

## 3.10 HAZARDOUS MATERIALS

### INTRODUCTION

The proposed action would not result in significant adverse hazardous materials impacts.

This chapter assesses the potential for the presence of hazardous materials in soil and/or groundwater at both the projected and potential development sites identified in the Reasonable Worst-Case Development Scenario (RWCDS) under the proposed 125<sup>th</sup> Corridor Rezoning and Related Actions.

An assessment of potential hazardous materials impacts was performed for the projected and potential development sites for a number of reasons. For example, rezoning of manufacturing lots to a residential use can lead to exposure of future residents to hazardous materials. Therefore, as part of the process of rezoning a manufacturing zone to allow commercial or residential uses or development adjacent to a manufacturing zone, a hazardous materials assessment is appropriate. An additional consideration for the development sites included determining whether an (E) designation is necessary at privately-held sites that are projected or potential development sites under the proposed actions. An (E)-designated site is designated on the City zoning map (by block and lot) within which no change of use or development requiring a New York City Department of Buildings permit may be issued without approval of the New York City Department of Environmental Protection (NYCDEP). These sites require the NYCDEP's review to ensure protection of human health and the environment from any known or suspected hazardous materials associated with the site. (E) designations for hazardous materials are listed in Appendix C. An additional mechanism that is used for City-owned sites is a Memorandum of Understanding. There are three City-owned sites, comprised by 8 tax lots, where this would apply. These sites are listed in Appendix D (See "APPENDIX D TABLE 2: CITY-OWNED SITES SUBJECT TO MEMORANDUM OF UNDERSTANDING WITH NYCDEP FOR HAZARDOUS MATERIALS CLEANUP.")

### Methodology

As described in the *New York City Environmental Quality Review (CEQR) Technical Manual*, the goal of a hazardous materials assessment is to determine whether a proposed action could lead to potential increased human exposure to hazardous materials and whether the increased exposure could lead to significant public health impacts or environmental impacts. The objective of this analysis is to determine which, if any, of the projected and potential development sites identified as part of the reasonable worst case development scenario (RWCDS) may have been adversely affected by current or historical uses on-site, adjacent to, or within 400 feet of the sites, such that the property may be adversely impacted by hazardous materials and thus require an (E) designation.

Hazardous materials, as defined in the *CEQR Technical Manual*, are substances that pose a threat to human health and the environment including, but not limited to, heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), methane, polychlorinated biphenyls (PCBs), pesticides, polychlorinated dibenzodioxins, dibenzofurans, and other

hazardous wastes. Hazardous wastes are defined under the regulations promulgated by the Resource Conservation and Recovery ACT (RCRA) as solid waste that meets at least one of the four characteristics: ignitability, corrosivity, reactivity, and/or toxicity, or as identified in NYCRR Part 371.4. For the study area, 49 ~~48~~ sites were identified as either potential or projected development sites. Each of these sites were evaluated for the potential impacts due to hazardous materials by reviewing: (1) historical topographic maps and Sanborn fire insurance maps; (2) an environmental regulatory database summary for the project area including a 1,000 foot study area; and (3) observations to identify environmental conditions that may be associated with a particular property. Historic United States Geological Survey (USGS) topographic maps dating from 1897 were obtained and reviewed to assess historical conditions within the project area. Information such as the current occupants or site operations/activity, Tax Block and Lot numbers, addresses, land use, lot size, historic site information, building information, notes on general environmental related observations, neighboring property uses, and listings on environmental regulatory agency databases were also used in this assessment.

### **Historic Sanborn Fire Insurance Map Review**

Historic and current Sanborn maps were reviewed to assess site activities and operations from specific years for the period of 1902 through 1996. For projected and potential development sites and adjacent or nearby lots, the historic land use was investigated to determine if activities at these sites may have the potential to release chemicals to the environment. For the majority of the sites, the Sanborn map coverage included 1902, 1912, 1951, 1976, 1980, 1989, and 1996. The review consisted of identifying the name(s) of the occupant(s), the type of business conducted, and the years of occupancy for each of the specific lots. Facilities listed in the *CEQR Technical Manual* with respect to hazardous materials were identified, including lots with a prior land use such as automobile service stations, gasoline service stations, filling stations, electric power substations, coal storage yards, etc. that make use of, potentially generate, or dispose chemicals that may have a deleterious effect on the environment

### **Database Review**

In preparing this analysis, a number of databases of potential sources of hazardous materials were reviewed, including<sup>1</sup>:

- National Priorities List for Federal Superfund Cleanup (NPL), last updated September 27, 2006
- Delisted NPL Rezoning Area List last updated September 27, 2006
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), including CERCLIS NFRAP Rezoning Areas, last updated October 10, 2006
- Resource Conservation and Recovery Information System – Corrective Action Activity RCRIS CORRACTS and Non-CORRACTS Treatment, Storage, or Disposal Facilities (RCRIS-TSD), last updated March 15, 2006. The Corrective Action Tracking System (CORRACTS) database is a list of facilities that are found to have had hazardous waste

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<sup>1</sup> The source of information was a database purchased from EDR, New Milford, CT.  
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releases and require Resource Conservation and Regulation Act (RCRA) corrective action activity, which can range from site investigations to remediation.

- Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans), last updated June 13, 2006. The Resource Conservation and Recovery Information System (RCRIS) database is a list of sites, which include generators of hazardous waste regulated under RCRA.
- Federal Institutional Control/Engineering Control Registries, last updated March 21, 2006
- Emergency Response Notification System (ERNS), last updated December 31, 2005. The Emergency Response Notification System (ERNS) is a database of notifications of oil discharges and hazardous substance releases.
- Toxic Release Inventory System (TRIS), last updated December 31, 2004
- New York State Inactive Hazardous Waste Disposal Rezoning Area (SHWS)/ New York State Hazardous Substance Waste Disposal Rezoning Area Inventory (HSWDS), last updated August 4, 2006. The Hazardous Substance Waste Disposal (HSWDS) database includes any known or suspected hazardous substance waste disposal sites. The database also includes sites de-listed from the registry of Inactive Hazardous Waste Disposal Rezoning Areas. These sites are eligible as Superfund sites now that NYS Superfund has been refinanced and revised.
- New York State Solid Waste Management Facilities Rezoning Areas (SWMF), last updated July 31, 2006. The Solid Waste Management Facilities (SWMF) database is an inventory of landfills, incinerators, transfer stations, and other sites that manage solid wastes.
- New York State Leaking Storage Tank Incident Reports (LTANKS), last updated July 26, 2006. The New York State Leaking Storage Tank (LTANKS) database provides information on petroleum related releases associated with underground storage tanks (USTs) and above-ground storage tanks (ASTs).
- New York State Spills Information (NY Spills), last updated July 26, 2006. The New York State Spills Information (NY Spills) database provides information on petroleum related releases, which can be related to USTs and ASTs.
- New York State Petroleum Bulk Storage Tanks (USTs/ASTs), last updated September 14, 2006. The Petroleum Bulk Storage (PBS) tanks database is an inventory of registered liquid petroleum bulk storage facilities. Inclusion of a site on the PBS list does not necessarily constitute a recognized environmental condition but instead merely indicates the presence of registered underground storage tanks (USTs) and aboveground storage tanks (ASTs).
- New York State Chemical Bulk Storage Tanks (USTs/ASTs), last updated September 14, 2006. The Chemical Bulk Storage (CBS) tanks database is an inventory of registered liquid hazardous chemical bulk storage facilities.
- New York State Major Oil Storage Facilities (MOSF), last updated January 1, 2002
- New York State Voluntary and Brownfield Cleanup Program Rezoning Areas, last updated August 4, 2006
- New York State Registered Dry Cleaners, last updated June 15, 2004. The registered dry cleaners database was researched to identify listings within one-quarter mile of the Rezoning Area.

- New York State Air Emission System (AIRS), last updated December 31, 2002
- New York State Pollutant Discharge Elimination System (SPDES), last updated November 8, 2006
- New York State Manufactured Gas Plant Rezoning Areas (Coal Gas) (no update)
- New York City Department of Buildings Files (on-line)

## **Field Survey**

Visits to the 125<sup>th</sup> Street corridor were conducted on November 13 and 16, 2006, and January 9, 2007. The site visits consisted of a visual inspection from the adjacent sidewalks. The intent of the inspection was to identify and verify those facilities within and adjacent to the rezoning area's boundary (e.g.: dry cleaners, gasoline stations, auto repair facilities, electrical sub-stations, etc.) that represent potential environmental concerns to the 49 ~~48~~ projected and potential development sites. Each site was observed in the field in order to verify literature and data records, and to identify existing environmental conditions and note any potential evidence of historic conditions. Therefore, observations were often made from the exteriors of buildings and lots. Each site was observed with attention toward environmental conditions of concern. These environmental conditions include, but are not limited to: the nature of the operations at a property; evidence of petroleum bulk storage tanks from either an oil fill port and/or vent; sidewall vents where potential air discharges occur; electrical substations; any sheen, discoloration or staining of surfaces on or adjacent to a property; topographical disturbances including excavation and filling; stressed vegetation; and solid waste disposal practices. Activities or occupants of adjacent properties were also noted to assess the possibility of a neighboring property contributing an impact on each of the projected or potential sites.

