

PORT WESTWARD GOAL EXCEPTION, COMPREHENSIVE PLAN AMENDMENT, AND ZONE CHANGE SUPPLEMENTAL ANALYSIS: LAND USE COMPATIBILITY

To Beery, Elsner & Hammond, LLP

For Port Westward Zone Change

Dated July 21, 2020

Project Number 2160462.01



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LIST OF ABBREVIATIONS

-	DOE	Oregon Department of Energy
Aboveground Storage Tank	ODOT	Oregon Department of
Bureau of Land Management		Transportation
British Thermal Unit	OEM	Oregon Office of Emergency
Clean Air Act		Management
Cleaner Air Oregon	ORS	Oregon Revised Statutes
Code of Federal Regulations	OSFM	Office of the State Fire Marshal
United States Army Corps of	OWRD	Oregon Water Resources
Engineers		Department
Clean Water Act	PA-80	Primary Agriculture-80 Acres zone
Department of Environmental	PGE	Portland General Electric
Quality	PHMSA	Pipeline and Hazardous Materials
Essential Fish Habitat		Safety Administration
Energy Facility Siting Council	POTW	Publicly Owned Treatment Works
United States Environmental	PPA	Pollution Prevention Act
Protection Agency	PWW	Port Westward Industrial Park
Federal Emergency Management	RCRA	Resource Conservation and
Agency		Recovery Act
Federal Energy Regulatory	RIPD	Resource Industrial-Planned
Commission		Development zone
Flood Insurance Rate Map	SHPO	State Historic Preservation Office
Federal Register	SLOPES	Standard Local Operating
Liquified Natural Gas		Procedures for Endangered Species
Liquified Petroleum Gas	TPR	Transportation Planning Rule
Land Use Board of Appeals	TSCA	Toxic Substances Control Act
Land Use Compatibility Statement	UIC	Underground Injection Control
U.S. Maritime Administration	USACE	United States Army Corps of
million British Thermal Units		Engineers
Magnuson Stevens Act	USC	United States Code
National Environmental Policy Act	USDOT	United States Department of
National Flood Insurance Program		Transportation
Natural Gas Act	USFS	United States Forest Service
National Marine Fisheries Service	USFWS	United States Fish and Wildlife
National Pollution Discharge		Service
Elimination System	UST	Underground Storage Tank
Oregon Administrative Rule	WPCF	Water Pollution Control Facility
Oregon Department of Fish and		
Wildlife		
	Bureau of Land Management British Thermal Unit Clean Air Act Cleaner Air Oregon Code of Federal Regulations United States Army Corps of Engineers Clean Water Act Department of Environmental Quality Essential Fish Habitat Energy Facility Siting Council United States Environmental Protection Agency Federal Emergency Management Agency Federal Energy Regulatory Commission Flood Insurance Rate Map Federal Register Liquified Natural Gas Land Use Board of Appeals Land Use Compatibility Statement U.S. Maritime Administration million British Thermal Units Magnuson Stevens Act National Environmental Policy Act National Flood Insurance Program Natural Gas Act National Pollution Discharge Elimination System Oregon Administrative Rule	Aboveground Storage TankODOTBureau of Land ManagementBritish Thermal UnitOEMClean Air ActCleaner Air OregonORSCode of Federal RegulationsOSFMUnited States Army Corps ofOWRDEngineersClean Water ActPA-80Department of EnvironmentalPGEQualityPHMSAEssential Fish HabitatPOTWUnited States EnvironmentalPPAProtection AgencyPWWFederal Emergency ManagementRCRAAgencySHPOFederal RegisterSLOPESLiquified Natural GasTPRLand Use Board of AppealsTSCALand Use Compatibility StatementUICU.S. Maritime AdministrationUSACEmillion British Thermal UnitsWSCMagnuson Stevens ActUSCNational Environmental Policy ActUSFSNational Flood Insurance ProgramVSCNational Pollution DischargeUSTOregon Department of Fish andWPCF



I. INTRODUCTION AND PURPOSE

In 2013, the Port of Columbia County¹ (the Port) applied for approval from Columbia County (the County) to rezone land adjacent to the Port Westward Industrial Park (PWW) from Primary Agriculture-80 Acres (PA-80) to Resource Industrial-Planned Development (RIPD), for incorporation into the existing industrial park. Figure 1 is an aerial photo of PWW and the zone change area, while Figure 2 is a map of the area's existing zoning designations.

The application, which relied upon concurrent requests for a Comprehensive Plan Amendment and a Goal Exception for rural industrial development on resource land, was approved by Columbia County in early 2014. However, the decision was appealed to the Oregon Land Use Board of Appeals (LUBA). LUBA remanded the case in part and identified areas in which the record and findings provided insufficient justification for the approval.²

In response to the remand, the Port modified its land use application to align with the direction provided by LUBA in its decision, identifying five specific rural industrial uses to be allowed under the exception, and further limiting them by only allowing uses that would be dependent on the existing deepwater port and dock at Port Westward. The Port's legal team engaged Mackenzie to address the concerns raised by LUBA and Mackenzie prepared the *Port Westward Goal Exception, Comprehensive Plan Amendment, and Zone Change Alternatives Analysis* report, dated April 10, 2017. The amended land use application was approved by the County in February 2018 (Ordinance No 2018-1). Columbia Riverkeeper (Riverkeeper) and 1000 Friends of Oregon subsequently appealed the County's 2018 decision to LUBA. In December 2018, LUBA denied the majority of the appellants' arguments but sustained one argument, remanding the case to address whether the identified rural industrial uses are "compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts" per ORS 197.732(2)(c)(D) and OAR 660-004-0020(2)(d).³

Riverkeeper appealed LUBA's decision to the Oregon Court of Appeals, and the Port filed a cross-petition challenging LUBA's conclusion regarding compatibility. The Court of Appeals affirmed LUBA's decision.⁴ Riverkeeper again appealed the Court of Appeals decision to the Oregon Supreme Court, but the Supreme Court denied review.⁵ In response to the 2018 LUBA remand, the Port has requested that the County take up the remand and is providing additional information regarding compatibility with adjoining uses. In support of this effort, Mackenzie was retained to analyze compatibility among the five proposed dock-dependent rural industrial uses approved by Columbia County and recognized by LUBA (Forestry and Wood Products processing, production, storage, and transportation; Dry Bulk Commodities transfer, storage, production, and processing; Liquid Bulk Commodities processing, storage, and transportation; Natural Gas and derivative products, processing, storage, and transportation; and Breakbulk storage, transportation, and processing) and existing adjacent land uses.

As part of prior proceedings in 2017-2018, the Port limited its request to the five rural industrial uses identified above, and further restricted uses to those that would be dependent on the deepwater port at

¹ Prior to 2019, the Port of Columbia County was known as the Port of St. Helens.

² Columbia Riverkeeper, et al. v. Columbia County, 70 Or. LUBA 171 (2014), aff'd without opinion, 267 Or App. 637 (2014).

³ Columbia Riverkeeper, et al. v. Columbia County, 78 Or. LUBA 547 (2018).

⁴ Columbia Riverkeeper, et al. v. Columbia County, 297 Or. App. 628 (2019).

⁵ *Columbia Riverkeeper, et al. v. Columbia County*, 365 Or. 721 (2019).



FIGURE 1 PORT WESTWARD VICINITY MAP Columbia County, Oregon

LEGEND



- Thompson Property
- Proposed Zone Change Area
- State Boundary





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FIGURE 2 **PORT WESTWARD ZONING MAP** Columbia County, Oregon

LEGEND

Port of Columbia County Properties Thompson Property Tax Lots
Proposed Zone Change Area
Rail
State Boundary
ZONING
RIPD Resource Industrial- Planned Development
PA-80 Primary Agriculture
PF-80 Primary Forest
CS-I Community Service- Institutional
CS-U Community Service- Utility
RR-2 Rural Residential- 2 Ac. Min
RR-5 Rural Residential- 5 Ac. Min.
RC Rural Community
EC Existing Commercial



Oct 2016

Date: 7/17/2020 Map Created By: BJV File: Port Westward_Zoning_2020 Project No: 2160462.01



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Port Westward. LUBA and the appellate courts concluded that the record contained sufficient evidence to support the validity of those uses, remanding solely for the County to address the issue of compatibility. This report is thus limited to an analysis of compatibility among the zone change area's five identified uses and existing adjacent land uses.

The report is structured as follows:

- Section II provides regulatory context for compatibility and lays out the analytical approach.
- Section III describes the zone change area and adjacent land uses.
- Section IV characterizes the range of potential impacts associated with the five proposed uses as well as the potential impacts from adjacent land uses.
- Section V details existing regulatory programs that serve to maintain compatibility among the proposed industrial uses and adjacent land uses.
- Section VI assesses compatibility in light of existing regulatory programs and the conditions of approval already imposed by the Columbia County Board of Commissioners.
- Section VII provides a summary and conclusion.



II. COMPATIBILITY ANALYSIS APPROACH

This section defines the term "compatible" as used in the context of a Goal Exception and outlines the compatibility analysis approach required to demonstrate compliance with applicable land use regulations.

Definition of Compatibility

Below is information on the framework through which the Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), LUBA, and the courts provide direction on how compatibility should be analyzed for a Goal Exception.

Statutes and Administrative Rules

ORS 197.732-197.736, which addresses Goal Exceptions, stipulates that a local government may grant an exception if several conditions are met, including that "The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts." ORS 197.732(1)(a) notes that "Compatible' is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses."

