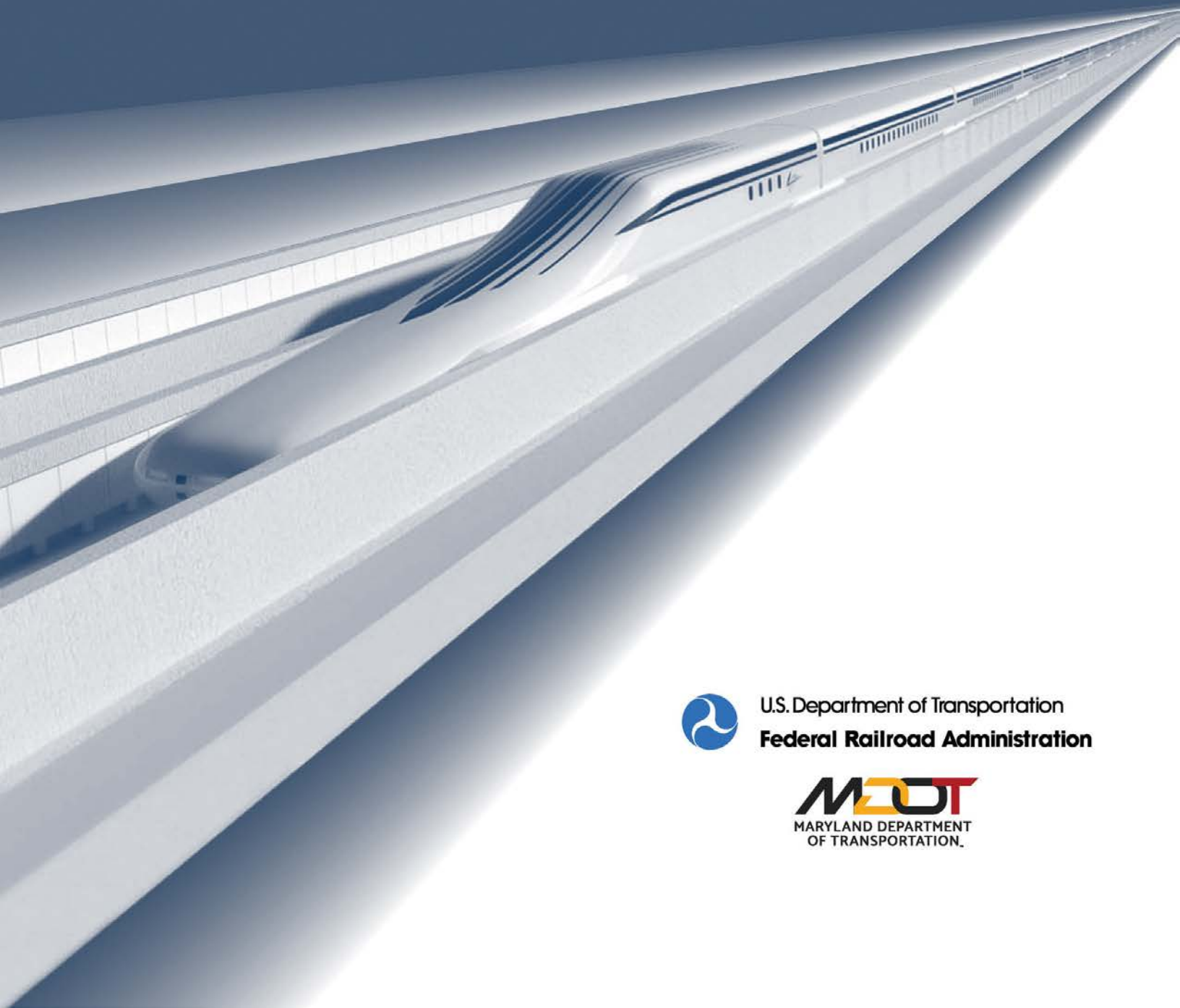


Section 4.15

Hazardous Materials Sites and Solid Waste

BALTIMORE-WASHINGTON SUPERCONDUCTING MAGLEV PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND
SECTION 4(f) EVALUATION



U.S. Department of Transportation
Federal Railroad Administration

MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION.

