4.10 Health and Safety

This section describes the potential environmental health and safety hazards that may result from construction and operation of the proposed Project and alternatives. Risks to environmental health and safety could occur during construction and operation of the Project. The risks may include job site hazards for construction workers, operational risks and hazards for future workers and site occupants, inadvertent release of hazardous materials to the natural and built environment, and exposure to existing hazardous materials sites and utilities. Potential mitigation measures are also identified.

4.10.1 Study Area

The study area for the environmental health and safety analysis is a 0.5-mile radius from the proposed Project site (see Figure 4-70). A 0.5-mile search radius was utilized to match the ASTM-defined search radius for state-listed contaminated sites.

4.10.2 Relevant Plans, Policies, and Regulations

This section summarizes federal, state, and local regulations related to health and safety that are applicable to the Project. Relevant policies and regulations related to health and safety are summarized in Table 4-57.

Table 4-57. Applicable Policies and Regulations for Health and Safety

Policies and Regulations	Description
Federal	
Comprehensive Environmental Response, Compensation and Liability Act (CERLCA; 40 CFR 300–302)	Establishes authority for governmental response to hazardous substance releases to the environment and liability for responsible parties for response actions and damage to natural resources.
Superfund Amendment and Reauthorization Act (40 CFR 302)	Amended CERCLA and requires reporting for emergency response, emergency release, and hazardous and toxic chemical releases.
Federal Resource Conservation and Recovery Act (42 USC 6901 et seq.)	Governs the generation, storage, and transportation of hazardous waste and waste management activities for hazardous waste treatment, storage, and disposal facilities. This is delegated to Washington State for administration under the Washington Hazardous Waste Management Act.
Occupational Safety and Health Administration (OSHA) Regulations (29 CFR 1910)	Federal occupational hazard regulations.
State	
Washington Industrial Safety and Health Act (WISHA) (RCW 49.17)	Requires employers to provide safe and healthful workplaces for all employees; enforced by Washington Department of Labor and Industries.
Pollution Prevention Plan Requirements (WAC 173-307)	Requirements for Pollution Prevention Plans associated with hazardous substance users and waste generators.
Washington Industrial Health and Safety Act (RCW 49.17)	Regulates emergency planning and response, including air-contaminant exposure limits for workers.
Washington Safety and Health (WAC 296-800)	Requires employers to provide a safety and healthy workplace free from recognized hazards and requires the establishment, supervision, and enforcement of an accident prevention program.

Policies and Regulations	Description
Model Toxics Control Act and its implementing regulations (RCW 70.105D and WAC 173-340)	Require potentially liable persons to assume responsibility for cleaning up contaminated sites. Require reporting hazardous substance releases if they constitute a threat to human health or the environment.
Washington Hazardous Waste Management Act (RCW 70.105 and WAC 173–303)	State equivalent of Resource Conservation and Recovery Act; requires designation of dangerous and extremely hazardous waste, and proper handling, storage, transport, and disposal of such wastes. Governs and establishes regulations for hazardous waste treatment, storage, and disposal facilities.
Washington Administrative Code, Site Discovery and Reporting (WAC 173-340-300)	Requires reporting hazardous substance releases if they constitute a threat to human health or the environment.
General Occupational Health Standards (WAC 296–62)	Protect the health of employees and help create a healthy workplace by establishing requirements to control health hazards, including chemical hazard communication and exposure programs.
Gas Companies – Safety (WAC 480-93)	WAC 480-93-020, Proximity Considerations, requires gas pipeline companies to receive Washington Utilities and Transportation Commission approval for construction or building activities near natural gas pipelines.
Local	
Pierce County Code Title 17C	Pierce County's construction and infrastructure regulations, including building and fire codes.
Pierce County Code Title 18E	Pierce County's Critical Areas Ordinance, including regulations related hazardous materials usage within critical areas.
Pierce County Comprehensive Emergency Management Plan	Pierce County's Comprehensive Emergency Management Plan describes the responsibilities and capabilities of the agencies and organizations in Pierce County working to prevent, protect against, mitigate, respond to, and recover from emergencies and major disasters impacting our communities.
City of Puyallup Municipal Code 17.04	City of Puyallup's building and construction municipal code.

4.10.3 Affected Environment

The Project is in the UGA of the City of Puyallup in unincorporated Pierce County. The 188-acre Project site is situated east of Shaw Road East and East Main Avenue, north of East Pioneer and 88th Street East, and west of the Puyallup River within Sections 25 and 26, Township 20N, Range 4E in the Willamette Meridian baseline.