Similarly, OAR 660-004-0020 outlines the evidentiary requirements for obtaining a Statewide Planning Goal Exception and refers to Part II of Statewide Planning Goal 2 (Land Use Planning) which states that "A local government may adopt an exception to a Goal when ... the proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts." Based on this Goal language, OAR 660-004-0020(2)(d) specifies that:

The exception shall describe how the proposed use will be rendered compatible with adjacent land uses. The exception shall demonstrate that the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. "Compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses. [emphasis added]

The underlined language is identical to ORS 197.732(1)(a); thus, both the enabling legislation and the administrative rule are clear that some degree of "interference or adverse impacts" on adjacent land uses may be permitted by a proposed use and yet still be deemed compatible as provided under the applicable statute and administrative rule.

LUBA

The 2014 LUBA opinion, in reference to the provision in OAR 660-004-0020(2)(d) allowing for "measures designed to reduce adverse impacts," states that:

That language contemplates that the county has identified the proposed use, has determined that the use has adverse impacts incompatible with adjacent uses, but has identified and imposed specific measures in the exception decision to reduce impacts and thus render the proposed use compatible.⁶

⁶ Columbia Riverkeeper, et al. v. Columbia County, 70 Or LUBA 171, 204 (2014).



The 2018 LUBA opinion's discussion of compatibility notes that:

[A]dequate findings regarding compatibility would start by identifying the likely adverse impacts of typical uses authorized under the five approved use categories, evaluating each use category separately, and if necessary specific types of uses within each use category. As petitioners argue, the potential adverse impacts of different types of liquid bulk terminals, e.g., an oil terminal versus a fertilizer export operation, could be different enough to require a separate analysis. The findings should also address the characteristics of uses on adjoining areas, and assess vulnerability to potential externalities from industrial uses in the exception area, such as impacts on water quality. Informed by those analyses, the county can then reach sustainable conclusions regarding whether the proposed uses are compatible with adjoining uses, or can be rendered compatible via identified measures.⁷

To summarize, LUBA has interpreted the administrative rule to stipulate that a determination of compatibility must be based on substantial evidence at the time of approval of a Goal Exception. More specifically, LUBA has provided clear guidance on an appropriate process to evaluate compatibility, identify and evaluate such evidence in the record, and make appropriate findings addressing compatibility.

Oregon Court of Appeals

After reviewing the 2018 LUBA case, the Oregon Court of Appeals affirmed LUBA's analysis, indicating that "...LUBA's decision to remand does not reflect a misunderstanding of its role on substantial evidence review, or otherwise demonstrate legal error." The Court of Appeals framed LUBA's decision regarding compatibility as follows: "We understand LUBA's rejection of the county's compatibility determination to turn on an application of the substantial evidence standard of review."⁸ As discussed above, LUBA provided a framework for analyzing compatibility in a manner that would satisfy the substantial evidence standard. That framework is the approach taken in this supplemental analysis.

Oregon Supreme Court

As the Oregon Supreme Court denied review,⁹ the compatibility approach proposed by LUBA and endorsed by the Court of Appeals continues to apply.

Compatibility Summary and Analysis Approach

Based on the effective statutes, administrative rules, court opinions, and plain-language definitions such as the Merriam-Webster Dictionary's primary definition for the word "compatible" ("capable of existing together in harmony"),¹⁰ determination of compatibility for a rural industrial Goal Exception should thus address the following:

Enumeration of potential adverse impacts of the proposed uses;

⁷ Columbia Riverkeeper, et al. v. Columbia County, 78 Or. LUBA 547 (2018).

⁸ Columbia Riverkeeper, et al. v. Columbia County, 297 Or. App. 628, 647 (2019).

⁹ Columbia Riverkeeper, et al. v. Columbia County, 365 Or. 721 (2019).

¹⁰ Compatible. *Merriam-Webster.com.* Accessed July 1, 2020, from https://www.merriam-webster.com/dictionary/compatible



- Identification of significant differences in character among the proposed uses and adjacent land uses;
- Assessment of whether potential impacts produce adverse effects on adjacent land uses;
- Cataloging of those uses which require no mitigation to be compatible and those which require mitigation measures to be made compatible with adjacent land uses;
- Compilation of existing regulations applicable to the proposed uses which have the effect of maintaining compatibility; and
- Where required to promote compatibility, identification of appropriate mitigation to minimize incompatible impacts with adjacent land uses.

Compatibility Study Area and Definition of Adjacent

While both ORS 197 and OAR Chapter 660, Division 4 utilize the term "adjacent," neither the statute nor the administrative rule define it in the context of ORS 197.732 or OAR 660-004-0020(2)(d). The term is also not defined in the Columbia County Zoning Ordinance.

In some contexts, the word is construed to mean abutting or touching, while in other contexts the word may refer to proximity or closeness. The Merriam-Webster Dictionary's primary definition for the word "adjacent" is threefold, including "not distant: nearby," "having a common endpoint or border," or "immediately preceding or following."¹¹

The Port would be justified in identifying a compatibility study area that includes only those parcels which immediately abut the zone change area. However, the Port's analysis goes beyond this narrow approach, looking to other administrative rules for guidance. Although not directly germane to Goal Exceptions, in the context of Urban Reserves OAR 660-021-0010 defines "adjacent land" as "abutting land" and "nearby land" as "land that lies wholly or partially within a quarter mile [1,320 feet] of an urban growth boundary."

Using these definitions as a starting point, for the purposes of compatibility analysis the Port has included all those parcels that touch the zone change area, plus all parcels that would touch the zone change area if not for an intervening road right-of-way, and defined those as "adjacent". In addition, the Port has included in its study area all contiguous parcels which are wholly or partially within 2,000 feet of the zone change area.¹² See Figure 3. Ultimately, the Board of Commissioners may determine that the scope of "adjacent" land uses is significantly less than that addressed in this analysis, but the study area addressed in this analysis has been enlarged to provide adequate information for the County to make an informed determination regarding compatibility.

¹¹ Adjacent. *Merriam-Webster.com.* Accessed July 1, 2020, from https://www.merriam-webster.com/dictionary/adjacent

¹² A 2,000-foot measure is more than fifty percent greater than the quarter-mile measure used in the OAR 660-021-0010 definition of nearby land.



FIGURE 3 LAND USE COMPATIBILITY STUDY AREA Columbia County, Oregon

LEGEND

- Port of Columbia County Properties
- Thompson Property
- Proposed Zone Change Area
- Tax Lots
- Adjacent Tax Lots to Zone Change Area
- Study Area
- 🗕 Rail
- State Boundary





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III. PORT WESTWARD ZONE CHANGE AREA AND SURROUNDINGS

This section describes the Port Westward zone change area and nearby land uses.¹³ The compatibility study area has been classified into multiple categories including industrial uses, agricultural and tree farm uses, forested uses, residential accessory to primary agricultural uses, and rural residential use.¹⁴

Proposed Zone Change Area

The zone change area, which consists of 837 acres adjacent to the existing PWW facility, has Bradbury Slough waterfront access on the east and deepwater Columbia River access on the north. Approximately 6% of the zone change area is owned by the Thompson family, an area largely outside the dike, while the remaining 94% is owned by the Port and largely inside the dike. See Figure 1. The zone change area is currently zoned Primary Agriculture-80 Acres (PA-80) and is proposed to be rezoned to Resource Industrial-Planned Development (RIPD) to accommodate future rural industrial development. See Figure 2. As detailed in the Port's request, this zone change necessitates a comprehensive plan map amendment and an Exception to Statewide Planning Goal 3 (Agricultural Lands). Nearby zoning includes RIPD to the north and east (existing PWW) and PA-80 to the west, south, and east.

The zone change area is presently undeveloped, except for a vacant agricultural accessory residence at 81022 Erickson Dike Road, a vacant agricultural accessory residence at 80869 Kallunki Road, and miscellaneous agricultural buildings. The area outside the dike is largely forested, while the area inside the dike has historically been utilized for tree farm and other agricultural uses.

Adjacent Land Uses¹⁵

Land adjacent to the zone change area is in a variety of uses, as depicted in Figure 4.

- Adjacent land north of the zone change area is primarily within the existing PWW 905-acre rural industrial park, and already zoned Resource Industrial-Planned Development by Columbia County. A minor fraction of this area is developed as industrial use already. The remainder of the adjacent land north of the zone change area is largely undeveloped and is in agricultural use with the exception of a forested section adjacent to the Thompson property. This area contains considerable wetlands, some of which are naturally occurring and some of which have been created as part of wetland mitigation activities by the existing industrial developments at PWW, e.g., conservation areas for Portland General Electric's (PGE) three Natural Gas power generation facilities.
- Adjacent land east and south of the zone change area is primarily in agricultural tree farm use, except for a handful of accessory residences on large lot properties primarily in agricultural use.¹⁶

¹³ The extent of the County's zoning authority is limited to land uses rather than waterways such as the Columbia River (which are subject to separate Federal and State water quality and maritime commerce regulations), so waters of the United States and waters of the State have not been cataloged here.

¹⁴ Wetland areas have been classified based on their existing land use (e.g., farm or forest use).

¹⁵ See Section II for discussion of the definition of "adjacent."

¹⁶ Residences on property zoned PA-80 are not outright permitted uses but instead require administrative review and satisfaction of approval criteria, e.g., residences accessory to agricultural use or located on lots-of-record.



- Port of Columbia County Properties



- Land west of the zone change area, between the zone change area and the Columbia River, is undeveloped and is largely forested.
- Two areas denoted as "Non-Port Property" in Figure 4 (between the existing PWW and the zone change area) are in agricultural use growing crops. There are also two associated accessory residences, one on Hermo Road and one on Erickson Dike Road, the owners of which have not objected to the Port's proposal.