4.15 Hazardous Material Sites and Solid Waste

4.15.1 Introduction

This section identifies existing hazardous material sites that may be encountered during construction, and solid waste that would be generated during construction and operation of the Superconducting Magnetic Levitation Project (SCMAGLEV Project). An existing hazardous material site is land that has hazardous substances present in the site soil or groundwater. Hazardous substances include those substances defined as hazardous by the United States Environmental Protection Agency (USEPA). A solid waste is any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.”¹

4.15.2 Regulatory Context and Methodology

4.15.2.1 Regulatory Context

In accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., the Council on Environmental Quality (CEQ) regulations, 40 C.F.R. Parts 1500 - 1508, and the Federal Rail Administration’s (FRA) Procedures for Considering Environmental Impacts, 64 Fed. Reg. 28545 (May 26, 1999), the Federal Railroad Administration (FRA) assessed the transportation or use of any hazardous materials which may be involved in the Build Alternatives, and the level of protection afforded residents of the SCMAGLEV Project Affected Environment from construction period and long-term operations associated with the Build Alternatives. In addition, Federal and state laws guide the scope of FRA’s hazardous materials analysis, including:

Federal

- 29 United States Code (U.S.C.) § 651 (Occupational Safety and Health Act [OSHA])
- 15 U.S.C. §2601-2629. (Toxic Substances Control Act [TSCA])
- 40 U.S.C. § 11001-11050 (Emergency Planning and Community Right-to-Know Act [EPCRA])
- 42 U.S.C. § 6901 et seq. (Resource Conservation and Recovery Act [RCRA])
- 42 U.S.C. § 9601 et seq. (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA])

¹ Criteria for the Definition of Solid Waste and Solid and Hazardous Waste Exclusions
USEPA. <https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions#solidwaste>

Maryland

- Code of Maryland Regulations (COMAR) 26.10 (Oil Pollution and Tank Management)
- COMAR 26.13 13 (Disposal of Hazardous Substances) - Chapter 01 (Hazardous Waste Management System: General); Chapter 02 (Identification and Listing of Hazardous Waste); and Chapter 03 (Standards Applicable to Generators of Hazardous Waste)
- COMAR 26.04.06.01 to 26.04.10.10 Solid Waste Management

District of Columbia

- Title 8, Environmental and Animal Control Protection
- Title 21, Water and Sanitation; Chapter 7, Solid Waste Control

4.15.2.2 Methodology

Hazardous Materials Sites

To evaluate the potential to encounter existing hazardous materials during construction, FRA utilized Environmental Data Resources, LLC (EDR) to conduct a regulatory database search of Federal, state, and local records for known underground storage tank (UST) facilities; landfills; hazardous waste generator facilities; hazardous waste treatment, storage, and treatment/storage/disposal (TSD) facilities; and other potentially contaminated sites. Consistent with EDR's default search distance, the search was conducted within an approximate one-mile search radius from a centerline estimated between the Build Alternatives.

FRA then defined the SCMAGLEV Project Affected Environment for hazardous materials to consist of the limits of disturbance (LOD) for each Build Alternative, including all surface and subsurface elements, plus an additional 0.25-mile buffer extending outward from the LOD. FRA utilized the search results found within these limits to evaluate the potential impacts the SCMAGLEV Project may have on the identified sites and the human health and environmental impacts associated with the identified sites. The Affected Environment considered for this analysis includes that identified in Section 4.22 Safety and Security, for vulnerable locations or vulnerable population centers within a 500-foot radius of the LOD. This considers sites that, if affected, could amplify safety or security concerns to confirm and supplement data included in the EDR report, FRA completed a "windshield" survey to obtain additional information regarding visual evidence and confirmation of EDR data. The survey consisted of observing sites from inside vehicles utilizing roadways and other public areas. The purpose of the "windshield" survey was to identify possible evidence of existing use or storage of toxic or hazardous materials, landfills or other disposal units, visible soil contamination, aboveground storage tanks, drums or barrels of hazardous materials, or monitoring wells. Because the observations were made from outside property boundaries or adjacent observation points, the information obtained in the survey is limited and is not meant to be all inclusive.