The affected environment includes the existing physical environment (property, facilities, and infrastructure) and the natural environments (plants, animals, and their habitat) on the Project site and within the Project vicinity as a precursor to hazards and hazardous materials. See Section 4.4 Plants and Animals and Section 4.5 Land and Shoreline Use for a description of the affected environment for these subject areas.

Known hazardous materials sites and hazardous materials cleanup sites within 0.5 mile of the Project site, but not north of the Puyallup River due to hydrological separation, are identified and discussed. A brief description of other potential sources of hazards within the Project site, such as the natural gas

pipeline, is also included. Natural hazards, such as flooding (Section 4.1 Earth Resources), volcanic eruptions/lahars (Section 4.1 Earth Resources), and groundwater contamination (Section 4.3 Ground Water) are addressed in their respective resource chapters.

Hazardous Materials and Sites

Hazardous materials are materials that, because of their chemical, physical or biological properties, pose a potential risk to life, health, the environment, or property when not properly contained.

> **Hazardous materials** can include materials that are explosive, flammable, combustible, corrosive, reactive, poisonous, biological, or radioactive. They can be in a solid, liquid, or gaseous state (Pierce County DEM 2015).

The Project site has historically been used for agricultural purposes, which may have included the application of arsenical or organochlorine pesticides. In addition, adjacent properties southeast of the Project site have been used since at least the 1940s for agricultural purposes including berry farming.

The rail line located immediately west of the Project site has been adjacent to the Project site since at least 1897 (USGS 2021). Contaminants of concern associated with the rail line may include polynuclear aromatic hydrocarbons (PAHs) and metals due to rail operations. Rail ties were treated historically with creosote and arsenic. Hydraulic drippings from train braking systems may contain polychlorinated biphenyls (PCBs) or PAHs. Due to the proximity of the rail line to the Project site, contaminants may have migrated into the Project site and surrounding area.

> A **hazardous materials release** is the release of the material from its container into the local environment (Pierce County DEM 2015).

A survey of known contaminated sites within the study area was conducted using Ecology's online system (Ecology 2021). No existing contaminated sites of concern were identified within the Project site. For the purposes of this analysis, sites located north of the Puyallup River were considered hydraulically separated from the Project site and are not included in the known contaminated sites below. The following three known contaminated sites were identified within the study area for health and safety (0.5-mile radius from the Project site).

