hazardous materials, ensuring that sampling and remediation take place where contamination may exist. Lots that contain existing residential buildings and that are not expected to be redeveloped under the proposed action would not be mapped with an (E) designation. These lots would transfer air rights to adjacent lots within the development site. They are indicated in Table 10-1 with an asterisk (*).

The following lots, subject to the zoning map amendment, comprised the former West 18th Street Gas Light Works (* portions of these lots were in the West 18th Street Gas Light Works):

- Block 689, Lot 17;
- Block 690, Lots 12, 20, 29, 40, 42, 46 and 54;
- Block 691, Lots 1 and 11*; and
- Block 715, Lot 59*

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
1	701	1	Projected	Manhattan Mini-Storage 541 W29th St	Storage	Appendix A List Automobile Service Station	1934 Bromley	Yes
2	701	30	Projected	Enterprise 30th Street Parking, LLC 505-509 W29th St	Parking Garage	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	33	Projected	505 W29th St	Storage/Vacant	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	35*	Projected	Terminal Food Shop 329 10th Ave	Deli	Appendix A List Metal Processing	1934 Bromley	No
2	701	35*	Projected	501 29th St	Residential / Commercial	Appendix A List Metal Processing	1934 Bromley	No
2	701	36	Projected	331 Tenth Ave	Parking Lot	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	37	Projected	333 Tenth Ave	Auto Sales (lot)	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	42	Projected	Enterprise 30th Street Parking, L.L.C. 343 10th Ave	Parking Lot	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	43	Projected	502 W30th St	Manufacturing /Vacant	Appendix A List Metal Processing	1934 Bromley	Yes
2	701	45	Projected	506-526 W30th St	Hot Dog Vending/Storage	Appendix A List Metal Processing	1934 Bromley	Yes
3	700	1	Projected	Kaz Systems 282 11th Ave	Parking Lot	Adjacent App A Auto Service	2004 Field Survey	Yes
3	700	1	Projected	Davids Auto Service 282 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
3	700	1	Projected	Brownfield Auto 298 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
4	699	5	Projected	547 W27th St	Art Gallery	Adjacent App A Iron Works	1897 Bromley	Yes
5	699	22	Projected	517 W27th St	Office Space	Adjacent App A Iron Works	1897 Bromley	Yes
5	699	23	Projected	515 W27th St	Office Space	Adjacent App A Iron Works	1897 Bromley	Yes
5	699	24	Projected	Colin Construction 513 W27th St	Office Space	Adjacent App A Iron Works	1897 Bromley	Yes
5	699	25	Projected	511 W27th St	Art Gallery	Adjacent App A Metal Processing	2004 Field Survey	Yes
5	699	26	Projected	509 W27th St	Scrap Metal Processing	Appendix A List Metal Processing	2004 Field Survey	Yes
5	699	27	Projected	Central Iron & Metal 507-9 W27th St	Scrap Metal Processing	Appendix A List Metal Processing	2004 Field Survey	Yes
5	699	44	Projected	Bungalow 8 518 W27th St	Bar/Restaurant	Adjacent App A Iron Works	1897 Bromley	Yes
5	699	44	Projected	Leonard Powers, Inc 514-20 W27th St	Industrial/Storage	Adjacent App A Iron Works	1897 Bromley	Yes
6	699	30*	Projected	503 W27th St	Residential	Adjacent App A Metal Processing	2004 Field Survey	No
6	699	30*	Projected	Brite Bar 297 10th Ave	Bar/Restaurant	Appendix A List Motor Freight Station	1955 Bromley	No

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
6	699	31*	Projected	Bongo 299 10th Ave	Residential/Retail	Appendix A List Motor Freight Station	1955 Bromley	No
6	699	32*	Projected	Punjabi Food Junction 301 10th Ave	Residential/Retail	Adjacent App A Auto Service	2004 Field Survey	No
6	699	33	Projected	City/Gas Auto Repair 303-309 10th Ave	Auto Gas/Service Repair	Appendix A List Automobile Service Station	2004 Field Survey	Yes
6	699	37*	Projected	10th Ave Gourmet 311 10th Ave	Residential/Retail	Adjacent App A Auto Service	2004 Field Survey	No
7	698	1	Projected	246-60 11th Ave	Office Space	Adjacent App A Brass Works	1897 Bromley	Yes
8	698	32	Projected	Firestone Bear Auto Center 279 10th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
8	698	35	Projected	The Friendly Group 287 10th Ave	Taxi Mgmt	Appendix A List Automobile Rental	2004 Field Survey	Yes
8	698	37	Projected	Marquee 289 10th Ave	Bar/Restaurant	Adjacent App A Auto Service Station	1934 Bromley	Yes
8	698	40	Projected	Paul Kasmin 293 10th Ave	Art Gallery	Adjacent App A Auto Service Station	1934 Bromley	Yes
8	698	141	Projected	502 W27th St	Residential	Appendix A List Automobile Service Station	1934 Bromley	Yes
9	697	27	Projected	501-9 W25th St	Parking/auto/ vacant	Adjacent App A Iron Works, Lumber Yard	1897 Bromley	Yes
9	697	31	Projected	Kantora Galley 259 10th Ave	Storage/ Commercial	Adjacent App A Iron Works, Lumber Yard	1897 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
10	696	58	Projected	550 W25th St	Auto/Pkg/Vacant	Adjacent App A Coal Yard	1897 Bromley	Yes
11	696	32	Projected	Kwik Farms 239 10th Ave	Gas Station	Appendix A List Gasoline Service Station	2004 Field Survey	Yes
11	696	33	Projected	Chandler Auto Repair 245-7 10th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
11	696	35	Projected	249 Parking Corp 249 10th Ave	Parking Garage	Adjacent App A Auto Service	2004 Field Survey	Yes
11	696	37	Projected	Pepe Giallo 253 10th Ave	Restaurant	Adjacent App A Auto Service	2004 Field Survey	Yes
11	696	38	Projected	World Class Audio 255 10th Ave	Auto Service	Appendix A List Automobile Service Station	2004 Field Survey	Yes
11	696	38	Projected	Marty's Auto Body 500 W25th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
12	693	1	Projected	144-50 11th Ave	Building for Lease (office/commercial)	Adjacent lots to the north, lot 64, has a Glass Manufacture past use	1934 Bromley, Jan 1955 Man Address Direct.	Yes
12	693	64	Projected	Chelsea Art Museum 150-54 11th Ave	Art Gallery	Glass Manufacture past use	1934 Bromley	Yes
13	692	7	Projected	545-7 W20th St	Art Gallery	Adjacent App A Auto Service	Jan 1955 Manhattan Address Directory	Yes
13	692	7	Projected	120 11th Ave	Mixed Use (Residential/Office)	Appendix A List Metal Processing	Jan 1955 Manhattan Address Directory	Yes
13	692	61	Projected	Lot 61 550 W21st St	Bar/Restaurant	Appendix A List Metal Processing	Jan 1955 Manhattan Address Directory	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
13	692	63	Projected	130 Eleventh Ave	Unknown (appears vacant)	Appendix A List Metal Processing	2004 Field Survey	Yes
14	692	53	Projected	540 W21st St	Office Space	Appendix A List Metal Processing	Jan 1955 Manhattan Address Directory	Yes
14	692	57	Projected	Eyebeam 548 W21st St	Art Gallery	Appendix A List Metal Processing	Jan 1955 Manhattan Address Directory	Yes
15	692	28	Projected	521-527 W20th St	Auto Service Garage	Appendix A Auto Service	2004 Field Survey	Yes
15	692	30	Projected	169-83 10th Ave	Construction Equipment Leasing	Adjacent App A Auto Service	2004 Field Survey	Yes
15	692	30	Projected	Manhattan Collision 507 W20th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
16	691	11	Potential	100 11th Ave	Parking Lot	Appendix A List Gas Storage	1897 Bromley	Yes
17	691	43	Projected	516 W20th St	Parking Garage	Appendix A List Gas Storage	1897 Bromley	Yes
17	691	50	Projected	Anton Kern 532 W20th St	Art Gallery	Appendix A List Gas Storage	1897 Bromley	Yes
18	691	25	Projected	W19th Street	Parking Lot	Appendix A List Automobile Service Station	1934 Bromley	Yes
18	691	27	Projected	505 W19th Street	Parking Lot	Appendix A List Automobile Service Station	1934 Bromley	Yes
18	691	29	Projected	Mendon Truck Leasing 153 Tenth Ave	Retail/Auto	Appendix A List Automobile Service Station	1934 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
18	691	33	Projected	Edison Park 161-5 Tenth Ave	Parking Lot	Appendix A List Automobile Service Station	1934 Bromley	Yes
18	691	35	Projected	165 Tenth Ave	Parking Lot	Adjacent Appendix A List Automobile Service Station	1934 Bromley	Yes
18	691	37	Projected	504 W20th St	Parking Lot	Adjacent Appendix A List Automobile Service Station	1934 Bromley	Yes
19	690	12	Projected	Corner W18th St	New Construction (Residential: Turner Construction)	Appendix A List Gas Storage	1897 Bromley	Yes
19	690	20	Projected	Roxy 515 W18th St	Bar/Restaurant	Appendix A List Gas Storage	1897 Bromley	Yes
19	690	20	Projected	Chelsea MTP Operating, LLC 511-25 W18th St	Parking Lot	Appendix A List Gas Storage	1897 Bromley	Yes
19	690	54	Projected	96 11th Ave	New Construction (Residential: Turner Construction)	Adjacent Appendix A List Gas Storage	1897 Bromley	Yes
20	690	29	Projected	131 Tenth Ave	Parking Lot	Appendix A List Adj to RR ROW	1897 Bromley	Yes
21	689	17	Projected	99-111 10th Ave	Parking Lot	Appendix A List Gas Storage	1897 Bromley	Yes
22	715	1*	Projected	457 W17th St	Residential/Retail	Adjacent App A Gas Storage	1897 Bromley	No
22	715	2	Projected	Red Rock West Saloon 116 10th Ave	Bar/Restaurant	Adjacent App A Gas Storage	1897 Bromley	Yes
22	715	3	Projected	The Park 118 10th Ave	Bar/Restaurant	Adjacent App A Gas Storage	1897 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
22	715	60	Projected	Lux 456 W18th St	Art Gallery	Adjacent App A Gas Storage	1897 Bromley	Yes
22	715	63	Projected	464 W18th	New Development (128 10th Ave: restaurant)	Adjacent App A Gas Storage	1897 Bromley	Yes
22	715	63	Projected	Star on 18 128 10th Ave	Restaurant	Adjacent App A Gas Storage	1897 Bromley	Yes
22	715	64	Projected	124 10th Ave	Parking Garage	Adjacent App A Gas Storage	1897 Bromley	Yes
23	715	5	Projected	453 W17th St	Commercial	Adjacent App A Gas Storage	1897 Bromley	Yes
23	715	7	Projected	447 W17th St	Unknown	Adjacent App A Gas Storage	1897 Bromley	Yes
24	714	1	Projected	Bimmy's 455 W16th St	Deli	Appendix A List Motor Freight Station	1955 Bromley	Yes
24	714	1	Projected	Chelsea Garden Center 455 W16th St	Nursery	Appendix A List Motor Freight Station	1955 Bromley	Yes
24	714	1	Projected	458 W17th St	Residential/Retail	Appendix A List Motor Freight Station	1955 Bromley	Yes
24	714	1	Projected	Atlantic Theater 453 W16th St	Office Space	Adjacent App A Auto Service	2004 Field Survey	Yes
24	714	1	Projected	Heavenly Body Works 441-55 W16th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
24	714	63*	Projected	112 Tenth Ave	Residential/Retail	Adjacent App A Auto Service	2004 Field Survey	No

