

3.4 HAZARDOUS MATERIALS AND RISK OF EXPLOSION

This section describes existing environmental health conditions on the site and discusses the potential for hazardous materials impacts from implementation of the Proposed Action and alternatives. This section is based upon the November 12, 2004, Phase I Environmental Site Assessment report; the March 16, 2005, Supplemental Environmental Investigation report prepared by Kleinfelder; and the February 10, 2005, Anomaly Excavation Report prepared by Stemen Environmental, included as **Appendix G** to this DEIS.

3.4.1 Affected Environment

The site is currently vacant, with no documented history of environmentally hazardous uses. Historical uses on the site (dating back to the 1940s) include four residential homes and three small commercial buildings. These uses were all eliminated from the site by 2002.

A Phase I Environmental Site Assessment (ESA) was conducted for the site in 2004 and a Supplemental Environmental Investigation was conducted in 2005 (see **Appendix G**). A previous Phase I ESA was conducted in 2002, and a Level 1 ESA was conducted in 1992.

The 2004 ESA found no visual indication of hazardous materials, underground or above ground storage tanks, surface straining, stressed vegetation, or the presence of groundwater wells. No documented evidence of historical use of hazardous materials on the site was found on file with the federal, state and local agencies reviewed as part of the ESA. The site is not currently a recorded source of soil and/or groundwater contamination.

Agency records indicated that one of the former commercial occupants of the site (an automobile detail shop that occupied a portion of the site from 1980 to 1993) removed a 500-gallon waste oil underground storage tank (UST) from the site in 1990. However, information on file with the Washington State Department of Ecology (Ecology) indicated that soil samples collected from the UST excavation did not reveal the presence of petroleum hydrocarbons, and there are no records of any groundwater impacts (see **Appendix G** for further information).

Based on the site's former uses, it is possible that USTs formerly used for heating oil and/or domestic wells were associated with the former buildings in the western portion of the site, because of the age of these former structures. Any USTs would have been required by City of Tumwater regulations to be removed during demolition of the former structures. However, no available documentation exists to show that any tanks were removed, aside from the UST associated with the former auto detail shop discussed above. Records indicate that a large area of "uncontrolled fill" was deposited in the southern portion of the site, and was found at approximately from 2 to 15 feet below ground surface (bgs) in some areas during geotechnical investigations conducted for this EIS. Based on soil samples collected from the fill material during subsurface investigations conducted during 1992 and 2002, the fill material was not contaminated with hazardous materials (see **Section 3.1, Earth**, for further discussion of the uncontrolled fill material). However, groundwater samples were not collected during the 1992 and 2002 environmental investigations for chemical analysis. Due to the large volume of uncontrolled fill at the site, the 2004 Phase I Environmental Site Assessment indicated that a potential exists that contaminant sources not observed during previous investigations may be present on site. Additionally, should there be buried contaminant sources, the potential exists for the site's groundwater to have been impacted.

During a subsequent environmental investigation incorporating near-surface geophysical exploration methods performed at the site in March 2005, one anomaly potentially indicative of a UST was detected along the western boundary of the site; however, this anomaly was unearthed in January 2006 and found to be non-hazardous (it was found to include metal objects other than a UST).

Additionally, analytical results of the groundwater samples collected from five monitoring wells installed at the site in February 2005, indicated that the concentrations of petroleum hydrocarbons (gasoline, diesel and heavy oil), volatile organic compounds, and dissolved metals were not detected at levels greater than the corresponding Washington Department of Ecology Model Toxics Cleanup Act (MTCA) Method A (unrestricted use) groundwater cleanup standards. Based on the groundwater analytical results, it appears that the fill material deposited on the site has not impacted the site's groundwater. Any hazardous materials (i.e. paint cans) or visibly impacted soil areas that may be encountered within the fill material (or at other areas throughout the site) during site development activities would be removed and properly disposed of in accordance with applicable Federal, State and local requirements (see **Appendix G** for further information).

A light industrial facility (Albany International) located to the east of the site generates small quantities of hazardous waste. There are no records on file with Ecology indicating that the Albany International facility has impacted soil and/or groundwater with hazardous materials. The potential for hazardous materials from the Albany International facility to impact the site is considered low.

3.4.2 Impacts

Proposed Action

Other than a 500-gallon waste oil tank that was removed from the site during 1992 (see **Section 3.4.1** above), no hazardous materials are known to exist onsite, and no known hazardous materials would be impacted by construction or operation of the proposed retail store or associated parking area.

A potential exists for the discovery of hazardous materials within the uncontrolled fill present on the site, or within groundwater present within the site. A limited potential exists that UST(s) could be found during earthwork activities at unknown locations within the site. A limited potential also exists for other buried hazardous materials, visibly impacted soil areas and/or septic tanks to be encountered on the site during earthwork activities.

During construction, there would be some potential for accidental spills of construction-related chemicals; however, these would not generally be considered hazardous materials, and a Stormwater Pollution Prevention Plan (SWPPP) containing procedures for preventing and responding to accidental spills would be prepared prior to construction (see **Section 3.2, Water Resources**, for further discussion).

The potential for the adjacent Albany International facility to have impacted the site, or to impact the site in the future, is low.