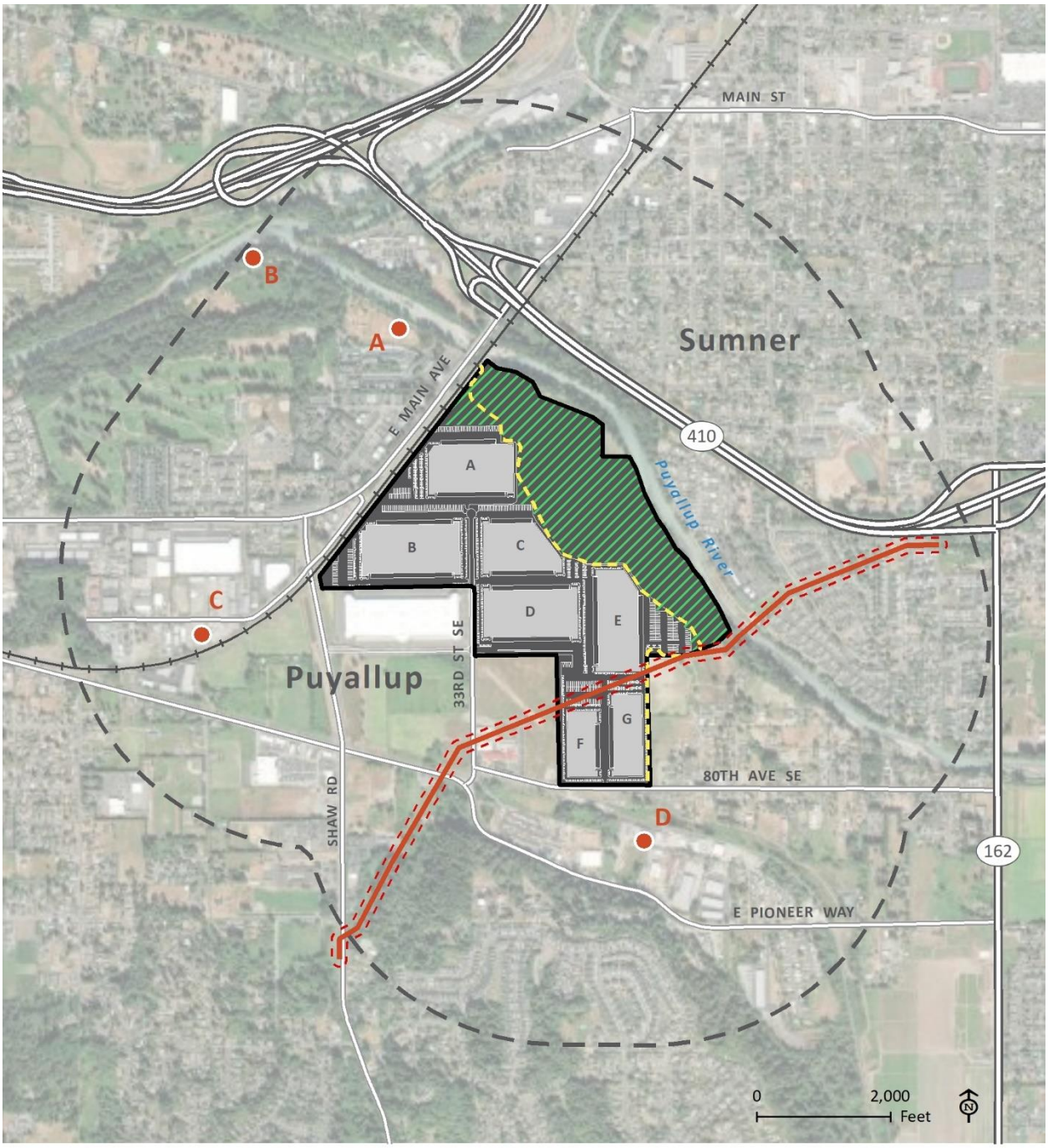
- **Puyallup Landfill A and B** (Sites A and B on Figure 4-70): The Puyallup Landfill A and B sites are located approximately 0.21 and 0.47 mile west of the Project site, respectively. These sites were used as municipal landfills from 1948 to 1976 and received many types of wastes. Another nearby landfill (Puyallup Landfill D, outside of the study area) is listed in the Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL). Because of their similar times of operations, similar uses, and proximity to Puyallup Landfill D, Ecology has also listed the Puyallup Landfill A and B sites on the CSCSL. Contaminants of concern at these sites include methane, dieldrin, monuron, non-carcinogenic polycyclic aromatic hydrocarbons, 4,4 Dichlorodiphenyldichloroethane, PCBs, lead, arsenic, iron, manganese, gasoline, diesel, and various volatile organic compounds. The Puyallup Landfill A and B sites are awaiting cleanup.
- **Best Parking Lot Cleaning Trust** (Site C on Figure 4-70)**:** This site is located approximately 0.23 mile southwest of the Project site. A leaking underground storage tank (LUST) was reported on

the site in 1998. Petroleum-gasoline contamination was confirmed above cleanup levels in soil. Metals and petroleum contamination was suspected in groundwater. The site was remediated and received a No Further Action from Ecology in 2007.

- **Pasquier Panel Products** (Site D on Figure 4-70)**:** This site is located approximately 0.08 mile southeast of the Project site. A LUST was reported in 1994. The LUST was removed along with approximately 20 cubic yards of contaminated soils. Additional soil and groundwater sampling occurred at the site in 2020. All sample constituents were below their respective Model Toxics Control Act cleanup limits.

Natural Gas Pipeline

A natural gas high-pressure transmission pipeline (the Williams Northwest Pipeline) is mapped in the southwestern corner of the Project site (NPMS 2021) (Figure 4-70). Williams Northwest Pipeline LLC owns and operates a 75-foot-wide high-pressure natural gas transmission ROW through the southeast portion of the Project site. Williams Northwest Pipeline LLC is a primary conveyer of natural gas to the Pacific Northwest. Natural gas is listed as a hazardous material due to its flammability under 49 CFR 172. Existing hazards are associated mainly with the natural gas transmission pipeline and the potential for contaminated sites located within the study area. The proposed Project contains hardscape and other improvements over the pipeline and associated easement; in addition, three of the proposed warehouses within the pipeline easement Williams Northwest Pipeline require prior approval for any development activities or structures located within its easements or ROW. The placement of trees, buildings, structures, sheds, fences, decks, patios, swimming pools, roads, driveways, utilities, sprinkler systems, power or telephone poles is not allowed on Williams' easements without Williams' consent.



Source: WA Dept of Ecology, 2021

Figure 4-70. Contaminated and Hazardous Materials Sites of Concern within the Study Area

4.10.4 Impacts

Methodology

Potential impacts on environmental health and safety were evaluated based on the applicable federal, state, and local regulatory frameworks, as well as health and safety related to construction and operation of the Project. Since warehouse tenants of the Project site have not yet been determined, the operational impact analysis presented here addresses the range of supported uses allowed within the applicable land use code for the Project site, which includes manufacturing facilities and chemical storage. A significant impact would occur if the Project would cause long-term or irreversible disruptions to community and worker health and safety.

