



3.12 ENVIRONMENTAL HEALTH

3.12.1 INTRODUCTION

This section provides information on potential impacts associated with known and suspected hazardous material sites located in the Study Area and the potential for impacts related to electromagnetic fields (EMFs). Information on the location of known and suspected hazardous material sites was obtained from the Washington State Department of Ecology (Ecology) Facility/Site database. (Washington Department of Ecology, 2017) Sites included for the analysis are those known and suspected hazardous material sites that either have the potential for or have confirmed hazardous material releases to the environment as well as those that manage or store hazardous materials.

After describing current conditions, the Impacts analysis considers how each alternative could affect environmental health in the Study Area. This includes the potential for encountering contaminated sites during construction, spills, and the potential to increase electromagnetic fields.

This analysis identifies significant impacts using the following thresholds:

- Hazardous chemicals or conditions that might result in health or safety impacts or impede future development.
- EMF conditions that might result in health or safety impacts or impede future development.

There are no performance standards related to environmental health.

Mitigation measures to address potential impacts are addressed after the Impacts section.



3.12.2 AFFECTED ENVIRONMENT

REGULATORY ENVIRONMENT

Key regulations for environmental health include:

- CERCLA 40 Code Federal Regulations (CFR) Part 300
- Resource Conservation and Recovery Act Regulations 40 CFR Sections 260 and 280
- Toxic Substances Act Regulations 40 CFR Sections 761.60–761.79
- Washington State Model Toxics Control Act (Chapter 70.105D Revised Code of Washington (RCW))
- Washington Administrative Code (WAC) Chapter 173-340-WAC Model Toxics Control Act Clean Up regulations
- Washington Underground Storage Tank Act Chapter 90.76 RCW
- WAC Chapter 173-360(2) WAC pertaining to underground storage tank (UST) systems
- Bellevue City Code Chapter 24.06.125 pertaining to prohibited discharges to storm and surface water system or receiving water

HAZARDOUS MATERIAL

Hazardous material sites are those properties that have been affected by a current or previous use that could have resulted in a release of hazardous substances or petroleum products. Hazardous material sites also include structures that contain lead-based paint and asbestos-containing materials (ACMs). According to Ecology's facility/site database, there are 59 hazardous material sites located in the Study Area and, as illustrated in Exhibit Exhibit 3.12-1, the majority of the sites are centered along NE 8th Street and 116th Avenue NE in areas currently and historically associated with automotive dealerships.

Most of the sites in the Study Area are identified as Hazardous Waste Generators (HWG). HWG are facilities that generate any quantity of a dangerous waste (i.e., antifreeze, solvents, and lab chemicals), ranging from small quantity to large quantity generators, depending on the amount of hazardous waste generated for a given month. Being listed as a HWG does not mean the site is contaminated; however, a number of the HWG sites in the Study Area are also identified as sites known and suspected