FRA used the EDR report to identify sites within the SCMAGLEV Project Affected Environment that are of potential concern; considered the proximity of each site to the SCMAGLEV Project LOD; and used additional information obtained from the “windshield” survey and web research to assign a Risk Ranking to each site (see Step 3 in the Methodology described in Appendix D.8). The “Risk” refers to the potential for the site to pose threats to human health and the environment. The assignment of a Risk Ranking is a three-step process:

1. Assign a Listing Score based on the regulatory databases of concern associated with each site. Using the definition of each database and best professional judgement, FRA estimated the relative risk posed by sites in each database to assign a Listing Score using numerical indicators 2 through 5. Thus, the Listing Score reflects the relative risks of the listing(s) associated with a site, without regard to location or site conditions.
2. Identify Adjustment Factors that account for the distance from each site to the LOD, the relative direction of groundwater flow at the site, and readily available information from other sources (e.g., documented completion of environmental remediation).
3. Apply the Adjustment Factors, where applicable, to the Listing Score to assign a Risk Ranking for each site that ranges from High (5) to Insignificant (1).

Appendix D.8 provides a detailed description of this process, including a full list of the regulatory databases and their associated listing score, and the Adjustment Factor definitions used to develop the Risk Rankings.

Hazardous Materials, Hazardous Waste, and Other Solid Waste

FRA defined the SCMAGLEV Project Affected Environment for an analysis of hazardous materials, hazardous waste, and other solid waste as the LOD for each Build Alternative, including both surface and subsurface elements. FRA reviewed available plans for construction and operations to identify what types and quantities of hazardous materials will be used and stored as part of the SCMAGLEV Project construction (e.g., diesel fuel/gasoline, emergency generator emissions, solvents, adhesives) and operations (e.g., cleaning supplies, fuel). FRA also reviewed the types of hazardous waste and other solid waste that may be generated by the SCMAGLEV Project, both in the short-term during construction and the long-term during planned operations. In the absence of further detailed SCMAGLEV Project specific information, FRA has identified the types of materials and wastes expected. FRA qualitatively considered potential effects from the Build Alternatives on water resources, hazardous materials, and solid waste. Impacts to these resources may also result in potential public health, safety and risks to the environment. Based on the analysis presented for each resource, FRA identified impacts to the resources noted above that could pose a direct risk to public health, employee safety and the environment. Specific avoidance and minimization

measures to reduce or eliminate potential impacts to these resources have been summarized in Section 4.21 Public Health and Safety.

4.15.3 SCMAGLEV Project Affected Environment

4.15.3.1 Hazardous Materials Sites

FRA identified and ranked more than 1,000 sites within the SCMAGLEV Project Affected Environment with the potential for hazardous materials site concerns. Most sites identified within the SCMAGLEV Project Affected Environment are designated a Risk Ranking of 1 or 2, meaning relatively low risk. FRA focused on sites with Risk Rankings of 3 or higher because they have the greatest potential for the SCMAGLEV Project to encounter contaminated soil, groundwater, or other hazardous materials during construction. In such cases, environmental remediation may be required to remove the hazardous materials or design measures needed to protect human health. The Risk Rankings for all sites are identified in Appendix D.8.

Only three sites had the highest Listing Score of 5 (High Risk), as National Priority List (NPL) sites: Fort George G. Meade, the Beltsville Agricultural Research Center (BARC), and the Patuxent Research Refuge (PRR). FRA developed a Risk Ranking for these sites based on the information summarized below.