Impacts Analysis

No Action Alternative

Under the No Action Alternative, the proposed Project would not be constructed, and existing health and safety hazards would remain in the study area. If other future development occurred, the development would need to comply with the relevant plans, policies, and regulations listed in Section 4.7.2.

Proposed Project

Construction Hazards

Mitigated Significant Impact. Various site preparation activities are proposed, including, but not limited to, clearing and grading; installation and construction of stormwater facilities; and extension of existing services and utilities including electricity, sanitary sewer, and potable water. During construction of the proposed Project, construction workers could experience construction hazards similar to those of a large-scale project. These include trips, slips, and falls; electrical or mechanical hazards; overhead hazards from cranes or excavators; and risk of blunt force trauma from accidents with machinery.

Construction workers could also be exposed to inadvertent release of hazardous materials. Hazardous materials likely to be present during construction would include materials typical of construction projects, which are generally handled and used in relatively small quantities. Types of hazardous materials that could be present include fuels and lubricant oils for construction vehicles and equipment. Diesel fuel is the primary potentially hazardous substance that could be used in a significant quantity during construction. Contractors would be required develop a Project Health and Safety Plan (HASP) prior to construction for all phases of the Project, which would mitigate risks to construction workers. The HASP would be implemented to manage and control safety risks, as well as to guide responses in the case of emergency situations during construction, including evacuation plans in the event of a lahar or volcanic eruption.

Construction of the proposed Project could expose hazardous materials in the Project site that could pose risks to human health and the environment through contact with contaminated soil, contaminated groundwater, and inhalation of toxic vapors.

Existing single-family residential structures located on the Project site would be vacated and demolished during construction. Based on the age of the structures, hazardous materials such as lead-based paint and asbestos-containing materials may be present. Releases of these materials could migrate to the air, soil, surface water, or groundwater and affect the health and safety of construction personnel and others including users of the neighboring parks and trails and surrounding residential development.

Based on these considerations, public and occupational health and safety risks during construction of the Project include the potential exposure to electrical and mechanical hazards for construction workers, inadvertent release of hazardous materials, and exposure to existing hazardous materials sites. A mitigated significant impact is anticipated. Mitigation measures HS-1 through HS-6 are required to avoid, minimize, or reduce impacts to the extent feasible:

- ***HS-1: Prepare a Project Health and Safety Plan.*** In accordance with RCW 49.17, in order to ensure worker safety on site during construction, the selected Contractor should be required develop a HASP prior to construction for all phases of the Project. The HASP would be implemented to manage and control safety risks as well as to guide responses in the case of emergency situations during construction. The HASP should be provided to the permitting agency prior to permit issuance.
- ***HS-2: Prepare Emergency Response Plan.*** The selected Contractor should be required to provide an emergency response plan and practice proper hazardous material storage, handling, and emergency procedures including spill notification and response requirements in accordance with RCW 49.17 and WAC 173-303. The emergency response plan should be provided to the permitting agency prior to permit issuance. BMPs would be in place to minimize impacts on environmental health. Implementation of appropriate spill prevention and control measures would ensure that the risk of an accidental release of hazardous materials remains low throughout construction of the Project.
- ***HS-3: Survey for Lead Based Paint and Asbestos.*** A lead-based-paint and asbestos-containing-materials survey should be conducted on structures before demolition activities begin. Abatement and management should then be conducted prior to demolition, renovation, and/or repair for lead and asbestos as required by the Washington Hazardous Waste Management Act and Washington Dangerous Waste Regulations (RCW 70.105 and WAC 173-303). The Applicant would be responsible for conducting the survey, conducting any required abatement, and providing the permitting agency with the results of the survey and abatement activities.
- ***HS-4: Comply with Model Toxics Control Act Regulations for Unexpected Encounter with Hazardous Materials***. The permitting agency would be required to inform the Applicant and contractors that they are instructed to immediately stop subsurface activities if potentially hazardous materials are encountered or significantly stained soil is found during construction. Contractors would be instructed to follow applicable regulations including the Model Toxics Control Act and its implementing regulations (RCW 70.105D and WAC 173-340) regarding discovery and response for hazardous materials encountered during the construction process.
- ***HS-5: Comply with WISHA Rules.*** The permitting agency would be required to inform the Applicant and contractors that they are required to comply with WISHA rules that protect

workers from hazardous job conditions. WISHA regulates an array of occupational hazards in WAC 296 (Safety Standards for Construction Work) such as safety standards for construction work (WAC 296-155), general safety and health standards (WAC 296-24), and general occupational health standards (WAC 296-62).