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
25	714	14	Projected	437 W16th St	Office Space	Adjacent App A Auto Service	2004 Field Survey	Yes
25	714	16	Projected	437 W16th St	Auto Service	Adjacent App A Auto Service	2004 Field Survey	Yes
26	701	59	Potential	Eurotech Construction/Painting 532 W30th St	Office Space	Appendix A List Adj to RR ROW	Aug 1934 Manhattan Address Directory	Yes
26	701	62	Potential	Eastern Connection 534 W30th St	Shipping / Packing	Adjacent App A Sign Painting	2004 Field Survey	Yes
26	701	68	Potential	Cabinetry / Millwork 314 11th Ave	Industrial	Appendix A List Furniture Manufacture	2004 Field Survey	Yes
26	701	68	Potential	Midtown Neon Sign Corp 550 W30th St	Retail / Manufacturing	Appendix A List Sign Painting Shops	2004 Field Survey	Yes
26	701	70	Potential	CNC Auto Repair 312 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
27	701	52	Potential	518-522 W30th St	Auto/Pkg/Storage	Appendix A List Adj to RR ROW	Aug 1934 Manhattan Address Directory	Yes
27	701	55	Potential	524 W30th St	Parking	Appendix A List Adj to RR ROW	Aug 1934 Manhattan Address Directory	Yes
27	701	56	Potential	526-528 W30th St	Parking	Appendix A List Adj to RR ROW	Aug 1934 Manhattan Address Directory	Yes
27	701	58	Potential	530 W30th St	Parking	Appendix A List Adj to RR ROW	Aug 1934 Manhattan Address Directory	Yes
28	701	16	Potential	Enterprise 30th St Parking, LLC 529-539 W29th St	Parking Garage	Appendix A List Furniture Manufacture	Aug 1934 Manhattan Address Directory	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	Block	Lot	Development Site	Address	Current Land Use	CEQR Reference	Source	(E) Designation Warranted
28	701	22	Potential	Briggs Robinson Gallery 527 W29th St	Art Gallery	Adjacent App A Furniture Manufacture	2004 Field Survey	Yes
28	701	23	Potential	Cabinet Maker 525 W29 St	Industrial / Commercial	Appendix A List Furniture Manufacture	2004 Field Survey	Yes
29	701	24	Potential	Tuck it 517 W29 St	Storage	Adjacent App A Furniture Manufacture	2004 Field Survey	Yes
29	701	28	Potential	Courier Network International Systems 515 W29th St	Retail / Art Gallery	Appendix A List Welding Shops	Aug 1934 Manhattan Address Directory	Yes
30	700	53	Potential	Pentacostal Church 534 W29th St	Religious	Adjacent App A List Coal Storage	1934 Bromley	Yes
30	700	54	Potential	John Young Studios 536 W29th St	Art Gallery	Adjacent App A List Coal Storage	1934 Bromley	Yes
30	700	55	Potential	Elite Investigation 538 W29th St	Office Space	Adjacent App A List Coal Storage	1934 Bromley	Yes
30	700	56	Potential	Alona Kagan Gallery 540 W29th St	Art Gallery	Adjacent App A Garbage Reduction	2004 Field Survey	Yes
30	700	57	Potential	Action Carting 542 W29th St	Garbage Disposal	Appendix A List Garbage Reduction	2004 Field Survey	Yes
30	700	59	Potential	546 W29th St	Auto Service Garage	Adjacent App A Auto Service	2004 Field Survey	Yes
30	700	60	Potential	Avi Taxi Repair 546-8 W29th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
30	700	61	Potential	550 W29th Street	Office Space	Adjacent App A Auto Service	2004 Field Survey	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
31	700	48	Potential	524 W29th St	Office / Retail	Adjacent App A Auto Service	2004 Field Survey	Yes
31	700	49	Potential	Sean Kelly Art Gallery 526-28 W29th St	Art Gallery	Adjacent App A List Coal Storage	1934 Bromley	Yes
32	700	42	Potential	512 W29th St	Night Club	Adjacent App A Motor Freight Station	1955 Bromley	Yes
32	700	44	Potential	Technik 1 516 W29th St	Auto Electronics	Adjacent App A Auto Service	2004 Field Survey	Yes
32	700	45	Potential	518 W29th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
32	700	47	Potential	LA Ideal / Regent Maintenance Corp 522 W29th St	Manufacturing / Commercial	Adjacent App A Auto Service	2004 Field Survey	Yes
33	700	9	Potential	NY Builders Supply Corp 545 W28th St	Masonry Yard	Appendix A List Lumber Processing	2004 Field Survey	Yes
33	700	9	Potential	NY SUV Auto Body 547 W28th St	Parking Lot / Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
34	700	18	Potential	Kamco Supply Corp 517 W28th St	Lumber Yard	Appendix A List Lumber Processing	2004 Field Survey	Yes
35	700	29*	Potential	Taxi Mgmt, Inc 313 10th Ave	Residential/ Office Space	Appendix A List Automobile Service Station	1934 Bromley	No
35	700	30*	Potential	Medina 315 10th Ave	Residential / Retail/ Restaurant	Appendix A List Automobile Service Station	1934 Bromley	No
35	700	30*	Potential	315 10th Ave	Residential	Appendix A List Automobile Service Station	1934 Bromley	No

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
35	700	31*	Potential	IMP Mgmt 317 10th Ave	Residential/ Taxi Mgmt	Appendix A List Automobile Rental Establishments	2004 Field Survey	No
35	700	31*	Potential	317 10th Ave	Residential/ Retail Space	Adjacent App A Auto Rental	2004 Field Survey	No
35	700	31*	Potential	317 10th Ave	Residential / Retail Space	Appendix A List Automobile Service Station	1934 Bromley	No
35	700	32	Potential	Evan Auto, Inc 321 10th Ave	Auto / Towing	Appendix A List Automobile Service Station	2004 Field Survey	Yes
35	700	32	Potential	Evan Auto, Inc 319 10th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
35	700	34	Potential	323 Tenth Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
35	700	36	Potential	10th Ave Tire Shop 327 10th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
36	699	1	Potential	Manhattan Motors 270 11th Ave	Auto Dealer	Appendix A List Automobile Rental	2004 Field Survey	Yes
36	699	63	Potential	554 W28th St	Commercial / Art Gallery	Adjacent App A Auto Rental	2004 Field Survey	Yes
37	699	9	Potential	537 W27th St	Vacant Lot	Appendix A List Iron Works	1897 Bromley	Yes
38	699	14	Potential	CTX 538 W28th St	Industrial	Adjacent lot to the east, lot 49, has an Iron Works	1897 Bromley	Yes
38	699	49	Potential	Crobar 531 W27th St	Bar/Restaurant	Appendix A List Iron Works	1897 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	**Block**	**Lot**	**Development Site**	**Address**	**Current Land Use**	**CEQR Reference**	**Source**	**(E) Designation Warranted**
38	699	49	Potential	Scores 533-35 W27th St	Bar/Restaurant	Appendix A List Iron Works	1897 Bromley	Yes
39	697	1	Potential	220-40 11th Ave	Parking Lot	Lumber Yard, Adj Iron Works	1897 Bromley	Yes
40	696	65	Potential	210 Art 210 11th Ave	Art Gallery / Commercial	Appendix A List Coal Yard	1897 Bromley	Yes
40	696	65	Potential	Stricoff Fine Art 564 W25th St	Art Gallery / Commercial	Appendix A List Coal Yard	1897 Bromley	Yes
41	696	1	Potential	202-8 11th Ave	Storage	Adjacent App A Coal Yard	1897 Bromley	Yes
42	694	30*	Potential	505 W22nd St	Residential	Appendix A List Adj to RR ROW	2004 Field Survey	No
42	694	31*	Potential	West Chelsea Veterinary Hospital 203 10th Ave	Residential / Medical	Appendix 5, §24-04a	Jan 1955 Manhattan Address Directory	No
42	694	32*	Potential	Tia Pol 205 10th Ave	Bar/Restaurant	Adjacent App A Motor Freight Station	1934 Bromley	No
42	694	32*	Potential	205 10th Ave	Residential	Appendix A List Automobile Service	Jan 1955 Manhattan Address Directory	No
42	694	33	Potential	207 10th Ave	Construction / Auto	Adjacent App A Auto Service	2004 Field Survey	Yes
42	694	39	Potential	Exxon 215 10th Ave	Gas Station	Appendix A List Gasoline Service Station	2004 Field Survey	Yes
42	694	40	Potential	512 W23rd St	Parking Lot	Adjacent App A Auto Service	2004 Field Survey	Yes
43	691	15	Potential	531 W19th St	Art Gallery	Appendix A List Gas Storage	1897 Bromley	Yes
43	691	19	Potential	David Zwirner 525 W19th St	Art Gallery	Appendix A List Gas Storage	1897 Bromley	Yes
43	691	22	Potential	Sidney Samuels 517 W19th St	Commercial Heating Cooling	Appendix A List Gas Storage	1897 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	Block	Lot	Development Site	Address	Current Land Use	CEQR Reference	Source	(E) Designation Warranted
43	691	22	Potential	Chelsea Studio Gallery 518 W19th St	Art Gallery	Appendix A List Gas Storage	1897 Bromley	Yes
43	691	24	Potential	515 W19th St	Art Gallery / Residential	Adjacent App A Gas Storage	2004 Field Survey	Yes
44	690	42	Potential	516-22 W19th St	Warehouse / Commercial	Adjacent App A Gas Storage	1897 Bromley	Yes
44	690	46	Potential	524 W19th St	Art Gallery / Commercial	Adjacent App A Gas Storage	1897 Bromley	Yes
45	715	50	Potential	Midtown Chelsea Center 436 W18th St	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
45	715	59	Potential	Verizon 438-54 W18th St	Office/Commercial Space	Adjacent App A Auto Service	2004 Field Survey	Yes
46	694	58	Potential	536 W23rd St	Commercial Space	Adjacent App A Auto Service	2004 Field Survey	Yes
46	694	60	Potential	548 W23rd St	Commercial Space	Adjacent App A Auto Service	2004 Field Survey	Yes
46	694	61	Potential	522 W23rd St	Commercial Space	Adjacent App A Auto Service	2004 Field Survey	Yes
46	694	65	Potential	Uhaul 170 11th Ave	Storage	Appendix A List Glass/Furniture Manufacture	1897 Bromley	Yes
47	695	1	Potential	Privilege 182 11th Ave	Bar/Restaurant	Adjacent App A Auto Service	1934 Bromley	Yes
47	695	3	Potential	Chelsea Inn 184 11th Ave	Hotel/Deli	Adjacent App A Auto Service	1934 Bromley	Yes
47	695	4	Potential	188 11th Ave	Office/Storage Space	Adjacent App A Auto Service	2004 Field Survey	Yes
48	695	7	Potential	New Construction	Residential/Retail	Adjacent App A Lumber Processing	1897 Bromley	Yes
48	695	12	Potential	Bula Gallery 541 W23rd St	Art Gallery	Adjacent App A Lumber Processing	1897 Bromley	Yes
48	695	57	Potential	536 W24th St	Construction	Adjacent App A Lumber Processing	1897 Bromley	Yes
49	695	44	Potential	MetroVision Production 508 W24th St	Office Space	Appendix A List Adj to RR ROW	1934 Bromley	Yes

Table 10-1, West Chelsea: Development Sites (E) Designation THIS TABLE HAS BEEN REVISED FOR THE FEIS								
Site	Block	Lot	Development Site	Address	Current Land Use	CEQR Reference	Source	(E) Designation Warranted
50	695	47	Potential	PlexiCraft 514 W24th St	Commercial	Appendix A List Lumber Processing	1897 Bromley	Yes
51	695	59	Potential	W24th St	Construction	Adjacent App A Lumber Processing	1897 Bromley	Yes
52	695	67	Potential	200 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
52	695	68	Potential	CC Auto 198 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
52	695	69	Potential	196 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
52	695	70	Potential	Apple Auto 194 11th Ave	Auto Service Garage	Appendix A List Automobile Service Station	2004 Field Survey	Yes
53	694	47	Potential	Manhattan Mini-Storage 530 W23rd St	Storage	Appendix A List Gasoline Service Station	1934 Bromley	Yes

(*) Lots indicated with an asterisk (*) are not expected to be redeveloped under the proposed action, as they contain existing residential buildings. Therefore, they would not be mapped with an (E) Designation. These lots would transfer air rights to adjacent lots within the development site.

The West 18th Street Gas Light Works, a manufactured gas plant (MGP), was operated and/or owned by Consolidated Edison Company of New York, Inc. (Con Edison) and predecessor companies from the mid 1830s through the early 1900s. The site was originally operated by the Manhattan Gas Light Company circa 1834, followed by the Consolidated Gas Company circa 1885. The former MGP was generally located between W. 16th and W. 20th Streets and Ninth and Eleventh Avenues.

Prior to the advent of natural gas, MGPs heated coal to create combustible gases that, after purification, were used as fuels or as raw materials for other uses

Contaminant classes commonly associated with MGP sites that may be present in soil and/or groundwater on the lots that comprise the former West 18th Street MGP or on adjacent properties include:

- *Semivolatile organic compounds (SVOCs)*: primarily polycyclic aromatic hydrocarbons (PAHs) and phenols;
- *Volatile organic carbons (VOCs)*: primarily naphthalene, but also benzene, ethylbenzene, toluene and xylenes; and
- *Metals*: primarily arsenic, copper, lead, nickel, and zinc; and
- *Cyanides:* primarily contained in inorganic spent iron oxides.

These contaminants can be present in various forms in the subsurface, including as ash, cinders, wood chips or other residues in non-native fill material; free-phase petroleum liquid (e.g., LNAPL and/or DNAPL); or dissolved-phase petroleum residuals in groundwater.

Subsurface testing programs that have been performed on portions of the property encompassed by the former West 18th Street MGP and on adjacent properties have detected remnants of former MGP structures as well as contaminated soil and groundwater. The data from these studies has been generally consistent. As indicated in a report prepared by Parsons for Con Edison and in reports prepared for an individual development site currently being developed within the former MGP, soils in the area contain elevated levels of VOCs, SVOCs, and metals. Cyanide has been detected in spent iron oxides and woodchips and DNAPL (coal tar) has also been found. Groundwater is primarily contaminated with VOCs and SVOCs.

Contaminants from MGP operations have been generally detected in a layer of miscellaneous fill material that is present from immediately below the surface (asphalt, concrete or foundations) to a layer of organic silt and clay that ranges from approximately 20 to 50 feet below grade. This organic clay and silt layer acts as a physical barrier to restrict the downward vertical migration of groundwater contamination sources (e.g., DNAPL) and dissolved-phase groundwater constituents. The organic layer was detected in the majority of borings advanced as part of the environmental and geotechnical investigations that have been performed on the former West 18th Street MGP and reviewed for this chapter.