In summary, land adjacent to the zone change area falls into several general categories:

- The majority is in agricultural use, including tree farms;
- Sizeable areas are forested;
- Considerable areas are in rural industrial use; and
- An insignificant fraction (approximately 0.15% of the adjacent area) is in residential use accessory to primary agricultural use.

Non-Adjacent Land Uses within the Study Area

As the Port has included more than the adjacent parcels in its compatibility study area, Figure 4 also illustrates the land uses for those non-adjacent parcels within the study area.

- Non-adjacent land to the north consists of the balance of PWW, which is the developed portion of the industrial park. This area is developed with the Clatskanie Public Utility District electrical substation, the Columbia Pacific Bio-Refinery ethanol facility, and PGE's Natural Gas power generation facilities, all industrial uses. PWW has a 1,500-foot dock on the Columbia River that serves industrial uses at Port Westward, plus roadways, rail lines, utilities, drainage facilities, levees, and pipelines.
- Non-adjacent land to the east is primarily in agricultural and forested use, except for a small number of accessory residences on large lot agricultural properties. There is also one (1) residence on Quincy Mayger Road on property zoned Rural Residential-2 Acre Minimum (RR-2).
- Non-adjacent land to south is primarily used for tree farms and other agricultural cropland, plus a few accessory residences on large lot agricultural properties.
- Non-adjacent land to the southwest, abutting the Columbia River, is undeveloped and forested.

In summary, non-adjacent land in the study area falls into several general categories:

- The majority is in agricultural use (including tree farms);
- Sizeable areas are forested;
- A small fraction (approximately 1.35% of the non-adjacent land in the study area) is in residential use accessory to primary agricultural use; and
- A single rural residential use is present.



IV. CHARACTERIZATION OF PORT WESTWARD AREA USES

This section describes the five proposed rural industrial uses and assesses potential impacts on adjacent and non-adjacent parcels within the study area.

Potential Adverse Impacts from Proposed Rural Industrial Uses

As described in Mackenzie's 2017 *Port Westward Goal Exception, Comprehensive Plan Amendment, and Zone Change Alternatives Analysis* report, the five rural industrial uses proposed by the Port for the zone change area are identified below. Significantly, each of these uses is subject to conditional use approval by the County, and as conditioned by Columbia County in Ordinance 2018-1, the industrial uses "...shall be limited to only those uses that are substantially dependent on a deepwater port...."

The use descriptions below (and the product examples in Table 1) are copied from the 2017 report.

- Forestry and Wood Products processing, production, storage, and transportation
 - This has historically been one of Oregon's leading rural industrial land uses. Several uses within this category include sawmills, pulp and paper mills, wood pellet production, utility pole production, sawdust, or log debarking. Semi-finished wood products range from assembly-required flat-pack furniture to base and crown molding for wholesale uses or wood flooring production. Other possibilities include bulk import, export, or domestic transfer of logs, lumber, or other wood-based products.
- Dry Bulk Commodities transfer, storage, production, and processing
 - Examples include grain, metals, or lumber. Commodities refers to merchandise, product, or substance produced or distributed for sale to or for use by others. Bulk refers to significant unpackaged quantities generally transported as a single commodity. Dry describes items transported in solid, not liquid form. These commodities require consolidation at a single location before further transportation or distribution. For example, sawdust or grain would be carried in a semi-truck, consolidated and stored, and then loaded on a ship for further transport. Processing is usually a value-added task performed before shipping and can be as simple as removing bark from logs before shipping overseas.
- Liquid Bulk Commodities processing, storage, and transportation
 - Examples include petroleum, ethanol, milk, cooking oil, or other edible fluids. Commodities refers to merchandise, product, or substance produced or distributed for sale to or for use by others. Liquid bulk is cargo transported or stored unpackaged in large volumes in a fluid state. These commodities are moved in large quantities by ship or barge, stored in tanks, and distributed by tanker trucks. Processing could, as an example, include the mixing of additives to petroleum.
- Natural Gas and derivative products, processing, storage, and transportation
 - Natural gas is a resource with abundant existing infrastructure at Port Westward. Natural gas is a raw material used to produce a range of chemical products such as fertilizer or



methanol suitable for transportation by river. There may be on-site storage of the raw material or its refined products before shipment.

- Breakbulk storage, transportation, and processing
 - Breakbulk refers to a system of transporting cargo as separate pieces, not in containers or single commodity loads, but typically by the use of bags, boxes, crates, drums, barrels, or single units (e.g., wind turbine blades, turbines, heat exchangers, automobiles, etc.). This use would allow for any items meeting local, state, and federal requirements to be stored on site either before or after transfer across the dock. Processing would include limited work such as modifications or alterations to allow for safe transportation by river, rail, or roads.

For each of the five Port Westward proposed rural industrial land uses, the range of potential adverse impacts for operations has been identified. As demonstrated in Table 1, the potential adverse impacts from the five Port Westward uses largely fall into the same general categories. The differences among uses is largely a matter of scale and probabilities associated with the different production processes. For instance, potential fuel spills for Dry Bulk would generally be limited to those volumes contained in vehicles or machinery, whereas Liquid Bulk carries the risk of fuel spills from storage tanks and loading and unloading to and from the zone change area. By contrast, Dry Bulk may generate higher volumes of particulates (dust) than Liquid Bulk.

Use	Product Examples	Potential Adverse Impacts from Industrial Operations
Use All five rural industrial uses proposed and evaluated by the Port	 See below 	 Airborne emissions (particulates, dust, water droplets, odor, steam, fumes, gas, smoke, heat, etc.) Noise Rail/truck/ship traffic for raw materials, finished products, and wastes Vehicle and machinery exhaust emissions Stormwater runoff which may contain chemicals, nutrients, colors, or sediment Process/cooling water discharge Wastewater discharge Fire/explosion Chemical spills (including oils and hazardous materials) Light Water usage Navigation impacts Dike impacts for any levee modifications
		 Chemical spills (including oils and hazardous materials)
		 Light
		 Water usage
		 Navigation impacts
		 Dike impacts for any levee modifications
		 Wetland impacts
		 Wildlife impacts
		 Accumulation of waste materials
		 Nuisances from waste materials

Table 1: Potential Adverse Impacts from Port Westward Rural Industrial Uses



Use	Product Examples	Potential Adverse Impacts from Industrial Operations
Forestry/Wood Products	 Sawmills Pulp and paper mills 	 Impacts common to all five proposed uses, as noted above Combustibility
	 Wood pellets Wood chips Utility poles Sawdust 	
	 Flat-pack furniture Flooring Logs 	
	 Logs Lumber 	
Dry Bulk	 Grain Metals Lumber 	 Impacts common to all five proposed uses, as noted above Dust combustibility
	PotashAggregatesSawdust	
Liquid Bulk	 Petroleum Ethanol Methanol Ammonia Milk Liquid fertilizers Liquid chemicals 	 Impacts common to all five proposed uses, as noted above
Natural Gas	Natural gasFertilizerMethanol	 Impacts common to all five proposed uses, as noted above
Breakbulk	 Bagged, boxed, or crated materials Drums or barrels Single units (wind turbine blades, turbines, heat exchangers, etc.) Automobiles Containerized agriculture products Steel slabs 	 Impacts common to all five proposed uses, as noted above



Potential Adverse Impacts from Adjacent and Non-Adjacent Land Uses

To evaluate compatibility among the five identified uses and currently existing land uses within the study area, it is necessary to describe the potential adverse impacts from other existing adjacent and nonadjacent land uses. Table 2 demonstrates that existing industrial uses within the study area have potential adverse impacts which entirely align with those noted for the proposed uses. The adjacent tree farm and other agricultural uses and the forest uses have a shorter list of potential adverse impacts, some of which overlap with industrial impacts, though likely at a smaller scale. However, in many cases impacts from agricultural uses are exempt from many regulatory programs applicable to the industrial uses that could be sited in the rezone area (e.g., stormwater standards and spill response plans) or otherwise are regulated at a lower standard than industrial uses. The adjacent accessory residential uses have minimal adverse impacts.

Land Use	Potential Adverse Impacts				
Existing industrial uses within the Port Westward Industrial Park	 Airborne emissions (particulates, dust, water droplets, odor, steam, fumes, gas, smoke, etc.) Noise Rail/truck/ship traffic for raw materials, finished products, and wastes Stormwater runoff which may contain chemicals, nutrients, colors, or sediment Process/cooling water discharge Wastewater discharge Fire/explosion Chemical spills (including oils and hazardous materials) Light Water usage Wetland impacts Accumulation of waste materials Nuisances from waste materials 				

Table 2: Potential Adverse Impacts from Adjacent and Non-Adjacent Land Uses



Land Use	Potential Adverse Impacts
Agricultural uses (including tree farms) and forest uses	 Airborne emissions (particulates, dust, water droplets, odor, smoke, etc.) Noise Truck traffic for raw materials, finished products, and wastes Vehicle and machinery exhaust emissions Stormwater runoff which may contain chemicals, nutrients, or sediment Chemical spills (e.g., fuels, hydraulic fluid, pesticides, herbicides, fungicides) Water usage Wetland impacts Accumulation of waste materials Nuisances from waste materials Alteration of soil chemistry and structure Bacteria release (if manure is used for fertilizer)
Residential accessory to primary agricultural uses and rural residential uses	 Airborne emissions (dust, smoke, etc.) Vehicle exhaust emissions Stormwater runoff which may contain chemicals (e.g., herbicides), nutrients, or sediment Wastewater discharge Water usage

Similarities and Differences Among Impacts of Proposed, Adjacent, and Non-Adjacent Land Uses

Comparing the lists in Table 1 and Table 2 reveals significant overlap among the potential adverse impacts from the five rezone area rural industrial uses and the existing industrial uses within PWW. The potential offsite impacts from the five proposed industrial uses are largely the same as those that are already present from the existing industrial uses.