- ***HS-6: Comply with Pierce County Public Works Inspection and Enforcement.*** Building codes are developed and enforced to protect individuals from safety risks such as structural failures, fire hazards caused by electrical systems, and electrical shock. The Project would be subject to building inspection and enforcement by the Pierce County Planning and Public Works Department during construction.

Natural Gas Pipeline Safety

As currently designed, the proposed Project is sited above the Williams Natural Gas Pipeline and associated 75-foot-wide easement. The pipeline is located below the parking area between Warehouses E, F, and G, and these warehouses are proposed within the pipeline ROW. Any Project development activity within the 75-foot easement requires approval by Williams Northwest Pipeline LLC. Construction of the Project would require excavation, grading, utility installation, and warehouse construction above or near the Williams Natura Gas Pipeline. Although a release or incident involving the pipeline is unlikely, unintentional force or excavation could cause releases from the pipeline, placing construction workers and the public at risk. Depending on environmental factors such as wind, proximity of vegetation or other fuels, and dryness of the environment, a fire could spread to other nearby structures or wooded natural environments; the extent of damage would depend on various unpredictable elements. To minimize the potential for an incident to occur and resulting significant impacts, mitigation measures HS-7 and HS-8 would be required:

- ***HS-7: Obtain and Comply with Williams Northwest Pipeline Encroachment Agreement.*** Prior to construction, the County will need to notify and seek comment from pipeline operators concerning land use development applications and take comments received under advisement as Williams has approval authority over the improvements planned and proposed in the pipeline easement.

  The Applicant should avoid any development over the Williams Pipeline corridor on site and should separate out the site plan into two separate warehouse complexes to avoid conflicts with and public exposure to risks associated with construction over the pipeline.

  For natural gas pipelines, the Applicant should site critical facilities and high-occupancy facilities within the regulations of WAC 480-93-020, and 480-93-030.

  The Applicant is required to consult with Williams Northwest Pipeline LLC to obtain an encroachment agreement and approval.

  The Applicant will obtain and provide accurate “as-built” pipeline maps as a condition of approval for any County development permit. In addition to scaled plan maps, which will be accurate to the parcel level, pipeline information (e.g., pipe size, allowable pressure, fuel type, average or approximate ROW width) will also be provided.

  The Applicant should coordinate with Williams and comply with any encroachment agreement to mitigate for construction impacts to the pipeline.

The Applicant is required to apply for an encroachment agreement from Williams Northwest Pipeline LLC in accordance with the Williams Developers' Handbook (Williams 2018) and may be required to modify the site plan as needed to comply with the terms of the agreement to mitigate safety risks. Upon receipt of an encroachment agreement between the Applicant and Williams Northwest Pipeline LLC, a pipeline risk assessment to determine if the Project would change the risk of potential damage to the pipeline will be conducted. A copy of the approved encroachment agreement should be provided to the County and City prior to approval of any County development permit (including but not limited to shoreline, site plan, conditional use, design review, clearing and grading, and major development).

The County should flag all information from Williams approvals on County databases for permit applications. Through the permitting process, flag or control excavation activity in areas adjacent to or within 50 feet of the pipeline, placing a higher level of scrutiny on construction in such areas.

A pipeline vicinity (within 660 feet of a pipeline) disclosure statement should be recorded with/on property deeds in the County Auditor's Office and will be treated in the same manner as critical areas notes.

A statement identifying that a significant natural gas or hazardous liquid pipeline is within the vicinity and the auditor's file number for it will be on the final plat or short plat map under surveyor's notes prior to final approval by the County.

- ***HS-8: Comply with PHSMA's Minimum Design Requirements.*** During design, the Applicant should comply with the minimum design requirements specified by PHSMA for protection of the pipeline. This would be required to meet federal standards expected of Williams Pipeline. Williams Pipeline, as the pipeline operator, is responsible for the safety of its pipeline in compliance with federal safety requirements. Compliance measures to be used would be determined by Williams and should be in coordination with the Applicant and based on a review of final design, site-specific conditions, and field measurements.

Operations Impacts

Chemical Use and Storage

Mitigated Significant Impact. The Project site is zoned EC under the Alderton-McMillen Urban Zone Classification. Due to the Project Site's location within a Volcanic Hazard Area Case I & II Lahar zone, "Hazardous Facilities" are not allowed within the Project site. Although post-construction tenants have not been identified, this zoning can support the following uses: basic manufacturing, contractor yards, food and related products, industrial services and repair, intermediate manufacturing and intermediate/final assembly, recycling collection and processing facilities, and salvage yards/vehicle storage and warehousing, distribution, and freight movement. Potential hazardous materials associated with future tenants may include solvents, petroleum products, and metals. For example, anhydrous ammonia is listed on the Extremely Hazardous Substances (EHS) list and is a refrigerant that could be used in cold storage facilities, one of the possible uses on the Project site. In addition to holding and using hazardous materials, hazardous wastes could be generated on site.