- **Fort George G. Meade:** Each Build Alternative would be located on and near the western border of Fort George G. Meade military base. The base was placed on the NPL on July 28, 1998, based on known contamination at four locations. These four locations are well outside the SCMAGLEV Project Affected Environment. However, in addition to the four known contaminated locations, the base contains multiple other locations of potential soil and groundwater contamination, two of which FRA identified within the SCMAGLEV Project Affected Environment. FRA reviewed documents that describe the nature of contamination at these two locations and the status of cleanup efforts. Both of these two additional sites were formally designated as requiring No Further Action by the United States Environmental Protection Agency (USEPA). Based on this information, FRA used the three-step process (described in Appendix D.8) to assign these two locations a Risk Ranking of 1 (Insignificant) for all Build Alternatives.
- **BARC:** The U.S. Department of Agriculture (USDA) is conducting CERCLA activities at BARC, which was placed on the NPL in 1994, and has been addressing soil and groundwater contamination throughout the BARC campus since that time. Many of the contaminated locations have already been cleaned up or are involved in investigations aimed at completing cleanups. Based on available information of these contaminated locations, all a part of their Remedial Action Program, FRA has assigned a Risk Ranking of less than 3 to all sites identified on BARC property, except one: BARC 32 – polychlorinated biphenyls (PCB) Storage Area.

At BARC 32, data from monitoring wells indicate that chlorinated solvents (perchloroethylene [PCE] and trichloroethylene [TCE]) are present in the groundwater at a depth of approximately 30 feet and have migrated southeast from the site toward the Baltimore-Washington Parkway (BWP). The known limits of the BARC 32 groundwater plume extend within the LOD for eight of the 12 Build Alternatives. Based on this information, FRA assigned the BARC 32 site a Risk Ranking of 4 for Build Alternatives J1-01 through J1-06, as well as Build Alternatives J-03, -04, -05, and -06. The remaining Build Alternatives have a Risk Ranking of 3 for this site.

Coordination with USDA on the status of remedial investigations and remedial actions at BARC sites would be necessary to better understand the risks posed and liabilities that may be incurred by the SCMAGLEV Project. In particular, the consequences of siting facilities over the groundwater plume from BARC 32.

- **Patuxent Research Refuge (PRR):** The North Tract of PRR was originally part of Fort George G. Meade and used as a military training ground. It was transferred from Fort George G. Meade to the PRR as part of Defense Base Closure and Realignment. FRA identified one site of potential concern on PRR property, the Medical Waste Site (MWS - OU16) within the SCMAGLEV Project Affected Environment. The MWS was investigated in the late 1990s, and the conclusion was made by USEPA that No Further Action was necessary. The resulting MWS Risk Ranking was 1 (Insignificant) for all Build Alternatives.

The North Tract of the PRR has been designated as a High Explosive Impact (HEI) Area, with the potential for buried unexploded ordnance (UXO). The North Tract abuts the east side of the BWP and appears to extend beneath the LOD for surface elements associated with Build Alternatives J-01 through J-06. FRA has assigned the HEI area of the PRR a Risk Ranking of 4 for these Build Alternatives. Build Alternatives J1-01 through J1-06 are not located on the PRR, and no impact is expected. Further coordination and survey of the UXO area would be required within this area prior to final design and implementation and plans for avoiding UXO within the areas of disturbance.

Most of the sites (32) identified within the SCMAGLEV Project Affected Environment and designated with a Risk Ranking of 3 or 4 are associated with leaking underground storage tanks (LUSTs) or other petroleum releases to the environment. These LUST sites are generally located within the densely developed areas of Baltimore City and Washington, D.C.

Appendix D.8 provides detailed information for all sites regarding location, database listings, and association with Build Alternatives.

4.15.3.2 Hazardous Materials, Hazardous Waste, and Other Solid Waste

The SCMAGLEV Project will involve the use of hazardous materials for construction and operation and will result in the generation of hazardous waste and other solid waste. This will require management of construction and operating activities to protect human health and the environment.