There is also overlap in the lists of potential adverse impacts from the five proposed uses and adjacent and non-adjacent tree farm and other agricultural uses and forested uses. Notably, the industrial uses are subject to more stringent environmental regulation than non-industrial uses. For instance, industrial uses need to comply with Federal, State, and County regulations requiring on-site containment and treatment of stormwater runoff, whereas agricultural operations may generate unregulated nonpoint runoff.¹⁷

The list of potential adverse impacts from residential uses is shorter than the list for the rezone area's rural industrial uses. However, as above, the industrial uses are subject to more stringent environmental regulations than non-industrial uses. For instance, even less stringent than agricultural uses discussed

¹⁷ U.S. Environmental Protection Agency, Polluted Runoff: Nonpoint Source (NPS) Pollution. Accessed July 1, 2020 from https://www.epa.gov/nps/nonpoint-source-agriculture



above, residential uses are generally only required to demonstrate compliance upon installation of an onsite wastewater treatment system and do not have ongoing monitoring requirements.¹⁸

Table 3 provides a comparison of the potential adverse impacts from each of the five proposed rural industrial uses; the existing industrial uses within PWW; agricultural uses and forested uses; and residential uses.

¹⁸ OAR Chapter 340 Division 71, Onsite Wastewater Treatment Systems. Accessed July 1, 2020 from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1479

Table 3: Comparison of Potential Adverse Impacts

	Land Use							
			Proposed I	Jses				
Potential Adverse Impacts	Forestry/ Wood Products	Dry Bulk	Liquid Bulk	Natural Gas	Breakbulk	Existing PWW Industrial Uses	Agricultural/ Forest	Residential
Airborne emissions (particulates, dust, water droplets, odor, steam, fumes, gas, smoke, heat, etc.)	x	х	х	х	x	х	х	х
Noise	Х	Х	Х	Х	Х	Х	Х	
Rail/truck/ship traffic for raw materials, finished products, and wastes	x	х	х	х	х	х	х	
Vehicle and machinery exhaust emissions	Х	Х	Х	Х	Х		Х	Х
Stormwater runoff which may contain chemicals, nutrients, colors, or sediment	х	х	х	х	x	х	х	х
Process/cooling water discharge	Х	Х	Х	Х	Х	Х		
Wastewater discharge	Х	Х	Х	Х	Х	Х		Х
Fire/explosion	Х	Х	Х	Х	Х	Х		
Chemical spills (including oils and hazardous materials)	x	х	х	х	х	х	x	
Light	Х	Х	Х	Х	Х	Х		
Water usage	Х	Х	Х	Х	Х	Х	Х	Х
Navigation impacts	Х	Х	Х	Х	Х			
Dike impacts for any levee modifications	Х	Х	Х	Х	х			
Wetland impacts	Х	Х	Х	Х	Х	Х	Х	
Wildlife impacts	Х	Х	Х	Х	Х			
Accumulation of waste materials	Х	Х	Х	Х	Х	Х	Х	
Nuisances from waste materials	Х	Х	Х	Х	Х	Х	Х	
Combustibility	Х	Х						
Alteration of soil chemistry and structure							Х	
Bacteria release (if manure is used for fertilizer)							Х	

Compatibility Evaluation

Given the range of potential adverse impacts from the five rezone area rural industrial uses, it might initially seem difficult to establish the compatibility of those uses with adjacent land uses and nonadjacent uses in the study area. However, upon closer analysis, such is not the case. First, not all potential impacts will be present for a given industrial operation. Where a particular impact will not be present, there is no need to mitigate the non-impact. Moreover, even the potential impacts align closely with the potential impacts from the existing PWW industrial uses. The County thus has a long record of compatibility in the form of the successful coexistence of existing industrial and non-industrial uses in the area, involving largely identical impacts, which serves as strong evidence that the rezone area's five rural industrial uses can indeed be made compatible with adjoining uses.

Approval of the zone change and associated comprehensive plan amendment and Goal Exception by the County would move the boundary of future industrial development farther south, but would neither expose new types of adjacent land uses to industrial uses, nor expose those adjacent land uses to a new set of new potential industrial impacts. This is a significant point as pertains to compatibility, as the potential impacts between similar adjacent land uses will likely be substantially the same. As described in Section III, the study area is primarily composed of industrial, tree farm and other agricultural uses, and forested land (with a smaller amount of residential uses accessory to primary agricultural uses). The proximity of these uses and their long-standing operations provide strong evidence that rural industrial uses can safely exist side-by-side with non-industrial uses if appropriate mitigation is in place (such as buffering, setbacks, other separation, and the mitigation measures previously imposed by the County with the adoption of Ordinance 2018-1).

Based on the potential adverse impacts from the five proposed uses cataloged in Table 1, the potential exists for adjacent non-industrial uses to experience some degree of susceptibility to those impacts, though not at a level greater than could potentially be experienced from existing industrial and agricultural uses at PWW. Accordingly, the five identified rural industrial uses will likely require some mitigation of their impacts in order to maintain compatibility. However, as discussed below, adequate mitigation measures exist and are available to ensure that compatibility is maintained between the existing adjacent land uses and each of the rural industrial uses proposed for the rezone area.

The fundamental reason the existing PWW uses and the five rural industrial uses identified for the zone change area are compatible with adjoining uses is that industrial operations are highly regulated at the Federal and State levels to minimize adverse impacts to adjacent land uses and area waterways.¹⁹ These regulations are adequate to ensure the adverse impacts from the five rural industrial uses can be adequately mitigated so as to be rendered compatible with adjacent land uses, as required for the requested Goal Exception. To provide even more protection, the Zoning Ordinance requires uses in the RIPD zone to identify and address "any adverse impact"²⁰ and the County's prior approval of the zone change requires the five industrial uses to go through conditional use review. Maintaining compatibility is therefore largely a function of cost for users to meet the regulatory standards at the time of development, and whether the total cost of initial and ongoing regulatory compliance is economically feasible to allow a particular use to site at Port Westward. Accordingly, Section V outlines applicable regulatory programs.

¹⁹ Furthermore, in large part specifically to help maintain compatibility with neighboring properties, the Port selected a narrow list of uses after evaluating and rejecting other uses with objectionable impacts.

²⁰ Columbia County Zoning Ordinance Section 683.1



V. EXISTING REGULATORY PROGRAMS RELEVANT TO PORT WESTWARD

This section provides detail on existing regulatory programs designed to mitigate and regulate potential adverse impacts from development in general and industrial operations in particular. This listing is not intended to be exhaustive; some users may be subject to additional regulations requiring compliance with programs and permits not described below. The programs below apply to the stationary sources associated with the land use. This list does not examine the regulations that apply to mobile sources, as those are already highly regulated by other rules (e.g. Federal and Oregon vehicle air quality standards) which are not specific to the five rural industrial uses.

As these regulatory programs may be applicable to the five proposed industrial uses, their application will have the effect of maintaining compatibility among the proposed rural industrial uses and adjacent land uses as required under ORS 197.732 and OAR 660-004-0020.

The proposed land uses in the Port Westward zone change area will require substantial review from Federal, State, and local agencies to ensure compliance with regulatory emission and impact standards to satisfy regulatory objectives. Permits from these agencies are generally required prior to commencement of industrial operations and usually expire after several years. Through the course of each permit, operators must typically monitor and report on the effectiveness of current mitigation measures. At the time of permit renewal, the operations would become subject to any new permit standards and regulations in effect since the last permit cycle, which may then lead to implementation of new best practices.

The programs described below require mitigation consisting of either performing specific actions (e.g., preparing and promulgating an emergency response plan or evaluating multiple development alternatives) or of complying with numerical standards, which allow the facility operator some flexibility on how to meet the standards (e.g., selecting from among several technologies to comply with emissions limits).

Applicable Federal Regulations

Federal environmental and other regulatory rules are enforced by multiple agencies as they carry out numerous programs. The discussion below provides information on programs that may affect industrial operations in the zone change area.

All Federal Agencies

National Environmental Policy Act

The National Environmental Policy Act (NEPA, 42 USC § 4321) requires Federal agencies to factor in environmental considerations and to provide opportunity for public comment prior to making decisions, such as when establishing new policies or procedures. NEPA is also triggered prior to issuance of Federal agency permits, which in the zone change area would be necessary for a variety of actions (e.g., Federal wetland permits) as further described below.²¹

²¹ A project would only avoid being subject to NEPA if no Federal permits are required.



NEPA is under the umbrella of the White House Council on Environmental Quality, but individual agencies with the most relevant expertise and overarching regulatory authority generally take the lead, with other agencies in supporting roles. NEPA requires the anticipated environmental effects from proposed actions to be identified. There are generally three tiers of analysis:

- If the proposed actions are on a list of activities that Federal agencies have identified as not having significant impacts on the environment, then a Categorical Exclusion determination is issued.²²
- For more complex situations, an Environmental Assessment is required to determine if the proposed action will or will not result in significant environmental impact. The result of this analysis is either a Finding of No Significant Impact or a requirement for an environmental impact statement.
- For major Federal actions, an Environmental Impact Statement is required. This requires estimation of environmental consequences, evaluation of alternatives to minimize adverse impacts, and identification of mitigation measures to eliminate significant impacts.

The lead Federal agency will issue a decision only after concluding the analysis described above.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (54 USC § 306108) requires Federal agencies to account for impacts on historic properties and archaeological sites prior to making decisions. Agencies must consult with interested parties such as state or tribal historic offices, tribes, and local governments. Similar to NEPA, this act is triggered prior to issuance of Federal agency permits (e.g., Federal wetland permits). If historic or cultural elements are present, applicants may need to modify their development proposals to avoid or minimize impacts.