PCC 18.25.030 Definitions

"Hazardous facilities" means those occupancies or structures housing or supporting toxic or explosive chemicals or substances and any non-building structures housing, supporting or containing quantities of toxic or explosive substances that, if contained within a building, would cause that building to be defined as a hazardous facility. Hazardous facilities include any elements contained in the definition for hazardous waste treatment, storage, and recycling facility. Hazardous facilities may be classified as a group "H" occupancy in the International Building Code.

Under the Hazard Communication Standard (HCS) of the U.S. Occupational Safety and Health Administration (OSHA), any chemical that presents a physical hazard or a health hazard is considered a hazardous material. Chemical warehousing, including the storage of hazardous materials, is a highly regulated undertaking with a substantial investment in both the physical storage environment and rigorous adherence to associated protocols, practices and paperwork required to ensure safety and compliance. Each chemical class is like an industry unto itself, with specific rules and regulations for safe storage and handling. Within each class, each specific chemical also has its own requirements; labels and Safety Data Sheets (SDS) are required of chemical manufacturers and importers to convey hazard information to eventual handlers of the chemical. In general, best practices related to a given chemical can be maintained by following the guidelines outlined in the SDS sheet for handling, storage, and transportation (Lilja 2017).

Additionally, OSHA has set permissible exposure limits for chemicals and other materials to protect employees in the workplace from exposure. Workers are not to be exposed to levels of chemical greater than these permissible exposure limits (Lilja 2017). During operations, businesses that store hazardous materials would be required to adhere to the storage requirements outlined in OSHA 29 CFR 1910, Subpart H, for hazardous materials storage (Table 4-58). Businesses that generate hazardous wastes would be required to follow Ecology's Dangerous Waste Regulations (WAC 173-303) for proper storage and disposal.

Table 4-58. OSHA Chemical Class Handling Requirements

Chemical Class	Requirements
Explosives	Heat, shock, friction, or even static electricity can initiate explosions of these chemicals. All rooms in the distribution center should be "no-spark"' environments to eliminate the potential for sparks or equipment backfires. That means using non-spark forklift trucks and EE- and EEE-rated machinery.
Flammable Liquids and Solids	All flammable products are required to be stored in one classified room, away from any potential ignition sources. Flammable liquids and gases require rack stack storage and a rack firehouse pump system (sprinklers). Regular preventive maintenance is required to ensure that all systems are well maintained and up to code.
Gases	Great care must be taken in storing and handling compressed gases since dropping or knocking over a cylinder can cause the energy in the cylinder to be rapidly released, even propelling the cylinder like a rocket. Specific storage requirements will depend on the type of gas. If the gas is flammable, it is stored in a classified flammable room. Some gases could be a mix of toxics and corrosives, so they might be stored in the toxics room.
Oxidizers	Oxidizers require their own room and are not to be mixed with other product, especially flammable or combustible materials. Oxidizers should be kept in a cool, dry place, well ventilated, and away from sunlight. Oxidizer rooms have no windows to keep out sunlight and are ventilated to reduce smell and allow airflow.
Poisons	Poisons require their own classified room. This room needs to have ventilation and be segregated from combustibles. Typically, air vents suck out the odors, and the air travels to charcoal bins above the warehouse. Poisons should be labeled, processed, and palletized in a poison-coded room. Poisonous products should never be in any other part of the warehouse except their specified room.

The Project could introduce the use, generation, and storage of hazardous materials on the Project site, which could expose employees to hazardous materials. Chemicals and other hazardous materials in the warehouse operations setting are highly regulated by OSHA. As such, the potential for employee exposure to chemicals and other hazardous materials is low; however, the impacts could be severe if exposure did occur.

Inadvertent Release of Hazardous Materials

The Project could expose people or structures to hazardous materials through the inadvertent release of chemicals used during operation. In Pierce County, spills of small quantities of hazardous materials occur on an annual basis and can range from cleanup of sites that present a public health risk to a diesel spill on the highway. Spills in large quantities are unlikely to occur on the Project site since the Project's location within a Case II inundation zone prohibits the siting of hazardous facilities (see Section 4.1 Earth Resources for discussion of geological hazards).

A hazardous materials incident may be caused by or during another emergency such as flooding, volcanic eruption/lahar, a major fire or earthquake, or a terrorist attack. Damage to transportation infrastructure and to fire facilities may impact the ability of fire services to respond to the emergency or disaster. Hazardous materials could possibly enter water or sewer systems and necessitate the shutdown of those systems (Pierce County 2020b).