Construction

Within the SCMAGLEV Project Affected Environment, solid wastes generated during construction and demolition (i.e., C&D waste) is likely to include materials and products incorporated into the built environment, including earth, pavement, and organic plant materials. Types of solid wastes associated with land clearing operations are earthen material such as clays, sands, gravels, silts, and topsoil; tree stumps, brush, and limbs; logs; vegetation; and rock. Types of C&D wastes associated with the razing of buildings, roads, bridges, and other structures includes structural steel, concrete, bricks (excluding refractory type), lumber, plaster and plasterboard, insulation material, cement, shingles and roofing material, floor and wall tile, asphalt, pipes and wires, and other items physically attached to the structure.

Some C&D waste materials and products encountered or generated during construction present a known risk to human health and the environment. These include hazardous wastes (listed, characteristic and universal types identified by the USEPA); asbestos-containing materials (friable); asbestos-containing materials (non-friable); lead-containing materials (including lead-based paint); products containing polychlorinated biphenyls (PCBs); solvents, chemicals, paints, petroleum-derived products; diesel/gasoline; fluorescent and compact fluorescent lamps; electronics; and medical waste. The SCMAGLEV Project does have the potential to encounter naturally occurring asbestos during tunneling operations through bedrock, as described in Section 4.13 Geology.

Spoils from tunneling and cut/fill from construction would be generated during construction activities. The soils anticipated to be produced by the SCMAGLEV Project would be disposed of pursuant to a coordinated plan developed during final design. FRA recognizes that further geotechnical and soil studies may determine that much of the spoil derived through construction has the potential to be useful as daily cover for local landfills (e.g. Millersville Landfill, Baltimore City Dump, Prince George's County Waste Management) and/or fill for local or future projects (e.g. Sparrow's Point redevelopment, Baltimore-Washington International Thurgood Marshall Airport [BWI Marshall Airport]). Spoils that are not transported to landfills for daily cover use or put to some other productive use would be designated as a solid waste. The Project Sponsor will provide additional detail regarding estimated volumes and final transportation routes of spoil during continuing design. FRA identifies potential preliminary routes in Section 4.1

Operations

The operation and maintenance of the SCMAGLEV Project would require the handling, transporting, generating, storing, and disposing of hazardous and solid waste. Hazardous materials including lubricants, hydraulic fluids and cleaning products would be used during the routine maintenance of rail vehicles and stations. Wastes that would require disposal include used oil, used cleaning products, solvents, and paint. Most of these hazardous materials and wastes are used or generated at the transfer stations and maintenance facilities during maintenance, repair, washing and fueling activities. Based on the type of waste, the waste would be transferred to a landfill if considered

clean and acceptable to the landfill owner; a RCRA Part B permitted incinerator if classification of products indicates it necessary for incineration; or a recycling facility and would be disposed of in accordance with Federal, state and local requirements. Solid waste is also generated from passenger and employee usage including maintenance, administrative, security, and food service, and is primarily composed of municipal solid waste consisting of everyday items and food waste.

More complete information on hazardous and solid waste is expected to be developed as the design advances and geotechnical and environmental subsurface site investigations are conducted. This information would be used to prepare a Construction Contingency Plan and Hazardous Materials and Solid Waste Management Plan.

4.15.4 Environmental Consequences

This section describes the environmental consequences of encountering hazardous materials sites, and the potential consequences of using hazardous substances and generating solid waste during construction and operation of the Build Alternatives.

4.15.4.1 No Build Alternative

Under the No Build Alternative, the SCMAGLEV Project would not be built and therefore no impacts related to the construction or operation of a SCMAGLEV system would occur. However, remediation of contaminated sites due to construction of the SCMAGLEV Project would also not occur.

4.15.4.2 Build Alternatives

The quantity and nature of the use and storage of hazardous materials and generation of solid waste during SCMAGLEV Project construction would be greater in areas that require a higher degree of earth-moving, such as tunnel excavation sites, portals, and underground station construction sites.