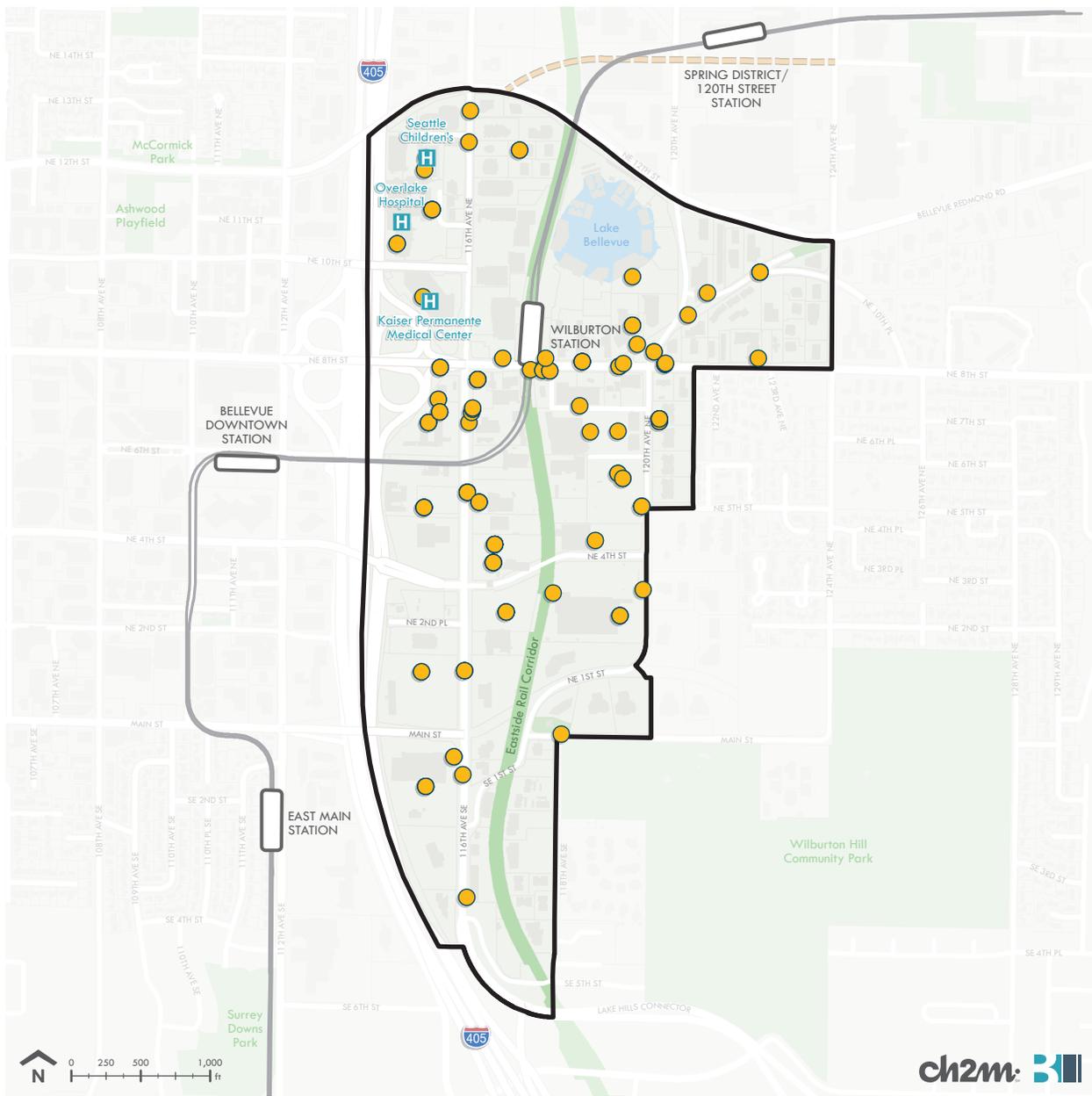


Exhibit 3.12-1 Hazardous Material Sites

Source: Washington Department of Ecology, 2017

- Wilburton Study Area Boundary
- Hospitals
- East Link Light Rail Stations
- Known and Suspected Hazardous Material Sites
- East Link Light Rail Route
- Spring Blvd—Under Construction
- Parks & Open Space
- Buildings



for hazardous materials. The types of hazardous material sites maintained by Ecology on its database include:

- **Underground Storage Tank (UST).** Any one or combination of tanks (including connecting underground pipes) that is used to contain regulated substances and has a tank volume of ten percent or more beneath the surface of the ground. This term does not include any of the exempt UST systems specified in Washington Administrative Code (WAC) Chapter 173-360-110(2) or any connective piping. See Chapter 173-360 WAC.
- **Leaking Underground Storage Tank (LUST) Facility.** A leaking underground tank cleanup site being cleaned up with Ecology oversight or review.
- **Voluntary Cleanup Sites.** For a fee, Ecology staff will review an independent cleanup report(s) and provide a written decision about the adequacy of the cleanup actions taken and described in the report.
- **State Cleanup Site.** A site being cleaned up under state regulations. Regulations include MTCA or its predecessors.
- **Independent Cleanup.** Any remedial action without department oversight or approval and not under an order or decree.
- **Independent Remedial Action Program (IRAP).** Ecology staff reviewed IRAP reports and provide written determination indicating whether the cleanup meets MTCA standards.

There are no Superfund sites (sites designated under U.S. Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC Sec. 9601 et seq.) within one mile of the Study Area boundaries and there are no known abandoned or closed solid waste facilities located within the Study Area. Beyond the sites that are identified as known or suspected in the Ecology database, there is the potential to encounter unknown hazardous material sites in these locations based on the number of existing and past automotive dealerships and their associated service departments in the Study Area.

In addition, older buildings, typically those constructed before the mid-1970s, have the potential for lead-based paints or asbestos, where asbestos abatement has not been conducted. Lead-based paints were banned starting in 1978 by the Consumer Products Safety Commission and ACMs were banned in the early 1970s. Both may still be located within any buildings that have not undergone abatement.