The severity of exposure would depend on the hazardous material(s) involved and the quantity, proximity of exposures, and current environmental factors during the time of the incident. However, due to the proposed location within a lahar zone, storage of hazardous materials in large quantities would not be allowed. The consequence to persons, property, infrastructure, and facilities in the affected area would range. Response to release of hazardous materials may require a multi-disciplinary approach and require support from responders from fire services, law enforcement, environmental containment and cleanup specialists, utilities, local public works, fish and wildlife experts, private and public emergency medical services, environmental public health, and other agencies (Pierce County 2020b).

Hazardous facilities are defined in the PCC as "*those occupancies or structures housing or supporting toxic or explosive chemicals or substances and any non-building structures housing, supporting or containing quantities of toxic or explosive substances that, if contained within a building, would cause that building to be defined as a hazardous facility, including hazardous waste treatment and storage facilities*" (Title 18E.60.040 PCC). As such, the storage of *large quantities* of toxic or explosive materials or hazardous waste treatment and storage facilities in the Project site would not be allowed. The Project could introduce the use and storage of *small quantities* hazardous materials on the Project site. Facility occupants would be required to follow established regulations for the proper storage and handling of these chemicals (WAC 296-24). An inadvertent release of stored chemicals is unlikely; however, if it were to occur, the potential damage from such an incident could be high. A hazardous chemical release could lead to a chemical fire or spill that could impact the immediate surrounding community. This could lead to direct mortality of workers and the public, destroy buildings and infrastructure, and directly impact nearby parks and trails through closures or impacts to infrastructure.

The Project could result in an inadvertent release of hazardous materials during operation. In the event of an inadvertent hazardous materials release, both the physical and natural environments as well as their occupants and inhabitants could be affected; the scope and magnitude of such effects are wide-ranging and dependent on the types and quantities of the chemicals being stored, as well as proximity to receptors. the risk of inadvertent release of hazard materials is low; however, if there was a release, the impacts could be significant.

Mitigation measures HS-9 and HS-10 would be required to reduce the probability of a release of stored chemicals and exposure to hazardous materials to the extent feasible:

- ***HS-9: Designate and carry out duties of a Facility Emergency Coordinator.*** Facilities storing EHS must identify the locations of such substances and designate a Facility Emergency Coordinator to act as the contact for facility and hazardous materials information. The owner or operator of a facility would be required to designate a facility representative who would participate in the local emergency planning process as a facility emergency response coordinator (40 CFR 355.30 and 40 CFR 355.30(c)). Reporting requirements would depend on the type and quantity of the stored chemical. Reporting forms, called Tier II forms, are sent to Ecology, the Local Emergency Planning Committee of Pierce County located at the Department of Emergency Management (DEM), and the local fire department or district (Pierce County DEM 2015).

- ***HS-10: Comply with HCS of the U.S. OSHA Standards.*** During operation, the Applicant and/or facility tenants should comply with permissible exposure limits for chemicals and other materials and the storage requirements outlined in OSHA 29 CFR 1910, Subpart H, for hazardous materials storage, and should follow Ecology's Dangerous Waste Regulations (WAC 173-303) for proper storage and disposal of waste.

Natural Gas Pipeline Safety

As currently designed, the proposed facility site is sited above the Williams Natural Gas Pipeline. The pipeline is below the parking area between Warehouses E, F, and G. Any disturbance, equipment crossings, utility crossings, pavement, or any changes in land use within the Williams Northwest Pipeline easement would require an encroachment agreement between the Applicant and Williams Northwest Pipeline. If the encroachment agreement is received, the Project could still pose a significant health and safety risk. Significant impacts could result from a gas-line explosion. A gas-line rupture could cause a disturbance of above the break. Structures located over or adjacent to the rupture could be damaged or destroyed. If the gas ignites, it might set structures or small quantities of stored chemicals located near the rupture on fire. Depending on environmental factors such as wind, proximity of vegetation or other fuels, and dryness of the environment, a fire could spread to other nearby structures or wooded natural environments. Although unlikely, impacts from the proximity to the Williams Northwest Pipeline would be considered significant.

Nationally, the Office of Pipeline Safety recorded 1,202 incidents involving natural gas pipelines between 1986 and 2000. These incidents resulted in 56 fatalities and 214 injuries. Between 1985 and 1999, Washington State had 47 natural gas pipeline accidents reported. These accidents resulted in 5 fatalities and 16 injuries (Whatcom County 2001). Between 1997 and 2017, there were 14 incidents involving natural gas transmission lines, none of which resulted in death or injury (WA UTC 2018). If a leak or rupture occurred, Williams Northwest Pipeline LLC would immediately shut off the flow of gas in the pipeline. The remaining gas in the line would then dissipate. If the gas ignited, shutting off the flow of gas would allow the fire to burn itself out (Pierce County 2019c).