Hazardous Materials Sites

Build Alternatives J1-01 through J1-06 include a longer tunnel portion than Build Alternatives J-01 through J-06. However, excavations conducted for Build Alternatives J-01 through J-06 may have a slightly greater impact than Build Alternatives J1 due to the higher number of medium-high risk sites identified along the Build Alternatives. Sites identified within the SCMAGLEV Project Affected Environment with a Risk Ranking of 3 or 4 represent the greatest potential for hazardous materials to be present in the soil and groundwater at the listed sites. These sites therefore pose a greater potential risk to human health and the environment. **Table 4.15-1** provides the total of sites ranked 3 or 4 for each of the Build Alternatives.

Table 4.15-1: Medium High and Medium Risk Hazardous Materials Sites

Build Alternative	Risk Rankings		Total Sites
	3	4	
J-01	40	11	51
J-02	47	13	60
J-03	40	11	51
J-04	31	12	43
J-05	38	14	52
J-06	31	12	43
J1-01	36	6	42
J1-02	37	6	43
J1-03	36	6	42
J1-04	27	7	34
J1-05	28	7	35
J1-06	27	7	34

Build Alternatives J-01, J-02, J-03, and J-05 have the highest number of sites ranked with a medium risk (3) to medium high risk (4), ranging from 51 to 60. The other Build Alternatives have a lower number of sites ranked 3 or 4, ranging from 34 to 43.

Alignment

Approximately nine more sites are associated with Build Alternatives J alignments (42) than associated with Build Alternatives J1 alignments (32), suggesting that the Build Alternatives J1-01 through J1-06 alignments would potentially encounter fewer hazardous material site concerns.

The BARC 32 groundwater contamination plume, with a Risk Ranking of 4, is associated with Build Alternatives J1-01 through J1-06 alignments, but it is also associated with two of the six Build Alternatives J alignments. Build Alternatives J-01, J-02, J-04 and J-05 would not be at risk by the identified plume, as these do not encroach the west side of the BWP where the plume is located. The proposed SCMAGLEV Project elements that do exist over the plume are the support structures for the viaduct and proposed overhead power line relocations. Efforts to minimize disturbance to this area such as spacing between power lines, containment of soils/spoil, and construction BMPs would be evaluated and incorporated into site design and mitigation measures. During final design and selection of a preferred alternative, this area and other potential contaminated soil and groundwater locations would be investigated further to determine the presence of volatile organic compounds (VOC)s and similar contaminants which may have the potential risk for vapor intrusion. This may occur if the VOC vapors migrate into buildings or enclosed spaces. FRA does not

consider this of concern at this specific location, as the plume is not located in an area where any SCMAGLEV systems buildings would be constructed. Continued monitoring of this location would be required to determine if it has or is migrating.

The PRR HEI Area, also with Risk Ranking of 4, is associated with the Build Alternatives J-01 through J-06.

Stations

The Cherry Hill Station is associated with nine sites, the Camden Yards Station and Mount Vernon Station are only associated with one site each, and the BWI Station did not have any listings. The nine listings for the Cherry Hill location, in Baltimore, include a variety of commercial and industrial properties. Based on these numbers, the Cherry Hill Station is likely to require more remediation and mitigation than the two other stations.

Trainset Maintenance Facilities (TMFs)

The BARC Airstrip option is the only TMF option that resulted in any listings with a Risk Ranking of 3 or 4. The seven sites identified for this option include a variety of commercial and industrial sites.

Hazardous Materials, Hazardous Waste and Other Solid Waste

The solid wastes generated during construction are generally expected to be similar for all Build Alternatives, except for solid wastes that are a result of C&D waste at sites with existing buildings or contaminated soil or groundwater. FRA anticipates there to be a difference in the volume of tunneling spoils between the Build Alternatives, but the solid waste implications between Build Alternatives would be insignificant. Given the depth and nature of the soils, which are anticipated to be clean and undisturbed, FRA anticipates that the material can potentially be useful as daily cover for local landfills. Spoils used for cover would not be classified as solid waste. Solid wastes generated during operations are expected to be the same between all Build Alternatives.