The proposed retail use would include the onsite storage (for sale), handling, and sale of household and automotive goods including potentially hazardous materials. These materials include flammable, combustible and corrosive liquids, such as: gasoline and other petroleum products, propane, aerosols, oxidizers, pesticides, herbicides, and fertilizers. These potentially hazardous materials would be located within the proposed onsite gas station (located in the future lease lot, see **Figure 2-3**) in the southern portion of the site and within the automotive, paint, household cleaning, and garden departments of the retail store. The gas station would include underground bulk oil tanks typical of gas station use,

During operation of the project, the storage, handling and sale of any potentially hazardous materials would follow all applicable regulations (see below and the Mitigation Measures section for details). However, there would be some potential for accidental spills. A Stormwater Pollution Prevention Plan (SWPPP) containing a Spill Prevention Control and Countermeasure (SPCC) Plan would be prepared and implemented, in accordance with a National Pollution Discharge Elimination (NPDES) permit from the Department of Ecology (it should be noted that the NPDES permit would not be required for the project; however, the applicant has indicated that an NPDES permit would be applied for from Ecology). Any accidental spills would be addressed by the SPCC Plan, which would be prepared in compliance with the Clean Water Act Section 311 (40 CFR part 112), WAC 173-303-350 and TMC 16.24, TMC 16.26 and 18.39. SPCC plans include: 1) actions to be taken in the event of a spill; 2) descriptions of arrangements with local agencies, 3) the name of the owner's emergency coordinator, 4) a list of emergency equipment available, and 5) an evaluation of plan for business personnel. The sale of typical household use items that may be considered potentially hazardous (such as propane, aerosols, pesticides and herbicides) would be itemized and addressed as part of the City of Tumwater building permit process to verify that applicable regulations would be followed with respect to the handling and sale of these items.

Water quality treatment measures would be implemented to prevent contamination of surface and groundwater from automotive and gas station uses on the site (see **Section 3.2, Water Resources**).

The proposed project would include the storage, handling and sale of potentially explosive materials such as propane, and gasoline on the proposed future lease lot. The storage and handling of these and other potentially explosive materials would be in accordance with all applicable regulations, including WAC Chapter 296-24 (General Safety and Health Standards), WAC 173-180A through 180D (Facility Oil-Handling Standards), and WAC 173-360 (Underground Storage Tank Regulations), as applicable. With conformance to applicable regulations, no significant risk of explosion from stored materials at the proposed retail store or gas station on the proposed future lease lot would be expected.

The proposed gas station would be located in the southern portion of the site, immediately north of the BPA easement. This easement contains power transmission towers, the closest of which would be approximately 150 feet from the gas station. These electrical facilities would not interfere with the operation of the gas station.

Alternative 1

Hazardous materials conditions under Alternative 1 would be similar to conditions under the Proposed Action; however, the proposed onsite gas station where many of these potentially hazardous materials would be stored and sold would be at the northern end rather than the

southern end of the site (see **Figure 2-7**). This gas station location would be approximately 900 feet from the closest BPA transmission tower, approximately 750 feet farther from these facilities than the Proposed Action.

No Action Alternative

The No Action Alternative would not result in the potential for discovery of unknown USTs or potential contamination in the existing uncontrolled fill or groundwater onsite. This alternative also would not result in potentially hazardous materials being stored or sold on the site. However, future development of the site could result the storage, sale or use of potentially hazardous materials onsite, depending upon specific uses that locate on the site.

3.4.3 Mitigation Measures

- If USTs and/or groundwater wells are encountered onsite during development, they would be decommissioned in accordance with applicable federal, state and local requirements. If UST(s) are found, removal of these USTs would be performed in compliance with Washington State's Underground Storage Tank Regulations (WAC 173-360-385), and with applicable federal and local regulations. A site assessment would be performed, consistent with WAC 173-360-390, to determine whether there has been any leakage of fuels. If leakages are detected, cleanup of the contaminated soils would occur in accordance with Model Toxics Control Act (MTCA) Cleanup Regulations (WAC 173-340).
- If any buried hazardous materials, visibly impacted soil areas and/or septic tanks are discovered, they would be removed and properly disposed of in accordance with applicable Federal, State and local requirements.
- During construction, any accidental spills of construction-related chemicals would be addressed through the Stormwater Pollution Prevention Plan that would be implemented to prevent adverse construction-related water quality impacts (see **Section 3.2, Water Resources**).
- All applicable regulations related to the storage, handling and sale of potentially hazardous materials would be followed.
- Any accidental spills of hazardous materials during operation of the project would be addressed by a Spill Prevention Control and Countermeasure (SPCC) Plan. A Stormwater Pollution Prevention Plan (SWPPP) containing a Spill Prevention Control and Countermeasure (SPCC) Plan would be prepared and implemented, in accordance with a National Pollution Discharge Elimination (NPDES) permit from the Department of Ecology (it should be noted that the NPDES permit would not be required by the project; however, the applicant has indicated that an NPDES permit would be applied for). The SPCC would comply with federal regulations under the Clean Water Act Section 311 (40 CFR part 112), and with WAC 173-303-350. SPCC plans include: 1) actions to be taken in the event of a spill; 2) descriptions of arrangements with local agencies, 3) the name of the owner's emergency coordinator, 4) a list of emergency equipment available, and 5) an evaluation of plan for business personnel.

- The sale of typical household use items that may be considered potentially hazardous (such as propane, aerosols, pesticides and herbicides) would be itemized and addressed as part of the City of Tumwater building permit process to verify that applicable regulations would be followed with respect to the handling and sale of these items.
- The storage, handling and sale of potentially explosive materials such as propane, and gasoline on the proposed future lease lot, would be in accordance with all applicable regulations, including WAC Chapter 296-24 (General Safety and Health Standards), WAC 173-180A through 180D (Facility Oil-Handling Standards), and WAC 173-360 (Underground Storage Tank Regulations), as applicable.
- No household hazardous materials would be stored outdoors.

3.4.3 Significant Unavoidable Adverse Impacts

With the implementation of the proposed mitigation measures, no significant unavoidable adverse impacts to environmental health conditions would be expected.