Con Edison, as the responsible party for purposes of environmental conditions associated with the West 18th Street MGP, is currently a Volunteer in the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program (VCP). As a participant in this program, Con Edison has entered into a Voluntary Cleanup Agreement (VCA) with NYSDEC, pursuant to which it has agreed to investigate and remediate contamination associated with the former West 18th Street MGP. Consistent with the VCA, Con Edison has prepared a detailed site history report for the former West 18th Street MGP and is currently performing a

subsurface testing program. The results of this program will aid in the determination of appropriate remedial strategies for the former West 18th Street MGP as a whole and for the individual lots that comprise the MGP site. Con Edison's undertaking of these obligations is subject to access being granted by individual property owners. Con Edison's VCA with the NYSDEC applies to the following properties: block 689, lot 17; block 690, lots 12, 20, 29, 40, 42, 46, and 54; block 691, lots 1 and 11; block 715, lot 59.

The objective of the VCP is to remediate contaminated sites to be protective of human health and the environment consistent with the contemplated use of the subject property. The VCP requires detailed historical and subsurface investigations, followed by remedy selection and implementation under the jurisdiction of NYSDEC and the New York State Department of Health (NYS DOH).[1]

Pursuant to the VCA between NYSDEC and Con Edison, any investigation or remediation of individual properties that are within the former West 18th Street MGP would be performed under a NYCDEP and NYSDEC-approved Remedial Action Work Plan (RAWP) and Health and Safety Plan (HASP) and a NYS DOH-approved Community Air Monitoring Program (CAMP). The RAWP sets forth the remedial plan and means and measures to effectuate it. The HASP provides procedures and protocols for the protection of the health of site workers. The CAMP applies to any work involving soil disturbance and requires the continuous monitoring of ambient air at the upwind and downwind perimeter of the site. This monitoring ensures that concentrations of VOCs and particulates in the air remain below NYS DOH-established Action Levels that might present a risk to the health of the community. Detection of the presence of odors considered to be a nuisance to the community and protocols for implementation of odor mitigation measures are also included in the CAMP. Compliance with the VCA (or a BCA) for any property ~~should satisfy any concerns of NYCDEP~~ would address issues related to contamination of the properties within the West 18th Street MGP and would avoid significant adverse environmental impacts.[2]

Block 690, lots 12 and 54 (which form part of Projected Development Site 19), are undergoing a voluntary remediation under the auspices of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (DOH). In addition to the Con Edison VCP, in 2003, the site's developer entered into NYSDEC's Voluntary Cleanup Program. The developer was considered a "Volunteer" under this program because it did not cause or contribute to the contamination existing at the site and was not otherwise obligated under law to remediate the contamination. This site was incorporated into the newly enacted New York Brownfield Cleanup Program in July 2004. The remediation will insure the health and safety of workers and the nearby community during remediation and construction of the planned new building as well as the protection of the environment and future users of the building.

[1] The VCP has been superseded by the Brownfield Cleanup Program (BCP), which was enacted in October 2003. The BCP in many ways parallels the VCP, including the execution of a Brownfield Cleanup Agreement (BCA) between NYS DEC and the owner or developer.

[2] It is unlikely, though theoretically possible, that Con Edison could leave the VCP. In that unlikely event, NYS DEC would likely utilize other approaches to compel Con Edison to fulfill its remedial obligations. Property owners would also have their own rights against Con Edison.

Potential Remediation Components

The remedy for any lot that was part of the West 18th Street MGP would be contingent on the particular conditions of that property, which would be ascertained through a subsurface testing program. As noted, such work would be conducted under the provisions of the NYCDEP, NYSDEC- and NYSDOH- approved RAWP, HASP and CAMP. Factors that would affect the remedy -- and that would generally be ascertained through the subsurface investigation that would be taken pursuant to the VCA -- include:

- The types and components of contaminants in soil, groundwater and soil vapor;
- The presence, character and extent of any non-aqueous phase liquids;
- The presence, character and vertical and horizontal extent of contamination with respect to proposed development;
- The presence (or partial absence) of the clayey silt layer and variations in its composition and thickness; and
- The presence, character and extent of any subsurface obstructions. Historical dockwork consisting of wooden crib baskets filled with boulders has been noted during recent construction on a lot within the former West 18th Street MGP.

Nevertheless, it is anticipated that the remedy on any development site in the former West 18th Street MGP would have several general component similarities, including:

- *Source Removal*: At a minimum, contaminated soil (which would likely include MGP-byproducts) would be removed and disposed of off-site in accordance with applicable federal, state and local regulations to the depth of excavation to accommodate the proposed development, including basement structures and utilities. Remediation at greater depths could be required on certain sites, if warranted by the type and nature of contaminants noted during subsurface investigations (e.g., a particular contaminant is at a level that poses a significant threat necessitating removal) or by the overall remedy.

- *Site Capping*: The surface of the development site would be covered by an impermeable surface (concrete, asphalt or a building foundation) or by at least two feet of non-regulated fill material. Site capping may be particularly helpful along the corridor where the existing Highline structure exists, as deep excavation for source removal may threaten the structural integrity of the rail line.

- *Vapor Barrier / Demarcation Layer*: If soil or groundwater contaminated by VOCs were expected to remain on-site after excavation (i.e., if the remedy does not include the complete removal of soil impacted by VOCs and/or if groundwater is contaminated with VOCs), then a vapor barrier/waterproofing membrane would be required to prevent vapor intrusion through proposed building foundations or landscaped areas. In landscaped areas, this barrier would also serve as a demarcation barrier to indicate when the soil cap is penetrated (e.g., for utilities).

- *Cutoff Wall*: A cutoff wall would be keyed into the clayey silt layer around the perimeter of the development site. The wall would contain any remaining site groundwater contamination sources and associated dissolved-phase contaminated groundwater on the site, thus preventing off-site migration. In addition, the wall would prevent migration of any contaminated groundwater located off-site on to the development site.

- *Long-term Operation and Maintenance.* A long-term site capping operation and maintenance plan would consist of a quarterly, biannual or annual site reconnaissance to note the condition of the site cap, and include contingency plans for its repair, if necessary.
- *Deed Restrictions / Environmental Easements*: Deed restrictions and notices proscribing the use of groundwater would be required, along with possible other requirements for future soil disturbance activities below the site cap and management of soil and groundwater.

High Line Structure

A Phase I Environmental Site Assessment (ESA) (updated in 2004 for NYC Department of City Planning) of the elevated structure which comprises the High Line has been prepared (it is provided in Appendix E). The properties located under the High Line elevated structure were not investigated as part of this update or as part of the original July 2000 Phase I ESA.

The High Line elevated rail structure was constructed between 1929 and 1934 to serve the industrial and manufacturing districts along the west side of Manhattan. According to information provided by the NYCDCP and the Friends of the High Line website, the elevated structure varies in width and elevation, but is generally between 30 to 50 feet wide and 25 feet high. There is approximately ~~6.7~~ 5.9-acres of space located atop the elevated rail structure, which is occupied by gravel, grasses, shrubs, and, trees. The elevated line currently extends for 22 blocks, approximately 1.45 miles, from the intersection of Gansevoort Street and Washington Street northwards to W. 34th Street. The current owner of the High Line is the CSX Corporation.

In 1847, the City of New York authorized street-level railroad tracks along Manhattan's West Side to allow freight to travel between New York City and Albany. Accidents began occurring between trains, pedestrians, horses, and other traffic as soon as railroad traffic was introduced. In 1929, the New York Central Railroad, the City of New York, and the State of New York, came to an agreement for the West Side Improvement Project, which included the High Line. The High Line ran from W. 35th Street down to St. John's Park Terminal, which covered four riverfront blocks between Clarkson and Spring Streets. The structure was designed to go through the center of blocks, rather than over the avenue, to avoid creating the negative conditions associated with elevated subways. It connected directly to factories and warehouses, allowing trains to roll right inside the buildings. Trains were operated on a two-track elevated structure along a private right-of-way to the 30th Street Yard, crossing over about 40 intersections on overhead bridges.

Freight traffic involved transportation of agriculture (grains, fruits, and vegetables), animals, dairy products, products of mines (coal, coke, iron ore, and non-ferrous ores and concentrates), lumber, and various manufactured products, including petroleum products, chemicals, fertilizers, non-ferrous metals, manufactured iron and steel, machinery, building materials, and asbestos materials.

The High Line is primarily constructed of steel and reinforced concrete. The tracks are generally carried on stone ballasts, except between Little West 12th Street and W. 14th Street, where the railroad ties supporting the tracks are embedded in the concrete structure. Reportedly, the tracks are concrete for sanitary purposes. The elevated rail line connected directly to factories and

warehouses. Milk, meat, produce, and raw and manufactured goods were hauled over this route until 1980. The northern end of the structure and its easement were rerouted to accommodate the construction of the Jacob Javits Convention Center. Portions of the High Line were torn down in the 1960s, and again in 1991 when a five-block section of the southern end of the line was removed. The railroad has not been used since 1980.

Since the Site was used as a railroad right-of-way from approximately 1934 to 1980, the potential for past leakage of petroleum or other fuel oils from railroad equipment that traveled along the tracks exists. Therefore, track bed ballast material should be sampled in preparation for the conversion of the structure to a publicly accessible open space. Special consideration should be given to sampling in the areas of soil staining noted throughout the High Line elevated structure. Additionally, a limited inspection identified suspect asbestos containing material (ACM) along the elevated structure. A complete asbestos survey should be conducted on the elevated structure in order to identify the existence of ACM prior to the demolition of the railroad tracks at the Site. Lead-based paint was also detected on the structural steel components of the elevated structure, including girders, columns, and beams.

During the 2004 Site reconnaissance, discarded wastes, including numerous cans of paints, aerosol paint cans, small propane tanks, five-gallon buckets of spent roofing tar, empty, unlabeled five-gallon containers, used tires, fluorescent light fixtures, and a chiller unit were observed along the elevated structure. Numerous debris piles were also observed along the entire length of the High Line. Debris piles included construction debris, wood, garbage, furniture, creosote timbers, concrete, and roofing materials. All discarded wastes and debris piles should be properly disposed of in accordance with Federal, State, and local waste regulations. Additionally, grease pits and switching mechanisms assumed to contain grease were observed along the elevated structure. The grease pits and switching mechanisms should be removed from the Site and disposed of properly.

As stated in the July 2000 report and 2004 update, a number of sites with recognized environmental concerns are located beneath the elevated structure at ground level. A total of 529 sites were identified in the environmental database search within an eighth-mile (660-foot) radius of the High Line elevated structure. Due to the number of spills and historic and current use of the surrounding properties, a Phase II subsurface investigation will be conducted for properties to be used for public access points. The results of the Phase II ESA will be presented in the FGIS.

Adjoining Structure Impact to Elevated High Line

Related to the assessment of the High Line structure, an assessment of adjoining structures and their potential impact on the High Line was conducted. The methodology for conducting this assessment consisted of compiling and analyzing project-specific data to identify potential contaminant sources, which may originate on adjacent structures and impact the elevated High Line structure. To accomplish this task, previous reports on the High Line were reviewed to gather information regarding potential contaminant sources previously identified and to determine possible additional sources that may have an impact on the elevated High Line structure. Also, a search of standard Federal, State, and local environmental record sources and databases pertaining to the elevated High Line structure and surrounding area was conducted. The environmental database search was conducted for properties within 660 feet of the elevated High Line structure, which is a typical corridor search distance. Finally, a field reconnaissance was performed from the High Line on adjacent structures to observe the presence or absence of hazardous substances and

emissions that may originate on adjacent structures and impact the elevated High Line structure. The uses of adjacent or nearby properties were identified to determine the likelihood for hazardous materials (if present and/or suspected) that could potentially result in exposure.

A limited asbestos investigation, focusing on suspect asbestos-containing materials that were identified on adjacent structures that could either break-off or deteriorate and impact the High Line was performed. Asbestos pipe insulation was identified on two structures that are adjacent to the High Line. The High Line passes through two buildings, one on the south side of W. 14th Street and the second on the north side of W. 15th Street. Approximately 690 linear feet of assumed pipe insulation was identified to be adjacent to the High Line and in various states of disrepair at the W. 14th Street structure while there is approximately 175 linear feet of pipe insulation in poor condition at the W. 15th Street structure. Additionally, four billboards, each of which has a 350 square feet transite asbestos backing, are attached to the High Line on W. 21st, W. 23rd, W. 26th and W. 29th Streets.

An inspection of structures that were adjacent to the High Line was conducted to determine if peeling lead-based paint (LBP) from those structures could potentially impact the High Line. One such structure was noted. On the west side of the High Line, a building on block 692, lot 41, which fronts W. 21st Street is located approximately 15' to the west of the High Line. The wall facing the High Line is covered with white paint, which is in various stages of delamination from the substrate at several locations. White paint chips were also observed along a 2' by 40' patch on the west edge of the elevated High Line at this same location.

The High Line passes through a building, on block 646, lot 10, on the south side of W. 14th Street. Five 55-gallon drums filled with varying levels of debris were observed on the west loading dock area. The bottoms of these drums have rusted through and the contents have stained the loading dock and spilled onto the High Line. The quantity of material that has spilled onto the High Line is unknown at this time.