ELECTROMAGNETIC FIELDS

Electromagnetic fields (EMFs) occur naturally and are produced wherever electricity is used, and can result in disruptions and malfunctions with sensitive equipment. EMFs can also negatively affect utilities by causing corrosion, which reduces the effective utility lifecycle as a result of stray currents (electrical current finds an alternative conducting path). EMFs can impact sensitive equipment, especially equipment found at medical facilities. The Phase 1 Draft EIS and Phase 2 Draft EIS for the Energize Eastside Project include detailed information with regards to EMFs and power lines including calculations of existing and expected levels along the proposed transmission line corridor. (PSE, 2017) EMFs in the Study Area can result from power lines. With distance, the EMFs levels decrease. There are two existing electric transmission lines that travel north-south through the Study Area:

- 115-kilovolt line owned by Puget Sound Energy (PSE) located along 116th Avenue NE
- 230-kilovolt line owned by Seattle City Light located along the Eastside Rail Corridor

In addition, there are two PSE substations. One is located in the Study Area (Center distribution substation) and the other just north of the Study Area (North Bellevue distribution substation). The Phase 2 Energize Eastside Draft EIS includes alternatives in the Study Area. The Environmental Health chapter of the Phase 1 Draft EIS analyzed the potential for short-term and long-term EMF impacts. (PSE 2017) Sound Transit has also started construction on the East Link project which will use electricity to operate the trains and will create EMFs. As part of the environmental process the East Link EIS addressed the potential for both short-term and long-term EMF impacts. (Sound Transit 2011b) Both EIS documents determined no impacts with EMF that would require mitigation as a result of construction and operation of the projects.

Buildings with sensitive equipment including magnetic resonance imaging and an optical surgery unit are located in the northern part of the Study Area and associated with the three hospitals (see Exhibit 3.12-1). There are no other known sites within the Study Area with sensitive equipment.



3.12.3 IMPACTS

IMPACTS COMMON TO ALL ALTERNATIVES

Significant impacts would result if an alternative would cause any of the following conditions:

- Introduction of or release of hazardous chemicals or conditions that would result in health or safety impacts or impede future development.
- EMF conditions that would result in health or safety impacts or impede future development.

There are no performance standards related to environmental health.

Short-term Impacts

Hazardous Materials

The greatest potential for impacts associated with hazardous materials would occur during construction. Construction activities could release hazardous materials due to ground disturbing, dewatering, and demolition activities. Development within the Study Area, especially where known hazardous material sites are located, needs to address the removal of hazardous materials, which could include contaminated soils and groundwater and, in older structures, the potential for lead-based paints and ACMs. Depending on the type and quantity of material and consistent with applicable law, hazardous materials may be contained on-site. Otherwise, hazardous waste must be disposed in accordance with applicable regulations. Also, depending on groundwater depth and the type of hazardous materials, it is possible the materials have infiltrated and migrated, requiring additional remediation. Cleanup efforts implemented before or during construction would reduce potential short-term and long-term impacts.

There are no known short-term impacts associated with electromagnetic fields. The East Link EIS notes no short-term EMF impacts on sensitive facilities. (Sound Transit 2011b)



Long-term Impacts

Hazardous Materials

Because documented hazardous materials requiring remediation would be removed or contained prior to new development, it is assumed there would be no significant health and safety impacts on those living, working, or visiting the area, or impacts on the intended uses of properties within the Study Area.

Most of the documented hazardous materials sites are associated with auto-related uses and would be cleaned up to applicable standards. Given the nature of the documented sites and the proposed development in the Study Area, which would not include large generators of hazardous materials, the need for special emergency services are not anticipated during either construction or operation. The Eastside Hazardous Materials Unit, a consortium of eastside fire departments that Bellevue Fire Department, would respond to hazardous material incidents. Fire Station 6, located north of the Study Area includes equipment for the Eastside Hazardous Materials Unit including at least one hazardous materials technician assigned at all times.

As growth occurs in the Study Area, there is potential for hazardous material spills associated with petroleum products as traffic and the potential for accidents increases. Any spills would be cleaned up consistent with applicable state and local requirements and no significant impacts are anticipated.

Electromagnetic Fields

Development is not anticipated to result in impacts related to EMF, or to be impeded by EMF. The operation of East Link would result in a new sources of EMFs, but as documented in the East Link EIS, no impacts on human health are anticipated. (Sound Transit, 2011b) The EIS noted that, based upon available data, the operation of the light rail is unlikely to generate health impacts for riders or people along the tracks. The operation of the East Link does have the potential to result in stray currents, which could impact utilities. During construction of East Link through the Study Area, Sound Transit would coordinate with utility providers (City of Bellevue and PSE) and implement best management practices to minimize or avoid the potential for stray currents.



It should be noted that the Preferred Alternative for Energize Eastside is located east of the Study Area.