U.S. Army Corps of Engineers

Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act (33 USC §§ 403 and 404) requires that a permit be obtained from the U.S. Army Corps of Engineers (Corps) prior to constructing structures that affect the course, location, condition, or capacity of navigable waters of the United States. This program was instituted to mitigate for navigational impacts. At Port Westward, such a permit would be necessary along the Thompson property's Columbia River shore (within the zone change area), for instance, to construct a dock, reinforce the bank, install a jetty, fill or dredge the shoreline. A Section 10 permit would also be required outside the zone change area if the Port were to undertake these activities on its waterfront property within PWW. Consistent with NEPA, permitting through Section 10 includes coordination with interested parties regarding historic resources, water quality, tribal claims and concerns, and wildlife and habitat impacts (among other factors). Mitigation measures may be imposed to achieve the lowest level of impact

Section 14 of the Rivers and Harbors Act (33 USC § 408) requires authorization from the Corps prior to alterations to federally authorized "Civil Works" projects. At Port Westward, any proposed modifications

²² Council on Environmental Quality, Categorical Exclusions. Accessed July 16, 2020, from https://ceq.doe.gov/ nepa-practice/categorical-exclusions.html



to the levee system (e.g., running utilities across a dike) would require Corps approval, which would be granted only upon demonstration that the actions taken are not "injurious to the public interest." As part of the permit review process, the Corps examines multiple considerations, as outlined in its procedural guidance:

Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation.²³

The Corps may require mitigation prior to issuing a permit; this mitigation could consist of modifying the project to reduce adverse impacts or performing compensatory actions to address impacts on habitat, cultural resources, air quality, or other elements.²⁴

Clean Water Act

Under Section 404 of the Federal Water Pollution Control Act of 1972 (Clean Water Act, or CWA, 33 USC § 1344), the Corps regulates dredging and fill of waters of the United States, which includes the Columbia River, some of its tributaries, and many wetlands.²⁵ For wetlands, a jurisdictional determination (necessitating field visits by a wetland scientist and review of a wetland determination report by Corps staff) would be required to identify whether any individual wetland is subject to Corps regulations. In general, to obtain a Section 404 permit, applicants must demonstrate that the discharge of dredged or fill material would not significantly degrade the nation's waters and there are no practicable alternatives less damaging to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

While wetland alterations affecting less than a half-acre may be approvable via a Nationwide Permit, activities exceeding that threshold (or of any size at Corps staff's discretion) would be subject to the more rigorous Individual Permit review process, which requires a robust alternatives analysis. Most impacts trigger a requirement to perform mitigation, with some minor exceptions (e.g., projects impacting less than 0.1 acres of wetlands that also meet other conditions). Mitigation for wetland impacts can be satisfied in three different ways:

- On-site wetland restoration, creation, enhancement, and preservation/conservation;
- Off-site wetland restoration, creation, enhancement, and preservation/conservation; or
- Payment to a wetland mitigation bank (though this would not presently be an option at Port Westward since Columbia County does not currently have a mitigation bank).

 ²³ Engineer Circular (EC) 1165-2-220, U.S. Army Corps of Engineers, 10 September 2018. Accessed July 1, 2020, from https://www.publications.usace.army.mil/Portals/76/Publications/EngineerCirculars/EC_1165-2-220.pdf
 ²⁴ Ibid.

²⁵ Effective June 22, 2020, the definition of "waters of the United States" was clarified through Corps and EPA administrative rulemaking. 85 FR 22250, accessed July 1, 2020, from https://www.federalregister.gov/documents/ 2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states

Environmental Protection Agency

Clean Water Act

The Environmental Protection Agency (EPA) has jurisdiction over programs established to carry out the Clean Water Act (except for Section 404, noted above, in which both the Corps and EPA have a regulatory role). Taken together, the EPA's programs established under the CWA will result in mitigation consisting of pollution control practices, spill prevention and response plans, and facility design features that minimize impacts on water resources.

- Section 301 (33 USC § 1311). This section prohibits discharge of pollutants to waters of the United States unless a person has obtained a permit (for instance, via Sections 402 or 404, described below).
- Section 303 Water Quality Standards and Implementation Plans (33 USC § 1313). This section requires the EPA and states to prepare and periodically review water quality standards.
- Section 306 National Standards of Performance (33 USC § 1316). Based on this section, the EPA creates water quality standards for various industry sectors (e.g., timber products processing), requiring effluent reductions based on best available technology at the time of permit issuance.
- Section 307 National and Local Pretreatment Standards (33 USC § 1317). This section establishes standards for wastewater flows to publicly owned treatment works (POTW, or municipal wastewater facility), which require pretreatment at a facility prior to discharging into a municipal wastewater collection system that then conveys flows to a POTW. In Oregon, the EPA has delegated authority of this program to the state Department of Environmental Quality (DEQ). These rules would only apply if a POTW system were implemented at Port Westward.
- Section 311 Oil and Hazardous Substance Liability (33 USC § 1321). This section regulates discharges of oil and other hazardous substances into waters of the United States to ensure the effects are not harmful to the public health or welfare or the environment. The EPA is the lead agency for responding to oil spills in inland waters (whereas the Coast Guard is the lead agency for spills at deepwater ports and tidal waters such as Port Westward). Mitigation for impacts addressed in this program often includes requiring facilities that store or use certain quantities of oil (those that may cause "substantial harm") to identify ways to prevent spills and to prepare a Facility Response Plan to identify how to respond in the event of a spill (per 40 CFR 112).
- Section 316 Thermal Discharges (33 USC § 1326). This section authorizes granting of variances from Section 301 or 306 thermal standards if the variance is still protective of fish and wildlife. Additionally, cooling water intake structures that withdraw more than two (2) million gallons per day are subject to design requirements to minimize environmental impacts, particularly on waterborne organisms.
- Section 319 Nonpoint Source Management Programs (33 USC § 1329). This section established funding for the EPA to issue grants for states to improve programs designed to reduce pollution



from nonpoint sources such as agricultural runoff, sediment, nutrients, pesticides, vehicle oil, etc. In Oregon, this grant funding is provided to DEQ.²⁶

- Section 401 State Certification of Water Quality (33 USC § 1341). Before Federal agencies issue permits resulting in discharge to waters of the United States, states must certify that water quality requirements of the CWA are met. Within the zone change area, these provisions would be triggered prior to wetland alterations if the Corps has taken jurisdiction of the affected wetlands or for EPA or other Federal permits. The EPA has established regulations for this process as outlined 40 CFR 121, and in Oregon the 401 Certification review is performed by the DEQ. The EPA allows DEQ to impose conditions of approval as needed to mitigate for incompatible impacts such as effluent quality standards and monitoring requirements to ensure the system's ongoing performance meets standards even beyond permit issuance.
- Section 402 National Pollutant Discharge Elimination System (NPDES, 33 USC § 1342). The EPA requires that point sources obtain a permit from the EPA or the state (in this case, Oregon DEQ) before discharging pollutants into waters of the United States. Point sources include pipes, ditches, and similar channels but exclude agricultural runoff. Within the zone change area, for example, these provisions may apply to wastewater treatment facilities or industrial facilities that discharge process water or stormwater to the Columbia River. Permits place specific limits on the quantity and concentration of an array of pollutants (e.g., heavy metals, nutrients, toxic compounds, bacteria, etc.) as specified in Section 301, which typically necessitates operators to install a treatment system prior to discharge. NPDES permits have regular monitoring and reporting requirements. As these permits have a discrete timespan, operators need to periodically reapply and meet updated permit standards, such as by implementing new available technology.
- Section 404 Permits for Dredged or Fill Material (33 USC § 1344). The EPA disseminates guidelines and criteria utilized by the Corps (and some states, but not including Oregon) in the administration of dredging and fill of waters of the United States.
- Section 405 Sewage Sludge and Disposal Program (33 USC § 1345). The EPA has established programs and standards for the management of biosolids (sewage sludge) from POTWs. As Port Westward does not have a POTW and the Port is not proposing land application of biosolids within the zone change area, this section does not directly affect the zone change area.

Oil Pollution Act

The aim of the Oil Pollution Act (33 USC § 2701), which amended the Clean Water Act, is to minimize damage from oil spills by requiring measures to prevent, prepare for, and respond to spills to avoid discharge to waters. The EPA has issued rules that require onshore oil facilities to prepare emergency response plans pursuant to the Spill Prevention, Control and Countermeasure (SPCC) Rule (40 CFR 112). The EPA has oil spill response authority in the Inland Zone, while the Coast Guard has authority in the Coastal Zone including waters subject to tide such as the portion of the Columbia River at Port Westward. The EPA may either perform cleanup itself or direct the spiller's response.

²⁶ As noted in Section IV, industrial development at Port Westward would not be permitted to allow nonpoint runoff, in contrast to agricultural operations which may generate nonpoint runoff.



Toxic Substances Control Act and Lautenberg Chemical Safety Act

Under the Toxic Substances Control Act (TSCA, 15 USC § 2601), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, the EPA requires testing of chemicals proposed for production or storage to assess exposure to humans and the environment, and can place limits on chemicals determined to pose an unreasonable risk of injury. More germane to the zone change area, EPA requires import and export operations to certify that chemicals comply with TSCA and requires chemical operations to maintain records and submit reports to EPA regarding the chemicals, which can be disclosed to local governments, emergency responders, and health professionals (even if the information includes confidential operational data).

Emergency Planning and Community Right-to-Know Act

This EPA's Office of Emergency Management implements and provides guidance on this program pursuant to 42 USC § 11001, which requires that states create emergency planning committees. It also requires industries to report information on use and storage of hazardous chemicals to local governments and to report any accidental releases of hazardous or toxic chemicals, with information available to the public through the EPA's Toxics Release Inventory. In Oregon, this program is largely overseen by the Office of the State Fire Marshal.