A visual inspection along the High Line was performed of all air emission discharge points and operations which may impact air quality on the High Line. Discharge points within 30' of the High Line were identified, though the height of some adjacent structures may have prevented the identification of discharge points on the roof of these structures. Twenty-seven potential emission discharge points were documented along the High Line as well as operations such as the metal recycling facility on W. 28th Street and the NYCT bus depot on W. 30th Street which may affect the air quality on the High Line. These facilities are listed in Appendix E.

A total of 31 sites were identified in the environmental database search within an eighth-mile (660-foot) radius of the High Line elevated structure that were listed as New York State Air Discharge sites. These are listed sites that are air pollution point sources that are currently monitored by the Environmental Protection Agency, and/or NYS and local air regulatory agencies. They are contained in Table 10-2.

Table 10-2 Air Discharge Regulated Sites within 660-Feet of the High Line

Facility Name	Facility Address	Distance& Direction to High Line
SUNOCO Gas Corp.	60 Ganesvoort Street	45' to WSW
Admiral Abatement Corp.	Ganesvoort & West Side Hwy	299' to S
Noblet Serigraphie, Inc.	425 West 13th Street	302' to SSE
Major Press, Inc.	448 West 16th Street	384' to ENE
Gansevoort Municipal Incinerator	Gansevoort & No River	642' to SW
Universal Japanning Co Inc.	521 West 26th Street	0'
Universal Jappaning	521 West 26th Street	0'
Berkshire Wood Finishing Inc.	521-523 West 26th Street	0'
Altura Studious Inc.	525 West 26th Street	12" to NNE
Duke Woodworks Inc.	525 West 26th Street	12' to NNE
RTI Shelving Systems	515 West 28th Street	91' to NNE
Rosenblatt & Thompson Inc.	515 West 28th Street	91' to NNE
Integrated Imaging Center	508 West 26th Street	125' to NE
Service Wagon Repair Co.	428 West 19th Street	138' to SSW
Gulf Service Center	500 West 23rd Street	155' to S
Getty (Power Test)	239 10th Avenue	161' to E
City Gas	303 10th Avenue	163' to NE
Central Iron & Metal Co Inc.	505 West 27th Street	166' to NE
Rathe Productions Inc.	555 West 23rd Street	278' to W
Auto Care West	456 West 18th Street	518' to S
Mark 11th Avenue Associates	246 11th Avenue	606' to NNW
NYC Human Resource Admin	260 11th Avenue	610' to N
Budagraphic Concepts Inc.	210 11th Avenue	613' to NW
Stuart Dean Company Inc.	366 Tenth Avenue	160' to ESE
Colonial Sand & Stone	30th Street & West Side Avenue	237' to WNW
Mobil	309 11th Street	242' to W
Princeton Laundry Inc.	450 West 31st Street	497' to ESE
S&S Graphics Inc.	406 West 31st Street	627' to ESE
Versacolor Press/Walbern Press	406 West 31st Street	627' to ESE
Malone Properties	406 West 31st Street	627' to ESE
Ameritrade Graphics	406 West 31st Street	627' to ESE

Potential High Line Access Points

An assessment was performed to identify potential contaminant sources, which may impact the sites beneath the elevated High Line structure in the vicinity of the four potential access points located on City-owned property or in the public right-of-way.

A hazardous materials assessment was performed in two steps. First, an area-wide summary was prepared of topographical, geological and hydrogeological conditions, from City and U.S. Geological Survey sources. Second, individual tax lots and their surrounding properties were assessed to determine whether current or historical potential hazardous materials conditions may have negatively affected these properties. Factors that were considered when making this determination included the potential of the identified hazardous materials condition to result in impacts, as well as geological or hydrogeological conditions that may have affected the migration of the hazardous material.

The elevated rail line currently extends for 22 blocks, approximately 1.45 miles and is listed in several different regulatory databases. Potential hazardous materials impacts to the development

sites beneath the elevated High Line were identified for all four potential access points. Additional sites potentially impacted by hazardous or contaminated materials were also identified throughout the corridor beneath the elevated High Line. Classes of typical contaminants encountered in urban areas are described briefly below:

Volatile organic compounds (VOCs). These include aromatic compounds such as benzene, toluene, ethylbenzene, xylene (BTEX), and methyl tertiary butyl ether (MTBE), which is found in gasoline as an additive, and chlorinated compounds, such as tetrachloroethene (also known as perchloroethylene or "perc"), and trichloroethene, which are common ingredients in solvents, degreasers, and cleansers. VOCs represent the greatest potential for contamination issues since, in addition to soil and groundwater contamination, they can generate organic vapors. Former or current dry cleaners, particularly plants where large-scale processing occurs, and gasoline stations are the most likely sources for substantial VOC contamination. Large gasoline spills can also be an additional concern due to the migration of the spill to adjacent properties.

Semi-volatile organic compounds (SVOCs). The most common SVOCs encountered are polycyclic aromatic hydrocarbons (PAHs), which are constituents of partially combusted coal or petroleum-derived products, such as coal ash, and asphalt. These are common in New York City fill. In addition, fuel oil spills are a common source of SVOCs, as are older gasoline spills.

Polychlorinated biphenyls (PCBs). Commonly used as a dielectric fluid in transformers, underground high-voltage electric pipelines, and hydraulically-operated machinery, PCBs are of concern at electrical transformer locations where leakage into soil under or surrounding the transformers may have occurred. PCBs and/or PCB containing materials were once widely used in manufacturing and industrial applications (i.e., hydraulic lifts, transformers, and plastic manufacturing, etc.). PCBs tend to travel only short distances in soil, except in unusual circumstances (e.g., large spills of PCB containing oils over many years).

Pesticides, herbicides, and rodenticides. These are commonly used to control rodents and/or insects, and vegetation in vacant structures or in vegetated lots.

Metals (including lead, arsenic, cadmium, chromium, and mercury). Metals are often used in smelters, foundries, and metal works and are found as components in paint, ink, petroleum products, and coal ash. These metals tend not to migrate through soil, therefore, they would be of greatest concern at the site where they were generated. Metals could be an issue if substantial subsurface construction is required on a development lot. Metals, at levels above natural background levels, are frequently present in fill material throughout the New York metropolitan area.

Table 10-3 lists the current or historical land use or database listing and indicates which classes of chemicals could have impacted soil and/or groundwater conditions based on site use. In parking lots or vacant lots, where illegal dumping of hazardous materials may have occurred, all of the classes of chemicals may have impacted the soil and/or groundwater.

Table 10-3, Recognized Environmental Conditions and Associated Classes of Chemicals

Recognized Environmental Condition	Associated Classes of Chemicals
Dry Cleaners	V, S, M
Filling Stations/Gasoline Tanks	V, S, M
MOSF Listing	V, S, M
Gasoline Vent Pipe/Fill Cap	V, S, M
Oil Change Shops	V, S, M
Substations	S, PCB, V, M
Utilities	V, S, PCB, M
Active Spill Listing	V, S, PCB, M
RCRA Generator	V, S, PCB, M, P
Fuel Oil Tanks (PBS Listing)	V, S, M
Auto Repair	V, S, PCB, M
Fuel Oil Vent Pipe/Fill Cap	V, S, M
Drug Manufacturing Laboratories	V, S, PCB, M, P
Printing Facility	V, S, PCB, M
Machine Shop	V, S, PCB, M
Hydraulic Shop	V, S, PCB, M
Stored Drums	V, S, PCB, M, P
Detail Shop	V, S, PCB, M
Auto Sales	V, S, PCB, M
Car Wash	V, S, M
General Factory	V, S, PCB, M, P
General Manufacturing	V, S, PCB, M, P
Upholstering	V, S, M
Furniture Making	V, S, M
Paint Stores	V, S, M
Historic Drug Stores	V, S, P, M
Medical Laboratory	V, S, M
Institutional Laboratory	V, S, M
Photo Developer	V, S, M
Lumber Yard	V, S, P, M
Closed Spill Listing	V, S, PCB, M
Furrier	V, S, M
Parking Lot	V, S, PCB, M, P
Vacant Lot	V, S, PCB, M, P
Transformer	V, S, PCB, M
Notes: V = VOCs, S = SVOCs, PCB = PCBs, P = Pesticides, M = Metals	

Regulatory databases utilized in this assessment include:

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is a compilation of known and suspected uncontrolled or abandoned hazardous waste sites which are, or were, under investigation by USEPA but have not been elevated to the status

of a Superfund National Priority List (NPL) site. Former CERCLIS sites that have been granted the status of No Further Remedial Action Planned (NFRAP) are also included in this database. There is one CERCLIS site reported within a 660-foot radius of the High Line. The facility is identified as the Manhattan General Mail Facility, located at W. 29th Street and Ninth Avenue, approximately 595 feet southeast of the High Line. Following a preliminary investigation by the USEPA in September 1993, the facility received a (NFRAP) Status. This means that the USEPA has completed its assessment of the site and has determined that no further steps will be taken to list that site on the NPL.

Solid Waste/Landfill Facilities (SW/LF) database is a comprehensive listing of State permitted/recorded solid waste facilities. There are currently five Solid Waste facilities reported within a 660 foot radius of the High Line and one reported Hazardous Waste Treatment, Storage and Disposal facility.

The New York State Department of Environmental Conservation (NYSDEC) Spills Information Database (NYSDEC Spills)/Leaking Underground Storage Tanks (LUSTs) database is a compilation of spill-incident reports attributable to various causes and includes LUST sites. The LUST list includes releases from either USTs or ASTs attributable to tank test leaks or tank failures. There are currently 18 active LUST listings and 70 active Spills listings reported within a 660-foot radius of the High Line. Additionally, there are currently 21 closed LUST listings and 142 closed Spills listings within a 660 foot radius of the High Line.

Resource Conservation and Recovery Information System - Treatment, Storage, or Disposal Facilities (RCRIS-TSD)/RCRIS Corrective Action Activity (CORRACTS) The RCRA program identifies and tracks hazardous wastes from the point of generation to the point of disposal. The RCRIS database tracks those facilities that treat, store and/or dispose of hazardous materials as defined by RCRA (referred to as TSD facilities). The RCRIS CORRACTS database identifies TSD facilities that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA. One facility was identified in the RCRIS-TSD database within a 660-foot radius of the Site. The facility is identified as Con Ed, located at 281 Eleventh Avenue, approximately 646 feet north of the High Line. The facility is reportedly a large quantity generator (LQG), indicating it generates over 1,000 kilograms (kg) of waste per month. A generator requirement violation was reported for this facility in October 2003, but was corrected in December 2003. This facility reportedly has treated, stored, and disposed of various types and amounts of wastes from 1999 to 2003.

Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans) database is a compilation by the EPA of reporting facilities that generate or transport hazardous waste and that must obtain a hazardous waste generator identification number or transporter permit. There are currently 134 RCRA listings reported within a 660 foot radius of the High Line.

The New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) Tank database was researched to identify listings for the Site and adjacent properties. This database contains information on AST and UST petroleum storage facilities with a combined storage capacity of over 1,100 gallons. There are currently 92 PBS listing reported within a 660 foot radius of the High Line.

New York State Air Discharges According to the database, there are 34 NYS air discharge facilities located within a 660-foot radius of the High Line.

Historic New York City Utility Sites (1890s to 1940s) Six Historic New York City Utility sites were identified within a 660-foot radius of the High Line.

Federal Civil and Administrative Enforcement Docket Facilities According to the database, there are seven Federal Civil and Administrative Enforcement Docket Facilities located within a 660-foot radius of the High Line.

Potential High Line Access Point at W. 14th Street between Ninth and Tenth Avenues

The NYSDEC Spills database is a compilation of spill-incident reports attributable to various causes including LUST sites. The LUST list includes releases from either underground storage tanks (USTs) or aboveground storage tanks (ASTs) attributable to tank test failures or tank failures. Spill sites include releases from other causes such as equipment failures, tank overfills, traffic accidents or housekeeping issues. A release will be considered "closed" by the NYSDEC when it has undergone satisfactory remediation and no further investigation is required. A release will be considered "active" or "open" when further investigation is required or the appropriate documentation necessary to close the file has not been completed. The NYSDEC Spills list was researched to identify LUST listings within one-half mile and Spill listings, attributable to other causes, within one-eighth mile of the intersection of W. 14th Street and the High Line the ("Site").

- Block 686, Lot 29, located at 501 W. 14th Street is currently a vacant lot. Lot 29 was historically occupied by a Sunoco Gas Station prior to 1991. Two active tank test failure listings are reported within the LUSTS database for this site. On July 1, 1991 an unknown amount of diesel fuel leaked from a 4,000 gallon UST due to a tank failure. Land was affected. Reportedly, they will excavate, isolate and retest the tank. In a separate incident on October 20, 1988 an unknown amount of gasoline leaked from a 4,000-gallon UST due to a tank failure. Groundwater was affected. Therefore, the potential exists for off-site migration of contaminants.

The historic presence of a gas station at Lot 29 coupled with reports of leaking tanks, may contribute to on-site petroleum and/or hazardous materials contamination. Due to these factors there is a potential for VOCs, SVOCs, and metals to exist on the site and migrate off-site. This site is also listed in the Petroleum Bulk Storage (PBS) database as discussed in a later section.