Williams Northwest Pipeline LLC provided a comment during the scoping period indicating that they have not been consulted by the Applicant regarding the proposal to encroach on their pipeline ROW. They further indicated that no approvals to encroach on the ROW will be granted until an encroachment agreement is in place. The Williams Developers' Handbook (Williams 2018) notes that they seek to minimize encroachment and excavation within the limits of the pipeline ROW. As such, they generally seek to have projects remain outside of the pipeline ROW. Further, the handbook notes that improvements that will encroach into the ROW/easement should be designed to ensure continued safe operation and maintenance of the pipeline.

As the pipeline operator, Williams is responsible for operating and maintaining its pipelines in accordance with or to exceed the Pipeline and Hazardous Materials Safety Administration (PHSMA) Minimum Federal Safety Standards in 49 CFR Part 195 (and Washington State UTC's adopted and enhanced regulations contained in WAC 480). The regulations are intended to ensure adequate

protection for the public and to prevent pipeline accidents and failures. The likelihood of a pipeline rupture and release remains low; the potential damage from such an incident would be high.

In order to minimize the potential risk associated with the presence of the Williams Pipeline, mitigation measures HS-7 and HS-8 should be required.

Alternative 1 – Rail Transport

Construction Impacts

Mitigated Significant Impact. The impacts from construction of Alternative 1 would be similar to those described for the proposed Project in that the potential exposure to electrical and mechanical hazards for construction workers, inadvertent release of hazardous materials, and exposure to existing hazardous materials sites would still occur. Construction over the Williams Pipeline ROW would risk unintentional force or excavation that could cause releases from the pipeline, placing construction workers and the public at risk. Under Alternative 1, construction of the rail line would occur almost entirely within the same Project footprint, except for a 300-foot portion between the existing Meeker Southern rail line and 80th Street East and the extension of the BNSF mainline/Meeker Southern interchanges. Additional considerations for Alternative 1 Construction include exposure to air pollution and particulates from construction of infrastructure for and operation of diesel-powered locomotives. A mitigated significant impact is anticipated. Mitigation measures HS-1 through HS-8 are identified to avoid, minimize, or reduce impacts to the extent feasible.

Operations Impacts

Mitigated Significant Impact. The impacts from operation of Alternative 1 would be similar to those described for the proposed Project in that Alternative 1 could also result in an inadvertent release of hazardous materials during operation. Under Alternative 1, the addition of rail activity during operations would allow for the transportation by rail of hazardous materials. Under Alternative 1, the proposed facility and rail line are sited above the Williams Natural Gas Pipeline. The pipeline is below the parking area between Warehouses E, F, and G and crosses below the proposed rail line. Similar to the proposed Project, there is a potential risk associated with operation of the facility above the Williams Pipeline. Based on these considerations, a mitigated significant impact is anticipated. Mitigation measures HS-7 and HS-8 are identified to avoid, minimize, or reduce operation of Alternative 1 Williams Pipeline impacts to the extent feasible. Mitigation measures HS-9 and HS-10 would further reduce the probability of a release of stored chemicals and exposure to hazardous materials to the extent feasible.

Alternative 2 – Reduced Intensity Alternative

Alternative 2 considers the potential impacts that would result if the mitigation measures that reduce the site footprint of the facility (AES-2, LU-1, REC-1, and SW-4) as outlined in this Draft EIS for the proposed Project) were adopted by the Applicant. As noted below, Alternative 2 would still require Project implementation mitigation measures to reduce health and safety impacts.

Construction Impacts

Mitigated Significant Impact. Compared to the proposed Project, Alternative 2 would have reduced footprint and construction could be expected to be at a smaller scale. However, the same construction-

related environmental impacts analogous to the proposed Project could still occur. A mitigated significant impact is anticipated. Mitigation measures HS-1 through HS-8 are identified to avoid, minimize, or reduce impacts to the extent feasible.

Operations Impacts

Mitigated Significant Impact. Compared to the proposed Project, Alternative 2 would be a reduced footprint and operation could be expected to be at a smaller scale. However, the same operation-related environmental impacts analogous to the proposed Project could still occur. Based on these considerations, a mitigated significant impact is anticipated. Mitigation measures HS-7 and HS-8 are identified to avoid, minimize, or reduce operation of Alternative 2 impacts to the extent feasible. Mitigation measures HS-9 and HS-10 would further reduce the probability of a release of stored chemicals and exposure to hazardous materials to the extent feasible.