Pollution Prevention Act

As part of the Pollution Prevention Act (PPA, 42 USC § 13101) the EPA implements programs including source reduction to minimize the amount of chemicals in use, thereby reducing the volume of any accidental release. Following source reduction, industries are required to recycle pollutants. For those businesses required to file toxic chemical release forms under the Emergency Planning and Community Right-to-Know Act, the PPA requires reporting of toxic reduction and recycling.

Safe Drinking Water Act and Resource Conservation and Recovery Act

The EPA has established the Underground Injection Control (UIC) program in 40 CFR 144 pursuant to provisions of the Safe Drinking Water Act (SDWA, 42 USC § 300) and the Resource Conservation and Recovery Act (RCRA, 42 U.S. Code § 6901). This program specifies the rules through which UICs (e.g., drywells for stormwater disposal) may be constructed and utilized. Mitigation (e.g., water quality treatment) may be required in order to protect groundwater quality, particularly for underground drinking water supplies. The EPA has delegated authority to DEQ to administer this program within Oregon.

The Resource Conservation and Recovery Act also authorizes the EPA to set standards to regulate solid waste, including hazardous waste, and specifies rules for underground storage tank safety. In Oregon, RCRA provisions are implemented through DEQ.

Clean Air Act

Under the Clean Air Act (CAA, 42 USC § 7401 et seq.), the EPA establishes air quality standards, including those for six common pollutants: ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. The EPA also regulates emissions of hazardous air pollutants that cause health effects such as cancer. Taken together, the CAA regulations require pollution controls and compliance with emissions standards. For each of these regulatory areas, new sources (such as those that would be constructed in the zone change area) are subject to more stringent regulations than existing sources. Similar to NPDES permits, Clean Air Act operating permits have regular monitoring and reporting



requirements and require periodic renewal. The EPA has delegated authority to DEQ to administer this program within Oregon.

CAA Section 112(r) requires facilities using certain quantities of an extensive list of regulated substances²⁷ to submit a Risk Management Plan to the EPA (not DEQ) every five years to outline steps to reduce the likelihood of chemical accidents and share information with first responders on how to respond to an accident.

U.S. Coast Guard

Homeland Security Act of 2002

In addition to its high-profile search and rescue mission, the U.S. Coast Guard has ten other missions identified in the Homeland Security Act of 2002 (6 USC § 468). Those most relevant to the Port Westward zone change area include marine safety; marine environmental protection; and ports, waterways and coastal security. The Coast Guard is the lead agency for responding to incidents (including spills of oils or hazardous materials) in waterways, and consequently coordinates and prepares for emergency response efforts. The Coast Guard reviews and approves security plans for ships and marine facilities (including ports), including anti-terrorism measures.

Oil Pollution Act

The Oil Pollution Act (33 USC § 2701), which amended the Clean Water Act, grants authority to the Coast Guard to require oil transport vessels (and large ships carrying fuel for their own use) to prevent, prepare for, and respond to spills. The Coast Guard requires vessel operators to obtain certificates to demonstrate adequate financial resources to respond to a spill, if one should occur. The Coast Guard has oil spill response authority in the U.S. Coastal Zone which includes areas subject to tide such as the Columbia River near Port Westward. The Coast Guard may either perform cleanup itself or direct the spiller's response.

Pipeline and Hazardous Materials Safety Administration

Hazardous Liquid Pipeline Act and Natural Gas Pipeline Safety Act

The Pipeline and Hazardous Materials Safety Administration (PHMSA) within the U.S. Department of Transportation is responsible for overseeing pipeline safety pursuant to the Hazardous Liquid Pipeline Act and the Natural Gas Pipeline Safety Act (both at 49 USC § 60101). PHMSA issues regulations on pipeline design and construction, testing, maintenance, and accident reporting.

Oil Pollution Act

The Oil Pollution Act (33 USC § 2701) grants authority to PHMSA to regulate pipelines that transport oil and other hazardous materials. PHMSA requires operators to design and construct pipelines to meet specific safety standards and to develop emergency response plans.

²⁷ U.S. Environmental Protection Agency, List of Regulated Substances under the Risk Management Plan (RMP) Program. Accessed July 1, 2020, from https://www.epa.gov/rmp/list-regulated-substances-under-risk-management-plan-rmp-program



Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2016 (PIPES) Act

The PIPES Act reauthorized PMHSA's pipeline safety program and required PMHSA to develop standards for underground natural gas storage operations. This Act also required PMHSA inspectors to provide reports to pipeline operators following inspections, so that operators can expediently make any necessary changes to improve safety.

Federal Rail Safety Act

Under the Federal Rail Safety Act (49 USC § 20106), as amended, PHMSA and the Federal Railroad Administration require railroad operators to prepare oil spill response plans, to share information with local emergency responders, and to utilize rail cars meeting the latest safety standards.

Federal Railroad Administration

Federal Rail Safety Act

Under the Federal Rail Safety Act (49 USC § 20106), as amended, PHMSA and the Federal Railroad Administration (FRA) require railroad operators to prepare oil spill response plans, to share information with local emergency responders, and to utilize rail cars meeting the latest safety standards. The FRA also issues rail safety regulations and enforces them via inspections. Violators are subject to fines.

U.S. Maritime Administration

Marine Highway Program

The U.S. Maritime Administration (MARAD), part of the U.S. Department of Transportation, manages the Marine Highway Program to encourage increased use of navigable waters. The M 84 Marine Highway Corridor (of which the Columbia River is a part) is included in this program. As part of this program, MARAD regulates the Columbia River M-84 Corridor and awards grant funding for qualifying projects at ports.

Deepwater Port Act

Pursuant to the Deepwater Port Act (33 USC § 1501), MARAD licenses offshore port structures not applicable in this context. This act defines deepwater ports more narrowly than the state of Oregon; for the purposes of this act, deepwater ports are those which are beyond state seaward boundaries. As a result, this act is not applicable to Port Westward, but may have a nexus to vessels in maritime commerce that call at Port Westward.

Federal Energy Regulatory Commission

Natural Gas Act and Natural Gas Policy Act

Under the Natural Gas Act (15 USC § 717) and Natural Gas Policy Act (15 USC § 3341), the Federal Energy Regulatory Commission (FERC) is charged with reviewing applications for the construction and operation of natural gas terminals, storage facilities, and pipelines. As part of this process, FERC coordinates with multiple agencies including the U.S. Coast Guard, U.S. Department of Transportation, and state and local governments to ensure that the facility meets standards and that the operator has an appropriate emergency response plan in place. If FERC approves a natural gas facility, it then operates under FERC regulatory oversight throughout the course of the facility's operation. As part of this oversight, FERC can



require operators to perform safety improvements. The NEPA review associated with these facilities would also address alternatives analysis, pollution prevention measures, and the like.

Interstate Commerce Act

As part of the Interstate Commerce Act (49 USC § 1), FERC regulates rates (tariffs) for both oil and natural gas pipelines. Safety regulations for these pipelines are issued by the U.S. Department of Transportation (USDOT) Pipeline and Hazardous Materials Safety Administration, not by FERC.

Federal Emergency Management Agency

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP, 42 USC § 50), which among other provisions requires preparation of Flood Insurance Rate Maps (FIRMs). FEMA also promulgates regulations that communities wishing to participate in the NFIP are obligated to meet or exceed.²⁸ FEMA does not have direct regulatory authority over the application of the NFIP in permitting and development, as that is under the purview of the local government (Columbia County, in the case of the zone change area). However, if an applicant wishes to amend a FIRM, it must submit technical documentation to FEMA to demonstrate compliance with the NFIP and other laws including the Endangered Species Act and may need to modify the project design to comply.

U.S. Fish and Wildlife Service

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC § 703) prohibits "taking" of certain migratory bird species without a permit from the U.S. Fish and Wildlife Service (USFWS). Taking is broadly defined as including:

...pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof...²⁹

Therefore, construction activities and facility operations need to avoid takings (e.g., by limiting certain actions to non-migration periods) or first obtain USFWS approval. If unpermitted takings occur, violators are subject to fines.

²⁸ Federal flood insurance is only available within communities that participate in the NFIP.

²⁹ 16 USC § 703(a). Accessed July 1, 2020 from https://uscode.house.gov/view.xhtml?req=(title:16 section:703 edition:prelim)



U.S. Fish and Wildlife Service and National Marine Fisheries Service

Marine Mammal Protection Act

The Marine Mammal Protection Act (16 USC § 1361) prohibits "taking" of marine mammals without a permit from USFWS or the National Marine Fisheries Service (NMFS), with the applicable agency dependent on species. The term take is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal."³⁰ Therefore, construction activities and facility operations need to avoid takings (e.g., by altering practices) or first obtain USFWS and/or NMFS approval. If unpermitted takings occur, violators are subject to fines.

Federal Agencies Providing Supplemental Review

Multiple agencies including USFWS, NMFS, Bureau of Land Management (BLM), and the U.S. Forest Service (USFS) provide additional review of Federal permits to ensure the proposed Federal actions do not impact sensitive natural resources. The administering Federal agency (e.g., the Corps) then incorporates the comments from the reviewing agencies into its decision on the requested permit. For instances where specific coordination requirements are not specified in other statutes, the National Environmental Policy Act (described above) would still require coordination with these agencies when reviewing Federal actions. While the reviewing agencies' comments are generally not binding, they help the lead agencies comply with Federal environmental laws by providing recommendations on courses of action.