- Block 712, Lot 1, located at 70 Tenth Avenue is currently a Mobil Gas Station complete with a car wash. Historic Sanborn maps indicate that between 1904 and 1950 Lot 1 was occupied by a Scrap Metals and Iron yard as well as a Lumber Yard and a Building Yard. Maps from 1950 show Lot 1 as vacant. Maps from 1969 show the Lot as a parking area. Maps from 1975 show that a portion of the Lot (to the east) was taken over by the department store Sacks 5th Avenue, leaving the remaining section of the lot as parking. Maps from 2003 depict the current Mobil Gas Station with the area formerly occupied by Sacks 5th Avenue as a warehouse.

Two active listings are reported within the Spills database for this site. On June 13, 2001 an unknown amount of gasoline was spilled in the basement of the gas station. Land was affected. No further information was provided. In a separate incident that occurred on June 19, 2001, a release of an unknown amount of gasoline due to an equipment failure was reported to the NYSDEC. The sewers were affected and corrective action was taken.

The historic presence of a scrap metal yard presents a potential risk for hazardous materials and metals to be present on-site. Additionally, the presence of the current on-site gas station and car wash together with the active spill listings, may contribute to on-site petroleum and/or hazardous materials contamination. This site is also listed in the PBS database.

At the intersection of Tenth Avenue and W. 15th Street is an active spill listing from March 9, 1995. According to information provided by Toxic Targeting, during a monitoring well installation, 1 mm of floating product (gasoline) was discovered. Groundwater was affected.

Due to evidence of floating product atop groundwater and the necessity for monitoring well installation at this intersection, the potential for petroleum contamination on the site to exist and potential for off-site migration of contaminants.

- Block 687, Lot 29 located at 85 Tenth Avenue is currently a ten-story office building. There is poor Sanborn Map coverage for Lot 29 prior to 1987 when maps show the lot was occupied with a building identified as Manhattan Industrial Center. However, the NYCDOB website provided additional tenant information via Certificates of Occupancy. The first certificate was issued in 1922 and listed the lot as a residence. The second certificate issued in 1937 listed the lot as a store. Both certificates eluded that the current ten-story structure had not yet been constructed and the site was developed with a single story building.

On October 5, 1999 a spill of No. 6 fuel oil was reported in the sidewalk vault, weigh scale pit, and sidewalk elevator pit. NYSDEC remarks regarding the spill state that the cause may have been overfilling and/or turning the boiler off. Fuel oil was found beneath the concrete slab in the basement. Groundwater was affected. On January 10, 2000 an AST (not the source) was removed and the entire building began remediation/re-construction activities. The trench system leading to the sump pump, located in the building, was reported to be full of oil. It was later cleaned using guzzlers. Sixty-thousand gallons of oil/water were removed. The source of the spill was a 160,000-gallon AST that was cleaned and now holds No. 2 fuel oil. The NYSDEC recommended that an oil/water separator be installed in the basement in order to further remediate the central drainage pit that remained filled with oil.

Due to the extent of the petroleum contamination mentioned above and the open status of the spill, the potential exists for the presence of on-site petroleum contamination as well as off-site migration of these contaminates. Additionally, the presence of a manufacturing complex on Lot 29, complete with elevators, allows for the possibility for PCB, VOC, SVOC and/or hazardous materials contamination. This site is also listed in the PBS database.

At the intersection of Tenth Avenue and W. 14th Street remains an active spill listing from November 22, 1997. According to information provided by Toxic Targeting, while excavating

an old UST at a gasoline station, a contractor encountered an old wooden vault that was filled with an unknown petroleum substance.

Due to the site's historical use as a gas station and the open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential for the presence of VOCs, SVOCs, and metals on this site and off-site migration of these contaminants.

- Block 714, Lot 1 located at 445-459 W. 16th Street is currently a building with the first floor occupied by a mechanics shop and the second floor occupied by offices and a theater studio. A historic Sanborn map dated 1895 shows that the lot, along with most of the block was occupied by Consolidated Gas Company. No further Sanborn coverage was available for this lot. However, the NYCDOB website provided additional tenant information via Certificates of Occupancy. The first certificate on file was issued in 1917 and listed the lot as a five-story storage/laundry facility. It was noted on the certificate that not more that 25 percent of the total floor area was to be used for laundry. The second certificate, issued in 1920, listed the building as a factory. The third certificate, issued in 1951, listed the building as commercial property.

On May 4, 2004 a spill of an unknown quantity of No. 2 fuel oil was reported from a private dwelling. Groundwater was affected.

The historic presence of a gas company, a laundry facility, and a factory located at Lot 1, along with the current on-site mechanic shop and the recent fuel oil spill that affected groundwater, all present the possibility for hydrocarbon and/or hazardous materials contamination. Due to these factors, there is potential for the presence of VOCs, SVOCs, PCBs and metals on this site and off-site migration of these contaminants. This site is also listed in the Petroleum Bulk Storage (PBS) database.

- Service Box 2343**,** located at 427 W. 14th Street a 15-gallon spill of unknown petroleum product occurred on land on November 24, 2003. No further information was provided.

Due to the size of this spill and the resource affected, the possibility of hydrocarbon migration to the site is negligible. However, there is potential for the presence of VOCs and SVOCs to exist on this site.

Fifteen closed spills are listed in the Spills database as being within 660 feet of the Site. These spills have all been closed by the NYSDEC after investigation and where applicable, remediation. Based on their regulatory status, these spills are not expected to impact the Site. Therefore, they are not considered environmental concerns. However, the incidence of historic spills allow for the potential presence of VOCs and SVOCs to still remain on these sites.

The NYSDEC PBS tank database was researched to identify listings for the Site and adjacent properties. This database contains information on PBS facilities with a combined storage capacity of over 1,100 gallons in ASTs and/or USTs. Several of the facilities listed in the PBS section of the regulatory report were also identified on the LUST/ Spills database and previously discussed as LUST/ Spills findings.

The PBS database is merely a listing of all facilities that are required to register their storage tanks for tracking purposes and not necessarily those with reported spill incidents. Based on distances and the absence of reported releases, these facilities are not likely to have an adverse impact.

- Block 714, Lot 1 located at 445-459 W. 16th Street is currently a building with the first floor occupied by a mechanics shop and the second floor occupied by offices and a theater studio. Freedman Realty retains offices within this building and has an address of 110 Tenth Avenue. This site is also listed in the Spills database.

Regulatory records indicate that three 550-gallon steel ASTs, reported to contain diesel fuel, were registered to this address with the NYSDEC PBS unit. All three tanks were administratively closed on March 17, 2000.

Regulatory records indicate that and additional six 550-gallons steel USTs reported to be empty, are registered with the NYSDEC PBS unit. All six tanks have been closed and removed. No dates or further information was given.

- Block 686, Lot 29 located at 501 W. 14th Street is currently vacant. This site is also listed in the LUST database.

Regulatory records indicate that twelve 550-gallon USTs, listed as contents "other" and four 4000-gallon USTs reported to contain unleaded gasoline, two leaded gasoline, and diesel fuel respectively, were registered to this address with the NYSDEC PBS unit. The twelve 550-gallon USTs with installation dates ranging from 1950 – 1964 were all closed in place on August 1, 1993. The remaining four 4000-gallon USTs with installation dates of 1971 and 1984 were administratively closed on April 1, 1998.

Regulatory records indicate that an additional twelve 550-gallon empty USTs and three 2000-gallon empty USTs are registered to this address with the NYSDEC PBS unit. All but one 550-gallon UST are temporarily out of service. The one in service UST is empty. All 15 USTs were installed in a vault with access on October 1, 1997.

- Block 687, Lot 29 located at 85 Tenth Avenue is currently a 10-story office building. This site is also listed in the Spills database.

Regulatory records indicate that one 15,000-gallon AST containing diesel fuel and one 4,000-gallon AST containing No. 1, 2 or 4 fuel oil are registered to this address with the NYSDEC PBS unit. The latter of the two tanks was closed and removed on November 1, 1999. The diesel tank which was installed on December 1, 1959 is temporarily out of service.

- Block 713, Lot 1 located at 459 W. 15th Street is currently occupied by assorted factories and industrial usage.

Regulatory records indicate that two in service 17,000-gallon USTs reported to contain No. 5 or 6 fuel oil are registered to this address with the NYSDEC PBS unit. Both USTs are vaulted with access and were installed on December 1, 1959. Block 713, Lot 1 was not listed in the Spills database.

- Block 712, Lot 1 located at 70 Tenth Avenue is currently a Mobil Gas Station that also houses the Tenth Avenue Car Wash and 15th Street Mini Storage. This site is also listed in the Spills database.

Regulatory records indicate that four 6,000-gallon USTs containing unleaded gasoline, two 6,000-gallon ASTs, one containing unleaded gasoline and the other containing diesel fuel (1/10 below ground), three 2,000-gallon ASTs, one containing used oil and two that contain lube oil, two 1,000-gallon ASTs containing lube oil, and three 500-gallon ASTs containing lube oil are registered to the Tenth Ave. Car Wash with the NYSDEC PBS unit. All of the tanks are reported to be in service. All six 6,000-gallon tanks were installed on August 1, 1999. The remaining tanks were installed on April 1, 2000.

Regulatory records indicate that two 2,000-gallon USTs containing unleaded gasoline are registered to 15th Street Mini Storage. Both tanks are currently in service and are vaulted with access. No installation date was provided.

- Block 646, Lot 32 located at 418 W. 14th Street is currently occupied by miscellaneous office buildings.

Regulatory records indicate that one 3,000-gallon AST reported to contain No. 1, 2 or 4 fuel oil is registered to Lomel Realty Corporation with the NYSDEC PBS unit. The tank was closed in place on September 1, 1996. This site is not listed in the Spills/LUSTs database.

There are 18 RCRIS gen/trans listed in the regulatory database that are located within 660 feet of the Site. However, according to ASTM standards, only properties that are on-site or adjacent to the Site are noted in the report. The database recognized two RCRA listings that are adjacent to the Site.

- Block 686, Lot 29 located at 501 W. 14th Street is currently vacant. This site is also listed in the LUST and PBS databases. Regulatory records list this site as a historic USEPA RCRA small quantity generator (SQG).

- Block 712, Lot 1 located at 450 W. 15th Street – 3rd floor is currently occupied by Baboon Productions and listed as a conditionally exempt SQG within the RCRIS. This site is also listed in the Spills and PBS databases.

There are three Air Discharge Facilities located within 660 feet of the Site listed in the regulatory database. However, according to ASTM standards, only properties that are on-site or adjacent to the Site potentially pose an environmental risk. The database recognized two Air Discharge Facility listings that are adjacent to the Site.

- Block 686, Lot 29 located at 501 W. 14th Street is currently vacant. This site also listed in the LUST, PBS, and RCRA databases. Regulatory records list this address as having an operating air discharge facility for VOCs. All records show that the facility is in compliance with State regulations.

Potential High Line Access Point at W. 23rd Street between Tenth and Eleventh Avenues

The NYSDEC Spills database is a compilation of spill-incident reports attributable to various causes and includes LUST sites. The LUST list includes releases from either USTs or ASTs attributable to tank test failures or tank failures. Spill sites include releases from other causes such as equipment failures, tank overfills, traffic accidents or housekeeping issues. A release will be considered "closed" by the NYSDEC when it has undergone satisfactory remediation and no further investigation is required. A release will be considered "active" or "open" when further investigation is required or the appropriate documentation necessary to close the file has not been completed. The NYSEC Spills list was researched to identify LUST listings within one-half mile and Spill listings, attributable to other causes, within one-eighth mile of the intersection of W. 23rd Street and the High Line (the "Site").

- Block 696, Lot 10 located at 537-541 W. 24th Street is currently improved with a one-story building occupied by a store. Historical Sanborn maps from 1911 through 1976 show Lot 10 developed with a factory or warehouse.

On August 5, 2000 contaminated soil was found during a tank removal. The source of the contamination was two faulty USTs that subsequently released an unknown amount of No. 2 fuel oil and gasoline into the ground. Records show that corrective action was taken.

Based on the open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

- Block 695, Lot 7 located at 555 W. 23rd Street is currently a vacant lot. Historic Sanborn map coverage was unavailable for this site. However, the NYCDOB website provided additional tenant information via Certificates of Occupancy. A 1954 certificate of occupancy (the only one available) showed that the vacant lot was once occupied by a three -story building that housed a car garage, car repair shop, boiler room, and offices.

On September 17, 2003 a faulty tank resulted in a gasoline spill of unknown quantity on land. No further information was available.

Due to the site's historical usage as a car garage and maintenance shop, along with the open status of the spill, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

- Block 695, Lot 15 located at 527 W. 23rd Street is currently occupied by Edison Parking Garage, and seven upper floors of apartments. Historic Sanborn maps dated 1899 show that Lot 15 was previously a Cotton Mill. Maps dated 1911 show the lot split between two occupants, the Manhattan Bedding Company and a Lumber Yard. Maps dated 1950 show that the Lot was partially occupied by a Laundry Supplies Store. The last available historic map dated 1976 shows Lot 15 occupied by a Rent-a-Car facility and parking area.

On October 14, 1998 an 8,000-gallon No. 2 fuel oil tank failed a tank tightness test. The faulty tank released an unknown amount of No. 2 fuel oil that subsequently affected land.

On December 18, 1995 a 550-gallon diesel fuel tank failed a tank tightness test. The faulty tank released an unknown amount of diesel fuel that subsequently affected land.