Grand Connection Options

The Grand Connection Options under Alternatives 1 and 2 could be affected by hazardous material if the sites are contaminated; however, it is anticipated that through the environmental and design process for the Grand Connection, hazardous sites would be identified and mitigated as part of the development. No impacts with regard to EMF are anticipated with the Grand Connection Options. East Link does not result in EMFs is anticipated to result in human health effects. If required, an analysis of potential EMF impacts would be addressed as of the project-level documentation

Public Space

If the establishment of open space options required construction or site disturbance, impacts would be similar to those under Impacts Common to All Alternatives.

PERFORMANCE STANDARDS

There are no applicable performance standards.

IMPACTS OF THE NO ACTION ALTERNATIVE

The impacts under the No Action Alternative are consistent with Impacts Common to All Alternatives, and this alternative would not result in other impacts.

IMPACTS OF ALTERNATIVE 1

The impacts under Alternative 1 are the same as those described above under Impacts Common to All Alternatives, but the increased development under Alternative 1 increases the likelihood of encountering contaminated sites. The increased development would also result in increases in traffic, which would increase the potential for hazardous material spills related to traffic accidents. However, these spills are anticipated to be minor in nature and would be contained and/or cleaned up after the spill. The increased development could result in greater effects related to EMFs,



though any increase would not result in impact beyond those described above under Impacts Common to All Alternatives.

IMPACTS OF ALTERNATIVE 2

Impacts under Alternative 2 would be the same as those described under Impacts Common to All Alternatives and under Alternative 1. However, given the greater buildout anticipated, this alternative would have the greatest potential for impacts from encountering hazardous materials on redevelopment sites and accidental spills as a result of the anticipated increase in traffic volumes. Refer to Chapter 2 for information on the potential development and Section 3.9 for information on the potential increase in traffic volumes. The increased development could result in greater effects related to EMFs however, any increase would not result in impacts beyond those described above under Impacts Common to All Alternatives.

3.12.4 MITIGATION MEASURES

INCORPORATED PLAN FEATURES

None.

REGULATIONS AND COMMITMENTS

- Development will need to comply with all applicable federal, state, and local regulations. In Washington State, Ecology's Toxics Cleanup Program is responsible for implementation of the Model Toxics Control Act (MTCA). MTCA sets strict cleanup standards to ensure human health and the environment are not compromised. Chapter 173-340 WAC provides information on the cleanup process for hazardous material sites.
- The City of Bellevue Building Department and Fire Department regulate hazardous materials through the International Building Code and the International Fire Code. New development would need to meet the requirements prior to permits being issued for construction.
- Development and implementation of Construction Stormwater Pollution Prevention Plans would be required by the City to



minimize the potential for release of hazardous materials to soil, groundwater, or surface water during construction. Chapter 24.06.125 of the Bellevue City Code prohibits the discharge of pollutants to the City's stormwater system.

- Abatement of lead-based paints and asbestos would be required by the Puget Sound Clean Air Agency (PSCAA) and other agencies and laws as structures are either renovated or demolished.
- Development of sites with suspected or known hazardous materials will require a Phase I Environmental Site Assessment per ASTM 1527 and potentially a Phase II Environmental Site Assessment (soil, sediment, or groundwater sampling) prior to construction-related activities, including demolition. Demolition of buildings would require a Phase I and potential Phase II assessment prior to demolition.
- Development must comply with hazardous materials regulatory requirements associated with project construction. To the extent possible, the amount of contamination at a site with known contamination would be verified prior to construction, to minimize exposure to hazardous materials.

OTHER PROPOSED MITIGATION MEASURES

- During construction, the following measures would minimize potential impacts of accidental releases of hazardous material:
 - » Preparing a comprehensive contingency and hazardous substances management plan, a worker health and safety plan, a spill prevention control and countermeasures plan, and a Construction Stormwater Pollution Prevention Plan.
 - » Managing and disposing of hazardous or contaminated materials in accordance with applicable laws and regulations.



3.12.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts would occur with the implementation of mitigation measures. Hazardous materials sources would not impede redevelopment. Federal, state, and local regulations are in place to require cleanup of sites and to promote spill prevention. EMF sources may influence the location of businesses with sensitive equipment (e.g. medical) but otherwise would not impede redevelopment. Separate environmental studies have been completed on EMF sources from utilities associated with PSE's Energize Eastside project and the Sound Transit East Link project. As noted above under Section 3.12.2, the analysis for both projects did not identify impacts associated with EMF or require mitigation measures rail line, with identified mitigation measures as appropriate.



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