Soil suspected of contamination, and wastes that are generated, would be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Prior to construction the Project Sponsor will prepare a Construction Management Plan which includes a Waste Management Plan (WMP) to address sampling analysis, characterization, handling, storing, transporting and disposing of hazardous waste and construction and demolition waste generated during construction and operation activities. The Waste Management Plan would specify that where practicable, uncontaminated construction and demolition waste would be diverted from landfills by reuse or recycling. The structures to be demolished as part of the SCMAGLEV Project would be inspected for the presence of asbestos-containing materials, PCBs or lead-based paint, and other hazardous building materials. This coordination would take place during preliminary engineering.

4.15.4.3 Short-term Construction Effects

SCMAGLEV Project construction would require the use and storage of certain hazardous materials and subsequent generation and accumulation of hazardous wastes and/or solid waste that have the potential to create an environmental impact. Potential short-term construction effects may include:

- Dewatering and excavation activities may further cause migration of contaminants through the soil and groundwater.
- Accidental spills or releases of hazardous substances used to run construction equipment.

FRA anticipates that excavation and special disposal of contaminated soils and groundwater may be required at some sites during construction. Demolition of buildings and roadways with potential asbestos-containing materials, PCBs and lead-containing materials may require abatement or special handling and disposal requirements. The WMP would additionally specify designated hazardous materials and waste storage areas for items needed both during construction and operations such as fuel storage tanks and emergency generators.

4.15.5 Potential Minimization and Mitigation Strategies

Hazardous materials information for the sites identified above was limited to data from the EDR reports, windshield surveys, and web research. Although detailed information was available for sites on Federal properties listed in the EDR report (Fort Meade, PRR, and BARC), most of the site information used in this analysis relied on EDR data and did not include more in-depth review of available file material. The EDR reports do not describe site conditions, only the regulatory status. Moving forward, the following actions are recommended to provide detailed information about sites that may be encountered and affect the design of the SCMAGLEV Project.

- Conduct environmental site assessments for all properties along the selected Build Alternative, including final construction laydown areas located both north and south of the Build Alternatives (refer to Appendix B Mapping Atlas), to identify sites for further evaluation. Assessments will include review of data in the USEPA Enforcement and Compliance History Online (ECHO) which provides details on site compliance history.
- Review of USEPA online EJSCREEN database, which provides relevant hazardous waste and demographic data sets that may relate to considerations of human health.
- For sites with higher risks and potential for significant impacts to design and construction, contact site owners and arrange for site investigations.
- Consult with regulatory agencies for sites where regulatory status is not certain, or where detailed information is needed.

- Site specific research and comparison of 2020 BWI Marshall Airport Environmental Assessment Finding of No Significant Impact/Record of Decision, to SCMAGLEV Project EDR results.

Identification and review of the higher risk hazardous material sites is the first step toward minimizing the impacts posed by hazardous materials sites within the SCMAGLEV Project Affected Environment. In order to minimize risk, additional knowledge of sites may be necessary. Such assessments could include:

- Further collaboration with Federal, state, and local agencies to obtain more detailed information regarding potential hazardous materials sites.
- Additional/supplemental detailed site reconnaissance; a review of additional regulatory records and existing technical reports; interviews with persons knowledgeable about the properties; or site investigation through sampling of soil and groundwater.
- Evaluation of completed soil and groundwater sampling and monitoring to determine the potential for contaminant migration due to construction and project operations and identify measures that could avoid or minimize such migration.

The Project Sponsor will need to conduct further coordination and survey of the identified UXO area within PRR property prior to final design and implementation. The survey would include a scan or probe of the area of concern to assess if there is any unexploded material embedded in the ground, ensuring any planned construction works can be carried out as scheduled with the minimum amount of risk to those involved. A UXO clearance could then be established and associated with any proposed earth disturbance.