Due to the historic usage of Lot 15 as a laundry supplies store, a rent-a-car facility, and its current usage as a parking garage, in addition to the two open LUST incidents, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

Ten closed tank/tank test failures were listed in the Spills database as being within 660 feet of the Site. These tank failures have all been closed by the NYSDEC after investigation and where applicable, remediation. Based on their regulatory status, these tank failures are not expected to impact the Site. They are therefore not considered environmental concerns to the Site. However, the incidence of historic spills allow for the potential presence of VOCs and SVOCs to still be present on these sites.

- Block 693, Lot 23 is located at 511 W. 21st Street and is currently occupied by Time Warner Cable Company. Historic Sanborn maps dated 1895 show that Lot 23 was previously a Gas Meter Factory. Maps dated 1904 show the lot occupied by Industrial Development Corporation. Maps dated 1950 show that the lot is occupied by a furniture warehouse. Maps dated 1975 show the lot developed as a private garage. And maps from 1994 show the lot occupied by its current residents.

On December 15, 2000 an unknown amount of gasoline was spilled on land due to a leak in an underground product line. Corrective action was taken.

Due to the historic usage of the lot and its open spill status, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

- Service Box 3769 is located at 508 W. 21st Street. On January 5, 1999 one gallon of unknown petroleum (possibly anti-freeze) was found floating atop 25 gallons of water. The spill was contained inside the box. Corrective action was taken.

Due to the small quantity and the contaminant of the spill, it is not anticipated that this spill will impact the Site.

- Block 696, Lot 32 located at 239 Tenth Avenue is currently occupied by a Getty Gas Station. According to Historical Sanborn maps and information attained from the NYCDOB, Lot 32 has been occupied by a gas station since at least 1920. Maps dated 1911 show the lot as occupied by a factory. No records were available between the years of 1912 – 1919.

On November 7, 1998 an unknown amount of gasoline was reportedly spilled on land at this site. The cause of the spill is listed as unknown.

Due to the historic and current usage of the site as a gas station, along with the active spill status, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site. In addition, even though there is no mention of groundwater impact, the likelihood exists for impacts to have

occurred to the groundwater at the site, due to the historical use of this site as a gas station. Therefore, the potential exists for migration of contaminants from the Site.

On July 22, 2003 at the intersection of W. 23rd Street and Tenth Avenue a 50-gallon spill of unknown petroleum occurred on land. No further information was available.

Due to the quantity of the spill and its open spill status, it is probable that on-site petroleum and/or hazardous materials contamination exists and off-site migration of contaminants may have occurred.

- Block 695, Lot 7 located at 555 W. 23rd Street is currently a vacant lot. This site is also listed on the LUST database.

On March 4, 1997 an unknown amount of No. 4 fuel oil was reportedly spilled, subsequently affecting land. The source of the spill is unknown. No further information was available.

Due to the open spill status it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

- Block 696, Lot 1 located at 202-208 Eleventh Avenue is currently occupied by Dynamic Delivery Corporation. No Sanborn map coverage for this site was available. The available NYCDOB information obtained for certificates of occupancy state that in 1937 the lot was a garage. Certificates dated 2001 to present state that the lot was occupied by a commercial art gallery and accessory offices. The cellar is listed as vacant.

On April 2, 1999 soil contaminated with No. 2 fuel oil was found at the site during testing in reference to a share transaction. Regulatory records indicate that the contamination was found in the loading dock area (site of former gas tanks) and in the heating oil tank area. In January of 2000 an environmental company removed 500 tons of soil from the loading dock area, installed ORC powder in the open pit area, installed a pipe system for a future soil vapor extraction (SVE) system, and then backfilled the pit with clean fill before installing a new concrete floor. Soil was also removed in the heating oil tank area and endpoint soil samples were taken. Monitoring wells were installed and tested bi-annually and NYSDEC report were submitted. The results outlined in the February 2000 report submitted to the NYSDEC indicated that a sheen was present.

Due to the extent of contamination on this site and its open spill status, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site. In addition, the presence of a sheen on groundwater indicates a potential for off-site migration.

- Block 695, Lot 15 located at 527 W. 23rd Street is currently occupied by Edison Parking Garage, and 7 floors of apartments. This site is also listed in the LUST database.

On August 2, 1996 0.7 feet of gasoline was found floating on top of the groundwater in an on-site groundwater monitoring well. The NYSDEC was notified. Additional wells are to be installed and six tanks are to be excavated.

Due to the open spill status associated with this site and the media affected by the contamination, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs and SVOCs on this site. In addition, due to the groundwater contamination there is a potential for off-site migration of contaminants.

- Block 692, Lot 41 located at 510 W. 21st Street is currently occupied by Storage USA. Insufficient Historical Sanborn map coverage was available for this site. Maps dated 1904 show the lot was developed with residential dwellings. Maps dated 1987 show the lot occupied by a storage company. NYCDOB certificates of occupancy state that in 1927 the lot was a warehouse and that in 1939 it was a garage.

On March 7, 2001 an unknown amount of No. 2 fuel oil was discovered in a sump hole. The spill was caused by leaking suction and return lines and resulted in contaminating groundwater. The following was listed in the spill report by the NYSDEC: Two basement sumps have accumulated No. 2 fuel oil resulting from a release. Lines have been replaced. Al Eastmond has been retained to test the 2000-gallon tank, pump out its pits daily and investigate the extent of sub-surface contamination. NYCDEC issued violations to the manager of Storage USA for discharge to city sewers (Storage USA was pumping product from its pits into the sewer). This discharge has been abated. Adjacent properties were canvassed to determine potential impacts; no problems were found other than odor complaints, which ceased with the discharge.

According to regulatory records, Storage USA was not complying with the clean-up standards mandated by the NYSDEC. Multiple summonses were issued to the manager of the business on March 15, 2001. A third impacted sump was discovered in the bottom of a freight elevator shaft.

Due to the extent of the current contamination on site and the media affected, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

- Block 694, Lot 39 located at 215 Tenth Avenue is currently occupied by a Gas Station. Historical Sanborn map review revealed that between the years of 1911and 1930 the lot was improved with mixed residential/light commercial usage. No map coverage was available between 1931 and 1949. Maps dated from 1950 to present show the lot occupied by a gas station.

On February 10, 2000 gasoline contaminated soil was discovered at the site. Regulatory records indicate that the cause of the spill was equipment failure. Soil samples were taken. Remediation is pending lab results.

Due to the site's historic and current usage as a gas station and its open spill status, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

- Block 696, Lot 32 located at 239 Tenth Avenue is currently occupied by a Getty Gas Station. This site is also listed in the LUST database.

On September 17, 1997 a gasoline leak was reported to the NYSDEC. The spill was the result of an equipment failure. The quantity spilled is unknown. The spill only affected land. Affected soil was removed and the leak was repaired.

Due to the site's historic and current usage as a gas station and its open spill status, it is probable that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

- Block 696, Lot 65 located at 210 Eleventh Avenue is currently an eleven story building occupied by miscellaneous factories and commercial businesses. No Historic Sanborn coverage or NYCDOB historic certificates of occupancy were available for this site.

On March 26, 2004 a four-gallon spill of No. 6 fuel oil occurred as a result of an equipment failure. The spill affected land. No further information was available.

Due to the site's historic use as commercial property occupied by factories and the open spill status assigned to the property, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

Forty-two closed spills are listed in the NYSDEC Spills database as being within 660 feet of the Site. These spills have all been closed by the NYSDEC after investigation and where applicable, remediation. Based on their regulatory status, these spills are not expected to impact the Site. Therefore, they are not considered recognized environmental conditions. However, the incidence of historic spills allow for the potential presence of VOCs and SVOCs to still be present on these sites.

The NYSDEC PBS tank database was researched to identify listings for the Site and adjacent properties. This database contains information on AST and underground UST petroleum storage facilities with a combined storage capacity of over 1,100 gallons. Several of the facilities listed in the PBS section of the regulatory report were also identified on the LUST/Spills database and were previously discussed as LUST/Spills findings.

The PBS database is merely a listing of all facilities that are required to register their storage tanks for tracking purposes and not necessarily those with reported contamination incidents. Based on distances and the absence of reported releases, these facilities are not likely to have an adverse impact on the environmental integrity of the Site.

There are thirty-one PBS facilities listed in the regulatory database that are located within 660 feet of the Site. However, according to ASTM standards, only properties that are on-site or adjacent to the Site pose an environmental risk. The database recognized three PBS listings that are adjacent to the Site.

- Block 695, Lot 7502 located at 521 W. 23rd Street is currently occupied by The Artists' Condominium.

Regulatory records indicate that one 5000-gallon UST, reported to contain No. 1 2 or 4 fuel oil is registered to this address with the NYSDEC PBS unit. There was no installation date

available for this UST, but records indicate that it underwent a tightness test on April 30, 2001. The tank is listed as being in service.

- Block 695, Lot 15 located at 527 W. 23rd Street is currently occupied by Edison Parking Garage, and 7 floors of apartments. This site is also listed in the LUST/Spills databases.

Regulatory records indicate that ten 550-gallon USTs, four containing diesel fuel and six containing leaded gasoline are registered to this address with the NYSDEC PBS unit. Nine of these tanks were closed and removed on November 1, 1999 with the remaining one closed in place on the same date. In addition there is one 2,200-gallon UST reported to contain diesel fuel and one 3,300-gallon UST reported to contain leaded gasoline registered to this address with the NYSDEC PBS unit. Both are listed as in service with no available installation dates.

- Block 694, Lot 39 located at 215 Tenth Avenue is currently occupied by a Gas Station. This site is also listed in the Spills database.

Regulatory records indicate that five 4,000-gallon tanks, reported to contain unleaded gasoline, are registered to this address with the NYSDEC PBS unit. All five tanks were installed on November 1, 1991 and successfully tested on June 1, 1998. All five tanks are listed as in service.

Regulatory records also indicate that four 2,000-gallon USTs, 3 reported to contain unleaded gas and one reported to contain leaded gasoline are registered to this address with the NYSDEC PBS unit. Two of these tanks were installed on April 1, 1971 and closed/removed on December 1, 1989. The remaining two tanks were installed on October 1, 1978 and closed/removed on December 1, 1993. In addition, there is one 550-gallon UST reported as containing "other" and one 250-gallon UST reported to contain lube oil registered to this address with the NYSDEC PBS unit. The 550-gallon tank was installed on April 1, 1964 and is currently still in service. The 250-gallon tank was installed on October 1, 1994 and is currently in service.

This database is a compilation by the EPA of reporting facilities that generate or transport hazardous waste and that must obtain a hazardous waste generator identification number or transporter permit.

There are thirty-four RCRIS generators/transporters listed in the regulatory database that are located within 660 feet of the Site. However, according to ASTM standards, only properties that are on-site or adjacent to the Site pose an environmental risk. The database recognized six RCRA listings that are adjacent to the Site.

- Block 695, Lot 7502 located at 521 W. 23rd Street is currently occupied by EMSIG Manufacturing Corporation and is listed in the RCRA database as a large quantity generator (LQG). This site is also listed in the PBS database. No further information was available.

- MH4171 located at 520 W. 23rd Street is owned by Consolidated Edison. Available regulatory records indicate that in 2002, 1,200 kilograms of petroleum oil or other liquid containing 50 parts per million (ppm) PCBs (<500 ppm) and 600 kilograms of other PCB wastes including contaminated soil, solids, sludges, clothings, etc. was generated at this manhole. Waste information at this site was reported by the NYSDEC. USEPA RCRA information was not reported.

- Block 695, Lot 15 located at 527 W. 23rd Street is currently occupied by Edison Park East. The available regulatory records did not indicate the type of generator this facility is. The site was not reported by the USEPA and no hazardous activity has been reported to the NYSDEC. However, this site is also listed in the LUST, Spills, and PBS databases

- Block 694, Lot 39 located 215 Tenth Avenue is currently occupied by a Gas Station and is listed in the RCRA database as a conditionally exempt SQG. The available regulatory records indicate that in 2003 the facility generated 600 gallons of solid waste that exhibits the characteristic of ignitability. This site is also listed in the Spills and PBS databases.

- MH61721 located at the intersection of W. 23rd Street and Tenth Avenue is owned by Consolidated Edison. Available regulatory records indicate that in 2003, 15,107 kilograms of petroleum oil or other liquid containing 50 parts per million (ppm) PCBs (<500 ppm) and 22 kilograms of petroleum oil or other liquid containing 500 ppm or greater of PCBs was generated at this manhole. Waste information at this site was reported by the NYSDEC. USEPA RCRA information was not reported.

- MH43104 located at the intersection of W. 23rd Street and Tenth Avenue is owned by Consolidated Edison. Available regulatory records indicate that in 2000, three cubic yards of lead was generated at this manhole. Waste information at this site was reported by the NYSDEC. USEPA RCRA information was not reported.

- MH61721 located on W. 23rd Street between Tenth and Eleventh Avenues is owned by Consolidated Edison. Available regulatory records indicate that in 1999, 1,293 kilograms of petroleum oil or other liquid containing 50 parts per million (ppm) PCBs (<500 ppm) was generated. In 1998, 30 kilograms of lead was generated at this manhole. USEPA RCRA generator type was no given.

In a separate listing, 513 kilograms of other PCB wastes including contaminated soil, solids, sludges, clothing, etc. was generated at this manhole in 1998. Waste information at this site was reported by the NYSDEC. US EPA RCRA information was not reported.