## **Topography and Hydrogeology**

Based on reports compiled by the USGS, the 125<sup>th</sup> Street Corridor lies at elevations between 10 and 30 feet above sea level. The highpoint of the corridor is approximately at the intersection of St. Nicholas Avenue with 125<sup>th</sup> Street (Elev. + 30) and has a gentle slope from this point both west to the Hudson River and east to the Harlem River. As groundwater flow is inferred to be in the same general direction as topography, it is expected to flow and easterly toward the Harlem River, and westerly toward the Hudson River. It is expected that groundwater would be encountered at a depths ranging from of 10 to 15 feet below grade on the east side, to 30 to 40 feet, depending on depth to bedrock, on the west side.

### **3.11.1 EXISTING CONDITIONS**

According to historical maps the study area was developed prior to 1902, with residential and complimentary commercial uses. Development continued and was noted throughout subsequent map reporting years, showing increasing residential and commercial development, and with it an increasing number of gasoline service stations and automobile repair services. By 1912, a pattern of development is well established, and was not substantially altered in subsequent years. Streets north and south of 125<sup>th</sup> Street show increasingly intense development with mixed use

buildings (commercial ground floor with residential upper stories) become a common building type.

### **3.11.2 FUTURE WITHOUT THE PROPOSED ACTION**

In the future without the proposed actions, a number of projected and potential development sites are assumed to be developed with residential, commercial and community facility uses. These sites are described in Chapter 1, “Project Description.” These sites are expected to be converted or developed on an as-of-right basis.

### **3.11.3 FUTURE WITH THE PROPOSED ACTION**

In the future with the proposed actions there are 26 projected development sites and ~~23~~ 22 potential development sites that are assumed to be developed. The analysis below examines projected and potential sites where it could be expected that development in the future with the proposed actions would have the potential for environmental impacts due to potential presence of hazardous materials. These impacts could include the potential for impacts to the health and safety of workers during construction, the potential for the transport of contaminated soil, or the potential for impact on future residents or employees of individual buildings on these sites. These adverse impacts are principally associated with the following uses and concerns:

- Former or current gasoline filling stations or automotive service centers on a development site or an adjacent site.
- Auto-related or “transportation” uses on the development site or an adjacent site (e.g., garage, filling station, auto repair, service or painting);
- Records of underground storage tanks or leaking underground storage tanks on the development site or an adjacent site;
- Records of spills of petroleum or chemicals on the development site or an adjacent site;
- Records of above ground storage tanks on the development site or an adjacent site; and
- Sites adjacent to power substations or utilities.

For all privately owned sites, as listed in Appendix D Table 1, (E) designations are recommended as part of the proposed zoning. Recommendations for (E) designations are based on whether the projected and potential development sites may have been adversely affected by current or historical uses at, adjacent to, or within 400 feet of these sites. By placing (E) designations on sites where there is a known or suspect environmental concern, the potential for an adverse impact to human health and the environment resulting from the proposed action is avoided. The (E) designation provides the City with the mechanism for addressing environmental conditions so that significant adverse impacts do not occur as a result of site development.

The (E) designation requires that pre-development activities at each site include a Phase 1 environmental site investigation, and, if necessary, a sampling protocol and remediation to the satisfaction of NYCDEP before the issuance of a building permit. Appendix D Table 1 presents the complete list of privately-owned projected and potential development sites for which (E)

designations are proposed (See Appendix D Table 1, “Projected and Potential Sites Requiring (E) Designations for Hazardous Materials”).

### **City-owned Sites**

In addition to the sites receiving (E) designations, there are City owned properties that have been identified as having the potential for hazardous materials contamination. Because these sites are under City ownership, they are not subject to the regulations governing (E) designations. The agencies that own and control these sites will enter into Memoranda of Understanding or other agreements with NYCDEP to ensure that any testing and remediation activities, as deemed necessary by NYCDEP in accordance with NYCDEP requirements, are performed prior to and/or during development of or a change in use on these sites. (See “APPENDIX D TABLE 2: CITY-OWNED SITES SUBJECT TO MEMORANDUM OF UNDERSTANDING WITH NYCDEP FOR HAZARDOUS MATERIALS CLEANUP.”)

For Projected Development Site 7, located on Block 1930, Lot 55, the ("Mart 125" site, owned by the New York City Department of Business Services), an environmental assessment published on July 28, 2004 analyzed rehabilitation of the existing building with no ground disturbance, and found no potential for significant adverse Hazardous Materials impacts. This EIS analyzes redevelopment of the property as a projected development site, and ground disturbance for the creation of one level of below-grade parking, with retail and residential uses above. The redevelopment of this projected development site could result in ground disturbance and thus the potential for significant adverse impacts due to Hazardous Materials. Accordingly, an MOU is warranted.