With a better understanding of the potential hazards, consideration of remediation activities can be evaluated, such as removal of contamination, in situ treatment, or soil capping. Alternatively, Activity Use Limitations (AULs) could be used to prevent land use that prevent exposures from the substances of concern, based on risk assessments. In some cases, the development of design features that provide protection against the effects of the contamination, rather than conducting remediation, may be used to minimize impacts. This can include standard best management practices (BMPs) identified in previous Sections 4.10 Water Resources and 4.11 Wetlands and Waterways, such as silt fencing, sediment traps, and dewatering operations. If VOCs and other chemicals that may migrate into vapor are identified within the soils and/or groundwater, mitigation may be required to minimize and prevent the risk for vapor intrusion. In areas where the SCMAGLEV Project may impact existing restoration/clean-up sites, where No Further Action was identified, additional clean-up may be required. This therefore may result in the No Further Action status removed.

FRA anticipates that some excavation and special disposal of contaminated soils and groundwater may be required during construction. Requirements for management of such soils and groundwater would be established through sampling from borings and temporary wells installed in areas of concern. The sampling results would be used to

determine the levels of hazardous substances and classify the materials for appropriate disposal. The results may also require the design of barriers to prevent contaminated groundwater inflows or harmful vapors into structures.

This information, including a site-specific sampling and analysis approach will be included in a WMP prepared by the Project Sponsor. The Project Sponsor will document the methodology, procedures, equipment, and analytical requirements for sampling performed and characterize areas exceeding regulatory thresholds in a Sampling and Analysis Plan as part of the WMP. Pollutants may include petroleum or hazardous substances listed in the current Maryland Department of the Environment Soil and Groundwater Cleanup Standards document or the current USEPA Regional Screening Levels (RSLs) table. Soils or fill material that are subject to Federal and state hazardous waste regulations (40 Code of Federal Regulations [CFR] Part 260 and the Code of Maryland Regulations [COMAR] 26.13) are any soils contaminated by a listed hazardous waste, or that display a characteristic of a hazardous waste.

FRA will require establishment of procedures for the proper storage and maintenance of equipment and hazardous materials. This will include but not be limited to the mitigation measures listed below.

- Ensure that all SCMAGLEV Project personnel receive the appropriate type and level of hazardous materials training and RCRA training.
- Conduct frequent and routine documented inspections of the construction site for violations, to verify consistent implementation of general construction permit conditions and BMPs.
- Designate special storage areas for hazardous materials and hazardous waste, containment berms, and coverage from rain.
- Avoid disturbing contaminated locations, if possible.
- Conduct frequent and routine spill drills.
- Ensure adequate supply of spill kits.

The Project Sponsor will develop a Construction Management Plan, which includes the WMP, that describes how to avoid and/or mitigate existing contamination and handle discovery of unknown contamination. This plan will outline procedures for initial contaminant screening, soil and groundwater sampling, laboratory testing, soil stockpiling, and removal, transport, and disposal of contaminated materials at licensed facilities, according to the nature and concentration of the contamination. Specific disposal methods and facilities will be identified as more detailed site data are available.

The plan would also establish roles, responsibilities and procedures for workers to follow in areas with known or suspected soil or groundwater contamination. For sites that require demolition and removal, the plan will address issues such as lead, asbestos, PCBs, and other materials that would require disposal in a TSCA landfill. The plan will specify how to appropriately contain, remove, and dispose of the asbestos and

lead-containing material at licensed disposal facilities. The Project Sponsor will consider the addition of site-specific plans for high-risk sites.

For SCMAGLEV Project operations, the Project Sponsor will develop a Hazardous Materials and Solid Waste Management Plan as a tool for compliance that will address the following:

- Waste characterization (e.g. hazardous) and accumulation (inspections, secondary containment, liners and covers, waste compatibility, selecting the proper container, security, communication, equipment, etc.)
- Green Procurement/Waste Minimization
- HAZMAT safety requirements
- Spill Prevention Control and Countermeasure (SPCC) plan or Spill Prevention Plan (SPP) for fuels and oils to address tank design (leak detection, overfill protection, double-walled, etc.); drum storage area design/containment system; tank and container inspections; spill prevention techniques; spill response; and spill training and reporting
- Stormwater Pollution Prevention Plan (SWPPP) requiring that all persons are trained on the plan and know how to implement all the required BMP (Refer to Section 4.10 Water Resources for further stormwater management requirements)