There are six Air Discharge Facilities located within 660 feet of the Site listed in the regulatory database. However, according to ASTM standards, only properties that are on-site or adjacent to the Site potentially pose an environmental risk. The database recognized one facility adjacent to the Site.

- Block 694, Lot 39 located at 500 W. 23rd Street is currently occupied by a Gulf Service Center. Regulatory records list this address as having an operating air discharge facility for VOCs. All records show that the facility is in compliance with NY State regulations. This site is also listed in the Spills, PBS, and RCRA databases.

Potential High Line Access Point at W. 30th Street between Tenth and Eleventh Avenues

The NYSDEC Spills database is a compilation of spill-incident reports attributable to various causes and includes LUST sites. The LUST list includes releases from either USTs or ASTs attributable to tank test failures or tank failures. Spill sites include releases from other causes such as equipment failures, tank overfills, traffic accidents or housekeeping issues. A release will

be considered "closed" by the NYSDEC when it has undergone satisfactory remediation and no further investigation is required. A release will be considered "active" or "open" when further investigation is required or the appropriate documentation necessary to close the file has not been completed. The NYSDEC Spills list was researched to identify LUST listings within one-half mile and Spill listings, attributable to other causes, within one-eighth mile of the intersection of W. 30th Street and Tenth Avenue (the "Site").

- Block 701, Lot 68 located at 550 W. 30th Street is currently a three-story miscellaneous factory/industrial building. Historic Sanborn maps show that in 1911 Lot 68 contained among a wagon shed, a contractor's yard, contractor's offices, and general office space. Maps from 1930 show the lot occupied largely in part by a Metal Works company, along with three offices. The first floor is occupies by Metal Works offices, the second floor is occupied by a Mineral Water company, and the third floor is occupied by Scenic Studios. Maps from 1950 show the lot is changed only by the absence of the Mineral Waters Company that is replaced by a draperies company and the addition of a painting and spraying company. Maps dated 1976 and 1987 show that the lot is occupied by miscellaneous factories and offices.

On August 5, 1998 a 2,000-gallon No. 2 fuel oil AST failed a tank test. The faulty AST released an unknown amount of No. 2 fuel oil that subsequently affected land.

Due to the sites historical use as a metals works, contractors yard, along with its current use as factory space with an open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

- Block 728, Lot 69 is located at 366 Tenth Avenue and is currently a gas station or garage. Historical Sanborn Maps from 1911 show that Lot 69 was previously a mixed property with a store on the first floor and a dwelling on the second floor. There was no Sanborn map coverage available for this site between the years of 1912 – 1975 however; the NYCDOB website provided additional tenant information via Certificates of Occupancy. A certificate issued in 1947 lists the occupants of this lot as a motor vehicle repair shop and garage. The following certificate, issued in 1970 lists the occupants of the two story building present on this lot as: 1st floor – a garage, storage, and a warehouse. And 2nd floor - offices. Historical Sanborn maps dated 1976 show the lot vacant. Maps dated 1987 show that the lot was used for parking.

On December 19, 2002 a 3,000-gallon No. 2 fuel oil tank failed a tank tightness test. The faulty tank released an unknown amount of No. 2 fuel oil that subsequently affected land.

Due to the site's historical use as a motor vehicle shop and garage, along with its current use as garage or gas station and the open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, PCBs, and metals on this site.

Two closed tank test failures were listed in the Spills database as being within 660 feet from the Site. These tank failures have all been closed by the NYSDEC after investigation and where applicable, remediation. Based on their regulatory status, these tank failures are not expected to

impact the Site. They are therefore not considered environmental concerns. However, the incidence of historic spills allow for the potential presence of VOCs and SVOCs to still be present on these sites.

- Manhole 56705 located at the intersection of Tenth Avenue and W. 31st Street was the site of a fuel oil spill on April 16, 2000. One gallon of unknown petroleum product was reportedly spilled in a manhole. Samples were taken. No further information was available.

Due to that quantity of the spill and the source affected, this spill is not expected to impact the Site. However, it is possible that on-site petroleum contamination does exist.

- Transformer Vault VS7361 located at the intersection of W. 29th Street and Eleventh Avenue was the site of a fuel oil spill on April 12, 2004. Five gallons of unknown petroleum product was reportedly spilled on land. No further information was available.

Due to that quantity of the spill and the source affected, this spill is not expected to impact the Site. However, it is possible that on-site petroleum contamination does exist.

At the intersection of W. 30th Street and Tenth Avenue on June 10, 1996 a car accident occurred that resulted in a 10-gallon spill of motor oil. The oil was contained on the asphalt and cleaned up within an hour. Due to the small quantity of the spill and the source affected, this spill is not expected to impact the Site. However, it is possible that on-site petroleum contamination does exist.

- Block 700, Lot 48 located at 524 W. 29th Street is currently listed as a miscellaneous garage. Historical Sanborn maps dated 1930 show that Lot 48 was partially occupied by a ground level store and general meeting rooms. Maps dated 1950-1987 show the lot is developed with office space. No further Sanborn map coverage for this lot was available. However, the NYCDOB website provided additional tenant information via Certificates of Occupancy. A 1939 certificate of occupancy stated that the lot was occupied by a boiler room located in the cellar, a locker room located on the mezzanine level, first floor offices, a milk depot, and truck space. A certificate issued in 2002 listed the occupants as follows: 1st floor – garage, milk depot, office and truck space, and a commercial art gallery with offices and storage space; and cellar – locker room and boiler room.

On October 20, 2003 a gasoline tank overfill occurred of an unknown amount. Land was affected. No further information was available.

Due to the site's historical use as a garage and the open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential presence of VOCs, SVOCs, and metals on this site.

- Block 675, Lot 36 located at 309 Eleventh Avenue is currently a Mobil Gas Station. Historical Sanborn maps show that Lot 36 has been a gas station since 1930 (possibly longer, prior years unavailable).

On August 5, 1993 an unknown amount of gasoline was reportedly spilled on land at this site. The caller stated that possible remedial action, including tank and soil excavation, would take place. No further information was available.

Based on the historical and current usage of the site as a gas station and its open spill listing, it is possible that on-site petroleum and/or hazardous materials contamination exists. Due to these factors, there is a potential for the presence of VOCs, SVOCs, and metals on this site.

At the intersection of W. 29th Street and Eleventh Avenue on August 16, 1991, 9,000-gallons of dielectric fluid was released on land. The spill occurred as a result of an equipment failure. Corrective action was taken. No further information was available.

Due to the size of the spill and its open status, it is possible that on-site PCB contamination exists

In a separate incident at this intersection, on July 24, 2002 a car equipment failure occurred and resulted in a one-gallon spill of unknown material. The spill affected land. No further information was available.

Due to that quantity of the spill and the source affected, this spill is not expected to impact the site. However, it is possible that on-site hazardous material contamination does exist.

Four closed spills are listed in the Spills database as being within 660 feet of the Site. These spills have all been closed by the NYSDEC after investigation and where applicable, remediation. Based on their regulatory status, these spills are not expected to impact the Site. Therefore, they are therefore not considered environmental concerns. However, the incidence of historic spills allow for the potential presence of VOCs and SVOCs to be present on these sites.

The NYSDEC PBS tank database was researched to identify listings for the Site and adjacent properties. This database contains information on AST and UST petroleum storage facilities with a combined storage capacity of over 1,100 gallons. Several of the facilities listed in the PBS section of the regulatory report were also identified on the LUST database and were previously discussed as LUST findings.

The PBS database is merely a listing of all facilities that are required to register their storage tanks for tracking purposes and not necessarily those with reported contamination incidents. Based on distances and the absence of reported releases, these facilities are not likely to have an adverse impact on the environmental integrity of the Site.

There are 14 PBS facilities listed in the regulatory database that are located within 660 feet of the Site. However, according to ASTM standards, only properties that are on-site or adjacent to the Site pose an environmental risk. The database recognized four PBS listings that are adjacent to the Site.

- Block 702, Lot 1 located at 351 Tenth Avenue is currently used by the Metropolitan Transportation Authority (MTA). It is a railyard for the Long Island Rail Road (eastern portion of Caemmerer Yard).

Regulatory records indicate that two 2000-gallon USTs, reported to contain No. 1, 2 or 4 fuel oil are registered to this address with the NYSDEC PBS unit. Both tanks were installed on December 1, 1986 and are currently in service.

- Block 701, Lot 43 located at 502 W. 30th Street is currently occupied by Certified Moving & Storage Company Incorporated.

Regulatory records indicate that one 5000-gallon AST reported to contain No. 1, 2 or 4 fuel oil is registered to this address with the NYSDEC PBS unit. No installation date was provided. The tank is listed as being in service.

- Block 701, Lot 68 located at 540/556 W. 30th Street is currently occupied by Beauvais Realty Corporation. This site is also listed in the LUST database.

Regulatory records indicate that one 2000-gallon UST reported to contain No. 1, 2 or 4 fuel oil is registered to this address with the NYSDEC PBS unit. There was no installation date available for this UST, but records indicate that it underwent a tank tightness test on September 1, 1998. The tank is listed as being in service.

- Block 702, Lot 50 located at 501 W. 30th Street is currently occupied by the Metal Purchasing Company Incorporated.

Regulatory records indicate that one 5000-gallon UST reported to contain No. 5 or 6 fuel oil is registered to this address with the NYSDEC PBS unit. The tank was installed on December 1, 1937 and administratively closed on January 1, 1995.

This database is a compilation by the EPA of reporting facilities that generate or transport hazardous waste and that must obtain a hazardous waste generator identification number or transporter permit.

There are 11 RCRIS gen/trans listed in the regulatory database that are located within 660 feet of the Site. However, according to ASTM standards, only properties that are on-site or adjacent to the Site pose an environmental risk. The database recognized one RCRA listing that is adjacent to the Site.

- Block 701, Lot 68 located at 550 W. 30th Street is currently occupied by The Building Block and is listed in the RCRA database as a SQG. The available regulatory records indicate that in 2000 the facility generated 165 gallons of spent non-halogenated solvents and in 2002 generated 165 gallons of solid waste that exhibits the characteristics of ignitability.

This facility does not have any RCRA violations however, the site appears on the Spills and PBS databases.

There are two air discharge facilities located within 660 feet of the Site listed in the regulatory database. However, according to ASTM standards, only properties that are on-site or adjacent to the Site pose an environmental risk. Neither facility listed was on-site or adjoining. However one of the facilities listed is also found on the Spills and RCRA databases.

In addition, as part of the FGEIS for the *"No. 7 Subway Extension – Hudson Yards Rezoning and Development Program,"* Phase II testing was conducted on the Eastern portion the Caemmerer Yard. As described in the Hudson Yards FGEIS, field screening revealed that elevated concentrations of methane are not present in soil at Caemmerer Yard East. No pesticides, herbicides or PCBs were detected in the soil samples. The mean concentrations of copper, mercury, and zinc exceed the TAGM RSCOs and naturally-occurring background concentrations. The soil results are consistent with the presence of historic urban fill (confirmed through comparison of the fill material results to samples collected of native site soils).

Groundwater sample results did not identify the presence of VOCs, PCBs, pesticides or herbicides. One groundwater sample revealed the presence of the SVOC diethyl phthalate at a concentration above TOGS. All four groundwater samples (including 1 duplicate sample) exceeded TOGS for metals concentrations; however, the types and levels identified are commonly the result of contaminants found within historic urban fill. The results of the Phase II ESA confirmed the hypothesis that anthropogenic activities (e.g., historic placement of fill material had resulted in a random distribution of contamination at the site. The Phase II ESA also revealed that the historic use of hazardous materials had not resulted in soil or groundwater contamination.

The results of the Phase II ESA indicate that the historic placement of fill material produced conditions that require management. The FGEIS states that based on the Phase II ESA, there is minimal risk of exposure to contaminated soil and groundwater for on-site receptors at Caemmerer Yard East. The contamination identified raises no unique environmental concerns and requires no specific precautions beyond the typical measures employed during construction in New York City.

Potential High Line Access Point at Washington Street

A Phase I ESA was performed in conformance with the scope and limitations of ASTM Practice E1527-00 of a three-story vacant meat packaging and distribution plant, located at 820 Washington Street, New York, New York (Manhattan Block 644, Lot 10). This ESA has revealed the following "recognized environmental conditions" in connection with the Site:

1. Sanborn fire insurance maps indicate that a gasoline storage tank was once located near the northeastern corner of the loading dock in the building from at least 1950 to 1987. However, no evidence of this tank was noted during the site reconnaissance.

2. The historical presence of a painter supplies manufacturer is of environmental concern due to its proximity and upgradient location relative to the Site. Any historical mishandling of chemical product may impact the subsurface environment in the vicinity.

3. Because the building at the Site was used as a meat processing plant for more than 60 years, it is possible that industrial strength degreasing solvents were used to clean animal fat from the facility. The handling and storage of these chemicals may pose a potential subsurface environmental concern, if the chemicals were discharged through old floor drains and sewer systems.

4. Limited observations of two small rectangular openings on the loading platform wall revealed that underneath the majority of the first floor is a crawl space with a dirt floor housing insulated pipes and scattered construction debris. Due to a blocked entry to the stairwell that leads to the crawl space, detailed observations could not be made.