Endangered Species Act

Under the Endangered Species Act (16 USC § 1531), USFWS has created a list of endangered species. Federal agencies are required to coordinate with USFWS and NMFS to ensure that Federal actions (including permit decision) will not further threaten listed species, either through direct effects or through habitat impacts. An example of how this could affect the zone change area is that if a project requires a Federal permit, the stormwater management system must be designed to meet both the NMFS Standard Local Operating Procedures for Endangered Species (SLOPES) standards and the County stormwater standards.

Fish and Wildlife Coordination Act

For projects that impound, divert, control, or modify water bodies and wetlands (including navigation and drainage projects), the Fish and Wildlife Coordination Act (16 USC § 661) requires other Federal agencies to consult with USFWS and NMFS prior to issuing permits to minimize damage to wildlife. An applicant may need to modify the project design to address concerns raised by the reviewing agencies.

Magnuson-Stevens Fishery Conservation and Management Act

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (16 USC § 1801), Federal agencies are required to coordinate with NMFS prior to taking actions (including issuing permits) that may impact essential fish habitat. An applicant may need to modify the project design to address concerns raised by the reviewing agencies.

³⁰ 16 USC § 1362(13). Accessed July 1, 2020 from https://uscode.house.gov/view.xhtml?req=(title:16 section:1362 edition:prelim)

Applicable Oregon Regulations

Similar to the Federal level, state regulatory programs are administered by multiple agencies.

Department of State Lands

Wetland and Waterway Removal and Fill permits

Pursuant to Oregon's Removal-Fill Law (ORS 196.795-990), the Department of State Lands (DSL) regulates alterations of waters of the state, which include streams, ponds, wetlands, and ditches. Regulated activities include removal or intentional movement of rock, gravel, sand, silt, other inorganic substances, and large woody debris from the bed or banks of a waterway, or deposition of material. These regulations are similar to Corps regulations of waters of the United States, but state rules are in some ways more stringent than Federal rules.

DSL permits are required for projects that involve 50 cubic yards of fill and/or removal (cumulative) within the jurisdictional boundary.³¹ Furthermore, there are two areas within and near the zone change area that would require DSL permits for projects of any size (even smaller than 50 cubic yards), namely (1) in the wetland mitigation sites northwest of Portland General Electric's generating facilities, and (2) abutting the east end of the zone change area in Dobbins Slough/Johns Slough due to its designation as Essential Salmonid Habitat.

Similar to Corps permits, to obtain many DSL fill-removal permits, applicants must generally perform an alternatives analysis to justify wetland/waterway alterations and demonstrate alteration of construction to minimize impacts on aquatic habitat. DSL requires mitigation for the adverse impacts to the extent practical, with a minimum of 1.5 acres of new wetland creation for every acre filled.³²

Department of Environmental Quality

Oregon Department of Environmental Quality (DEQ) oversees permit programs addressing air quality, water quality, and solid waste disposal.³³ Prior to review of any DEQ permit, the state requires submittal of a Land Use Compatibility Permit (LUCS) signed by the local government (in this case, Columbia County) to indicate whether the proposed use is compatible with applicable comprehensive plan provisions and zoning standards.³⁴

As part of its rulemaking process, DEQ regularly evaluates and refines its programs and standards to safeguard public health and the environment. For instance, the NPDES 1200-Z permit (noted below) is currently under review, with the proposed draft rule anticipated to be issued for public comment in fall 2020 and the final rule anticipated in spring 2021.

³¹ Oregon Department of State Lands, A Guide to the Removal-Fill Permit Process, 2019. Accessed July 1, 2020 from http://www.oregon.gov/dsl///_Fill_Guide.pdf

³² Ibid.

³³ DEQ also manages an Environmental Cleanup Program but since the zone change area is not a brownfield, the cleanup program is not applicable at this location.

³⁴ Oregon Department of Environmental Quality, Land Use Compatibility Statement. Accessed July 1, 2020 from https://www.oregon.gov/deq/Permits/Pages/LUCS.aspx



Water Quality

DEQ issues water quality permits based both on Federal authority delegated by the EPA (e.g., the Underground Injection Control Program) and on authority granted by Oregon statute. Water quality permits must be obtained prior to discharge of pollutants to water or to the ground. These permits generally limit allowable quantities and types of pollutant discharges (e.g., sediment, chemicals, etc.) and may require certain equipment or practices to limit pollution. Several permit types also require regular monitoring and reporting; the agency then makes these data available to the public.

NPDES Permits

Pursuant to Section 402 of the Clean Water Act, DEQ is authorized by the EPA to issue permits as part of the National Pollutant Discharge Elimination System. These permits are required for point source (pipes, ditches, and similar channels but excluding agricultural runoff) discharges to waters of the United States and State of Oregon. Within the zone change area, for example, these provisions may apply to wastewater treatment facilities or industrial facilities that discharge process water or stormwater to the Columbia River. Permits place specific limits on the quantity and concentration of an array of pollutants (e.g., heavy metals, nutrients, toxic compounds, bacteria, etc.) as specified in CWA Section 301, which typically necessitates operators to install a treatment system prior to discharge. NPDES permits have regular monitoring and reporting requirements. As these permits have a discrete timespan, operators need to periodically reapply and meet changing permit standards such as by implementing best available technology.

Types of NPDES permits that would be needed for future activities within the zone change area include:

- 1200-C Construction Stormwater General Permit, for construction activities that disturb more than one acre; and
- 1200-Z Stormwater Discharge General Permit, for ongoing industrial operations.

WPCF Permits

Water Pollution Control Facility (WPCF) permits are similar to NPDES permits but are instead required for discharge to the ground rather than to surface water. DEQ issues WPCF permits for wastewater lagoons, onsite sewage disposal systems (described below), underground injection control systems (described below), and land irrigation of wastewater. In each case, operators must install any requisite technology to meet allowable release standards.

Underground Injection Control Program

Pursuant to the Federal Safe Drinking Water Act and Oregon's Groundwater Act (OAR Chapter 340, Division 40), DEQ's UIC Program regulates injection wells that may be used for disposal or storage of liquids (e.g., stormwater management drywells), to ensure that such facilities are built and operated in a manner that is protective of groundwater supplies. Prior to construction, applicants need to obtain a UIC permit from DEQ to demonstrate that adequate separation from groundwater is provided and that appropriate pre-treatment facilities are in place to improve water quality prior to injection, with required pre-treatment levels varying depending on the source of the injected fluid. DEQ may also require periodic sampling and reporting, and may require closure of non-compliant UICs.



Onsite Wastewater Management Program

DEQ publishes rules (OAR Chapter 340, Divisions 71 and 73) regarding the design, construction, and maintenance of onsite sewage systems (e.g., septic systems) to maintain public health and protect water quality. These rules require an applicant to obtain a permit prior to construction and to build the system to specific standards to minimize impacts. Owners of certain types of systems (e.g., sand filters) are required to file an annual operation and maintenance form by a certified onsite maintenance provider. In Columbia County, individual onsite systems are permitted through the County rather than through DEQ.

Nonpoint Source Program

DEQ's Nonpoint Source Program encourages reduction of pollution from nonpoint sources. Pursuant to CWA Section 319, DEQ provides grant funding for qualified partners to implement programs to decrease nonpoint source pollution.³⁵

Section 401 Removal and Fill Certification

For projects that require Federal permits that may result in discharge to waters of the United States, Section 401 of the Clean Water Act requires states to certify that water quality requirements of the CWA are met. As noted above, these provisions would be triggered within the zone change area if a Corps wetland fill permit or other Federal permit is needed to accommodate a project. DEQ may impose conditions of approval to mitigate for incompatible impacts such as effluent quality standards and monitoring requirements. Without DEQ's 401 certification, the Federal permit cannot be issued.

Biosolids Program

Pursuant to Clean Water Act Section 405 and state rules, DEQ manages the state's program for management of biosolids (sewage sludge) from municipal wastewater facilities. Port Westward does not have a municipal wastewater facility and the Port is not proposing land application of biosolids within the zone change area, so this section does not directly affect the zone change area unless those circumstances change in the future.

Industrial Pretreatment Program

The EPA has delegated management of the CWA National and Local Pretreatment Standards to DEQ. The state also has its own supplemental regulations. As noted above, these standards are applicable to wastewater flows to publicly owned treatment works (POTW), so they would only apply if a POTW system were implemented at Port Westward.

Ballast Water Program

DEQ's rules for ballast water stipulate that regulated vessels must provide reports to the state before entering state waters and comply with management practices outlined in ORS 783.620 through 783.640 to minimize introduction of nuisance species. DEQ can issue fines for noncompliance. At Port Westward,

³⁵ As noted in the EPA discussion, industrial development at Port Westward would not be permitted to allow nonpoint runoff but would instead need to collect and treat stormwater prior to discharge; by contrast, agricultural operations may generate unregulated nonpoint runoff.


this program would only apply to the zone change area if a dock were constructed in the future along the Thompson property's Columbia River shore.

Air Quality

DEQ issues air quality permits based both on Federal authority delegated by the EPA (for new sources and hazardous air pollutants) and on authority granted by Oregon statute. Air quality permits generally limit allowable quantities and types of air pollution emissions (e.g., particulates, toxics, Clean Air Act pollutants, etc.) and may require certain equipment or practices to limit pollution. DEQ also requires regular air quality monitoring and reporting; the agency then makes these data available to the public.

Cleaner Air Oregon Program

The Cleaner Air Oregon (CAO) Program, established in 2018, strengthened air quality standards for industrial operations. Based on the purposes outlined in OAR 340-245-0005, this program is intended to protect health, analyze health risk based on science, use a science-based approach to address risks, and reduce air toxic exposure while supporting businesses. With the exceptions of minor sources of pollutants, new businesses are required to first undergo CAO risk assessment, which may require operators to institute additional emission controls to comply with the state's Risk Action Levels. Following the CAO risk assessment, operators then apply for applicable permits (further described below), which incorporate the results of the assessment.