5. More than a dozen of industrial strength lead acid batteries and a cardboard baler were stored in the northern end of the loading platform floor. Some of the batteries showed signs of leakage on the concrete loading platform.

6. A forklift was parked in the meat processing area on the first floor. No signs of staining or leakage were noted around the forklift.

7. A metal container with approximately 20 gallons of unknown product was found in one of the elevator motor rooms on the roof level. Minor staining was noted around the container. Significant staining on the floor around a motor was also observed in the other roof elevator motor room. It is possible that the containerized unknown product is hydraulic oil that was once used to service the elevator motors and the handling of hydraulic oil caused the floor staining.

8. Many refrigerating units are mounted on walls in various meat processing areas. It is unknown if these equipment still contain refrigerant, such as Freon or brine.

9. Asbestos-containing materials, such as pipe insulation, roofing materials, vapor barrier mastics, window caulking and other associated materials have been confirmed to be present at the property.

C. FUTURE WITHOUT THE PROPOSED ACTION

Rezoning Area

In the future without the proposed action, the current trend of commercial conversions is expected to continue in West Chelsea, as warehouse space and loft buildings are converted to commercial uses. Residential uses are expected along W. 23rd Street and the south side of W. 24th Street, and the existing (E) designations for hazardous materials mapped on these sites (Potential Development Sites 46 through 53) would remain. The conversion of former manufacturing buildings could expose occupants and/or construction workers to residual hazardous materials contamination. Exposure to residual hazardous materials would be primarily occupational and regulated pursuant to OSHA standards.

With respect to the former MGP site, though unlikely, it is possible that VOCs from MGP byproducts could migrate as soil vapor through cracks in building foundations and might present an exposure risk to the community in the vicinity of the former MGP. This risk would be addressed by Con Edison as part of its obligations under the VCA with NYSDEC with respect to the former West 18th Street MGP, assuming that property owners allow Con Ed to enter their properties.

Without the proposed action, the existing potential for migration of groundwater containing MGP contaminants (primarily benzene, ethylbenzene, toluene, and xylene) would continue; however, the groundwater is not used for potable water in Manhattan.

New as-of-right development and its associated construction, including soil-disturbing activities, would have potential for exposure. However, this would be limited because the mechanisms in the VCA would assure that hazardous materials exposure would not occur to workers and future occupants.

As described above, two sites within the former MGP have been investigated and are currently being remediated concurrent with redevelopment: Block 690, Lots 12 and 54. These sites have transitioned from the VCP to the BCP.

Under No-Action conditions, a commercial office building is expected to be developed on a portion of Project Development Site 19 (Block 690, Lots 12 & 54). As noted under "Existing Conditions", these lots have entered into NYSDEC's Voluntary Cleanup Program. Under No-Action conditions, it is expected that a voluntary remediation under the auspices of NYSDEC will be completed in anticipation of construction.

High Line Structure

The High Line would remain in its existing, unused state, and any identified hazardous materials associated with it would remain in place. No open space would occupy the High Line. No public access points to the structure would be provided.

D. FUTURE WITH THE PROPOSED ACTION

As described in Chapter 2, "Land Use, Zoning and Public Policy," West Chelsea would be occupied by a mix of residential, commercial, and community facility uses in an area historically occupied by manufacturing uses. In addition, the High Line would be converted to a public open space.

Rezoning Area

As described above under existing conditions, as part of the proposed zoning map amendment, (E) designations for hazardous materials would be mapped, ensuring that sampling and remediation take place where contamination may exist. All lots within the projected and potential development sites with the potential to result in hazardous materials contamination would be mapped with (E) designations.

The (E) designation would require that the fee owner of such a site conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the Department of Environmental Protection (NYCDEP) before the issuance of a building permit by the Department of Buildings (pursuant to Section 11-15 of the Zoning Resolution – Environmental Requirement). The (E) designation also includes a mandatory construction-related health and safety plan which must also be approved by NYCDEP.

The mapping of (E) designations precludes the potential for significant adverse hazardous materials impacts as a result of the proposed action.

High Line

The City has agreed to work with NYCDEP in the completion of a Phase II analysis of the High Line structure, pursuant to the NYCDEP approved protocol. ~~This will be prepared between the issuance of the DEIS and the FEIS.~~ At the time the FEIS was being prepared, this work was in progress. ~~However, if~~ As the testing program has not been completed by the issuance of the FEIS, the City has committed to NYCDEP required remediation of the High Line structure. No work on contaminated portions of the High Line structure would be allowed until it is certain that public health is not compromised. Since, NYCDEP acceptance of the testing plan and remediation work is required, impacts to the environment would not occur.

As noted above in the "Existing Conditions" section, there would be up to 13 public access points to the High Line provided in the future with the proposed action. Nine of these would be provided through easements on private properties, specifically projected development sites. As these sites would receive (E) designations the potential for significant adverse hazardous materials impacts would be precluded. Public access easements on these sites cannot be established and access structures constructed until the environmental assessment, and if required remediation, requirements of the (E) designations have been met. Most likely, this would be conducted by the property's fee owner; in the unlikely event the City proceeds with providing public access points at these locations the City has committed to completing Phase II analyses, testing protocols, subject to NYCDEP approval, and the implementation of any required remediation measures prior to construction of access points.

For the four access points that would be provided by the City on City-owned properties, (E) designations would not be placed on these locations. However, a similar mechanism (to ensure that further investigative and/or remedial measures, as well as health and safety measures, occur prior to and/or during construction) is currently being developed. The City, acting through EDC, has committed to submit a testing protocol to NYCDEP for review and approval during the design phase and to conduct remediation required by NYCDEP.

E. BASE FAR SCENARIO

The Base FAR Scenario involves the same 53 projected and potential development sites as the proposed action, although this scenario would involve lower permitted density than the proposed action. As hazardous material impacts are generally site-specific, the hazardous materials effects of the Base FAR Scenario would be identical to that of the proposed action, with the exception of the High Line, which would not be converted to public open space. Therefore, with the placement of (E) designations, the Base FAR Scenario would not result in significant adverse hazardous materials impacts.

F. DETAILED MEASURES TO AVOID IMPACTS

As described under existing conditions, the proposed action area, including the development sites, the elevated High Line, and the potential public access points to the proposed High Line open space have the potential to contain hazardous materials. Preventative measures would be undertaken to protect the safety of the public, future occupants, and construction workers, as well as the larger environment for areas where redevelopment has the potential to encounter areas of contamination. With respect to the development sites, this would be required through the placement of (E) designations on the zoning map. Sampling protocols and remediation associated with the proposed High Line open space, including potential access locations, would be provided by the City, acting through EDC. This would include subsurface investigations to determine the nature and extent of contamination and prescribed construction measures to manage contaminated materials prior to and/or during construction. These measures would be presented in site-specific Sampling and Remedial Work Plans and Health and Safety Plans. Work would be reviewed and approved by NYCDEP, and would be performed in accordance with applicable City, State and Federal requirements.

Further investigation would include an assessment of properties located on, adjacent to or within 400 feet of a development site, to the extent that such research was not undertaken as part of this assessment. The assessment would include a site reconnaissance inside all portions of buildings currently on the development site. This assessment would be performed with the objective of determining the need for and/or scope of a subsurface testing program that would be performed on the development lots. When there is known or potential contamination, subsurface testing is necessary to guide health and safety procedures and measures necessary to protect both workers and the community and to indicate whether special handling or disposal of soils or excavated materials is likely to be required during development. A Subsurface Testing Work Plan would be prepared for submission and approval by NYCDEP. The Work Plan would specify soil sampling locations and analytical parameters based on both the potential sources of contamination and the proposed construction activities. The Work Plan would also detail any proposed groundwater monitoring well locations. The parameters that would be analyzed would include, at a minimum, those classes of chemicals that were identified as having the potential to have impacted on-site soil and groundwater conditions.

A Subsurface Investigation Report would be prepared following the completion of the sampling program. The report would document field activities, present field and laboratory data, and discuss conclusions and recommendations drawn from the results of the investigation. The report would compare the analytical results to appropriate city, state, and federal standards and guidelines. The report would be submitted to NYCDEP for review and approval. Based on the recommendation provided by NYCDEP, further investigation and/or remediation would occur on the development lots, as necessary, either prior and/or during construction. The protocols for further investigation and/or remediation would be presented in site-specific Sampling and/or Remediation Work Plans, as necessary, which would include Health and Safety Plans.

If contamination were found, prior to site development, a site-specific Construction Health and Safety Plan (CHASP) would be prepared. The CHASP would include health and safety procedures to minimize the exposure to workers and the public, including monitoring dust (and, if applicable VOCs). The CHASP would include provisions for the identification and

management of known and/or expected buried tanks or contaminated materials that might be encountered during soil disturbance activities anticipated as part of construction.

Excavation and proper off-site disposal is the procedure most commonly used for remediating contaminated soils. However, on sites with VOC contamination, measures such as a vapor barrier and/or a soil vapor extraction system might be used. If groundwater contamination exceeds the sewer use limitations set by the NYCDEP and dewatering were required, the water would be treated by readily available technologies (such as oil water separators for petroleum related VOC and SVOCs; or activated carbon for VOCs). The decision about which treatment procedures to use would depend on the types and levels of contaminants, and the quantity and discharge rate of water requiring treatment.

On development sites where contaminants might remain in soil and/or groundwater after construction, once construction activities are completed, any remaining soil would be "capped" by paved areas and/or two feet of clean fill material. In this manner, potential pathways of exposure would be eliminated with the possible exception of the migration of VOCs. However, if elevated levels of VOCs would remain at the site, the building design would incorporate sufficient measures (e.g. vapor barriers and/or venting systems) to eliminate the potential for exposure.

G. CONCLUSION

Rezoning Area

In accordance with CEQR protocol, a preliminary screening was conducted to assess, based on the prior site use, whether there is a potential for exposure to residual contamination on projected and potential development sites, as identified by New York City Department of City Planning (DCP). All 143 tax lots on the 53 projected and potential development sites were evaluated pursuant to preliminary screening criteria contained in Title 15, rules of the City of New York, Chapter 24, Section 4, and Hazardous Materials Appendix 5 of the *CEQR Technical Manual* Appendices.

The preliminary screening analysis determined that (E) designations are warranted at all of the lots located on the projected and potential development sites except those that contain existing residential buildings and that are not expected to be redeveloped under the proposed action. As part of the proposed zoning map amendment, these sites would receive an (E) designation for hazardous materials, ensuring that sampling and remediation take place where contamination may exist.

The (E) designation would require that the fee owner of such a site conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the Department of Environmental Protection (NYCDEP) before the issuance of a building permit by the Department of Buildings (pursuant to Section 11-15 of the Zoning Resolution – Environmental Requirement). The (E) designation also includes a mandatory construction-related health and safety plan which must also be approved by NYCDEP. The (E) designation therefore eliminates the potential for significant adverse hazardous materials impacts. The mapping of (E)

designations precludes the potential for significant adverse hazardous materials impacts as a result of the proposed action.

Two lots on Projected Development Site 19 (Block 690, Lots 12 & 54) have entered into NYSDEC's Voluntary Cleanup Program and are expected to be remediated under NYSDEC's auspices under No-Action conditions. (E) designations would be mapped for these lots as well.

High Line

A Phase I Environmental Site Assessment (ESA) (updated in 2004) of the elevated structure which comprises the High Line has been prepared. The properties located under the High Line elevated structure were not investigated as part of this update or as part of the original July 2000 Phase I ESA; however, the sites below the High Line in the vicinity of the four potential public access points proposed to be located on City-owned property or in the public right-of-way, were assessed in this ~~DEIS~~ FEIS.

The City will continue to coordinate with NYCDEP in the completion of any investigations and in the development of a remediation plan. The City, acting through EDC, has committed to submit a testing protocol to NYCDEP for review and approval during the design phase and to conduct remediation required by NYCDEP. No work on contaminated portions of the High Line structure would be allowed until it is certain that public health is not compromised. Since NYCDEP acceptance of the testing plan and remediation work is required, significant adverse impacts herewith related to the High Line, would not occur.

There would be up to 13 publicly accessible points to the High Line provided in the future with the proposed action. Nine of these would be provided through easements on private properties, specifically projected development sites. As these sites would receive (E) designations, the potential for significant adverse hazardous materials impacts would be precluded. Public access easements on these sites cannot be acquired and access structures constructed until the requirements of the (E) designations have been satisfied. Most likely, this would be conducted by the property's fee owner; in the unlikely event the City proceeds with providing public access points at these locations the City has committed to completing Phase II assessments, including sampling protocols, subject to NYCDEP approval, and the implementation of any required remediation measures prior to construction of access points.

For the four access points that would be provided by the City on City-owned properties or within the public right-of-way, (E) designations would not be placed on these locations. However, a similar mechanism (to ensure that further investigative and/or remedial measures, as well as health and safety measures, occur prior to and/or during construction) is currently being developed with regards to both the elevated High Line structure and properties in the vicinity of the four potential access points. The assessment has determined that the potential for hazardous materials contamination does exist. Although a Phase II ESA ~~will be~~ has not yet been conducted for these sites ~~and the results presented in the FEIS. T~~ the City, acting through EDC, has committed to submit a testing protocol to NYCDEP for review and approval during the design phase and to conduct remediation required by NYCDEP. With these commitments by the City, no significant adverse impacts are expected with respect to the High Line.