Air Contaminant Discharge Permits

Air Contaminant Discharge Permits (ACDPs) are required for new sources of air pollution or major modifications to existing sources.³⁶ DEQ has established four tiers of ACDPs, which increase in complexity as one moves through the following list (the type of emission source determines the applicable permit tier).³⁷ The following list provides examples of activities that would require each type of ACDP but does not replicate the entire inventory of applicable activities promulgated by DEQ. With each of these ACDP's, an operator may need to install pollution control technology as mitigation to ensure compliance with numerical emissions standards.

- 1. Basic ACDP. Facilities that fall under this permit threshold include:
 - Natural gas and propane fired boilers of 10 or more million British Thermal Units (MMBTU)/hour but less than 30 MMBTU/hour heat input that may use less than 10,000 gallons per year of #2 diesel oil as a backup fuel.
 - Rock, concrete or asphalt crushing, both stationary and portable, more than 5,000 tons/year but less than 25,000 tons/year crushed.
- 2. General ACDP. Facilities that fall under this permit threshold include:
 - Boilers (>10 million BTU/hour heat input for oil fuels and >30 million BTU/hour heat input for natural gas and propane fuels).

³⁶ Oregon Department of Environmental Quality, Instructions for Using Air Contaminant Discharge Permit Application Forms, January 21, 2020. https://www.oregon.gov/deq/FilterPermitsDocs/acdp-applguidelines.pdf ³⁷ Ibid.



- Rock crushers (>25,000 tons of rock crushed per year); sawmills, planing mills, millwork, plywood manufacturing and veneer drying (>25,000 board feet per 8-hour shift).
- 3. Simple ACDP. Facilities that fall under this permit threshold include:
 - Building paper and buildingboard mills.
 - Natural gas and oil production and processing and associated fuel burning equipment.
- 4. Standard ACDP. Facilities that fall under this permit threshold include:
 - All sources that DEQ determines have emissions that constitute a nuisance.
 - All sources having the potential to emit 25 tons or more of all hazardous air pollutants combined in a year.

Title V Operating Permits

Industrial operations deemed major sources of air pollutants (as defined in OAR 340-200-0020) are required by the Federal Clean Air Act to obtain Title V operating permits. For new facilities (such as any future facilities in the zone change area), operators need to first obtain the applicable ADCP authorizing construction, then apply for Title V operating permits.³⁸ Title V permits require additional air quality monitoring and reporting (compared to ACDPs) to demonstrate compliance with air quality standards.

Tanks

DEQ has standards for both aboveground storage tanks (AST) and underground storage tanks (UST).

Aboveground Storage Tanks

While AST's are largely regulated by EPA, DEQ does require that spills of oil or hazardous materials be reported to the DEQ emergency response program.³⁹ DEQ also has authority over ASTs with 10,000 gallon or greater capacity if petroleum is received from pipelines or vessels.⁴⁰ Operators would need to utilize appropriate tank designs and containment measures to reduce the potential for harmful spills.

Underground Storage Tanks

The EPA has certified that DEQ's underground storage tank program meets or exceeds Federal standards.⁴¹ Therefore, DEQ is the lead agency for UST's in Oregon, and requires tank owners and operators to meet both state and Federal standards. DEQ rules specify tank installation and operating standards, require DEQ registration of tanks and annual operating certificates, specify measures for

https://www.oregon.gov/deq/tanks/Pages/Above-Ground-Storage-Tanks.aspx ⁴⁰ Ibid.

³⁸ OAR Chapter 340, Division 218, Oregon Title V Operating Permits. Accessed July 1, 2020 from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1540

³⁹ Oregon Department of Environmental Quality, Above Ground Storage Tanks. Accessed July 1, 2020 from

⁴¹ Oregon Department of Environmental Quality, Underground Storage Tank Program. Accessed July 1, 2020 from https://www.oregon.gov/deq/tanks/Pages/UST.aspx



addressing leaks, mandate operator training, require licensed UST contractors, and establish liability for future leaks.

Hazardous Waste

The five proposed uses for the zone change area have the potential to generate hazardous waste. DEQ regulates hazardous waste generators; hazardous waste treatment, storage or disposal facilities; and hazardous waste recycling facilities to maintain public health and environmental quality. Waste generators need to characterize their waste to determine if it is hazardous under Federal law (RCRA) or state law (OAR Chapter 340), and then provide annual reporting to DEQ. Additionally, DEQ rules specify hazardous waste accumulation limits; personnel training standards for waste handling; emergency management planning; shipping methods; allowable storage and treatment requirements; and spill containment procedures. DEQ also provides hazardous waste training to educate operators about how to properly manage hazardous waste.

Noise Control

Pursuant to ORS Chapter 467, DEQ has issued noise control regulations adopted as OAR 340 Division 35, and these model rules can be adopted by local jurisdictions (including Columbia County) to address noise events. These rules stipulate that new industrial uses cannot generate sounds that exceed specified levels or that increase ambient noise levels by more than 10 decibels in an hour, as measured at a "noise sensitive property." Additional standards address impulsive sounds and sound frequency. Operators may need to implement noise reduction measures to comply with these standards.

Emergency Response

Pursuant to OAR 340 Divisions 141 and 142, DEQ coordinates with Federal, state, and local partners to help prevent accidental discharges of oil or other hazardous wastes and to respond to spill events. DEQ requires ship and pipeline operators to prepare oil spill prevention and response plans, which DEQ then circulates during a public comment period. DEQ also requires reporting of spills of oils and other hazardous materials.

Department of Energy

Among other programs, the Oregon Department of Energy (ODOE) participates in decisions regarding the siting of liquified natural gas facilities and energy facilities.

Liquified Natural Gas

ODOE is the state agency charged with evaluating requests for liquified natural gas (LNG) import/export facilities on behalf of the state. ODOE provides input to FERC, which has the ultimate decision-making authority regarding siting new facilities pursuant to Federal law. ODOE also coordinates with FERC and the U.S. Coast Guard to ensure that the operator has an appropriate emergency response plan in place and that the operator has signed a Memorandum of Understanding with ODOE regarding safety planning and cost recovery for any needed emergency preparation.

Energy Facilities

ODOE staff support the Energy Facility Siting Council (EFSC) which regulates the siting of energy facilities as defined in ORS 469.300(11)(a), which includes certain pipelines transporting petroleum or LNG; certain



fuel processing facilities; and LNG storage facilities over 70,000 gallons (excluding import/export facilities). The EFSC only issues site certificates once adequate evidence has been provided by an applicant to confirm that appropriate mitigation measures are in place to meet standards for safety, noise control, wildlife protection, offsite impacts, etc. EFSC's review process involves coordination with state, local, and tribal agencies and notice to nearby property owners.

Office of the State Fire Marshal

The Office of the State Fire Marshal (OSFM) manages multiple programs applicable to industrial safety.

Community Right to Know

OSFM implements Oregon's Community Right to Know program. This program requires industries to provide annual reporting on use and storage of hazardous chemicals (and associated Safety Data Sheets) and to report any accidental releases of hazardous or toxic chemicals.⁴² OSFM also collects hazardous material incident reports from emergency providers. The information reported to OSFM is available for review by the public. Confidential information (e.g., exact quantities of hazardous materials) is made available to emergency hresponders but not to the general public.

Emergency Response

OSFM oversees the State Emergency Response Commission, which establishes emergency planning districts and reviews local emergency response plans. The agency has also established the Oregon Fire Service Mobilization Plan to identify the state response role during large emergency response events.

Fire Code and Inspections

Deputy State Fire Marshals perform plan review on new structures to confirm compliance with the Oregon Fire Code, including standards for emergency access, fire hydrants and water supply, building information signs (denoting construction type and fire-resistance rating, fire protection systems, occupancy type, and hazards), fire suppression systems, and emergency responder radio coverage.⁴³ Deputy State Fire Marshals also perform inspections of industrial structures following construction.⁴⁴

Incident Response

OSFM trains emergency response personnel in how to respond to hazardous materials incidents. OSFM also has Incident Management Teams that can be deployed for large or complex events.

Storage Tanks

The Oregon Fire Code specifies standards for the installation of tanks storing flammable/or combustible liquids. Aboveground tanks over 1,000 gallons also need permits from OSFM prior to installation. Per OAR 837-030-0100 through 837-030-0280, bulk storage sites for liquid petroleum gas (LPG) are subject to annual permits and inspections, and operators are required to submit plans for OSFM review prior to

⁴² OAR Chapter 837, Division 85, Community Right-to-Know Survey and Compliance Programs. Accessed July 1, 2020 from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3816

⁴³ 2019 Oregon Fire Code. Accessed July 1, 2020 from https://codes.iccsafe.org/content/OFC2019P1

⁴⁴ Office of the State Fire Marshal, Deputy State Fire Marshals. Accessed July 1, 2020 from

https://www.oregon.gov/osp/programs/sfm/Pages/Deputy-State-Fire-Marshals.aspx



changes to the storage site and notify OSFM within two weeks of any new tank installations, whether above ground or underground. Any deficiencies noted by OSFM inspectors must be remedied within 60 days or fewer.

Office of Emergency Management

The Oregon Office of Emergency Management (OEM) has a role both in preparing for and in responding to significant emergencies.⁴⁵ OEM provides grants to local agencies to assist in disaster and emergency preparation and publishes the Comprehensive Emergency Management Plan which addresses natural hazards, preparedness, emergency operations, and recovery, including emergency operations procedures relating to such topics as firefighting and hazardous materials.⁴⁶ While local responders (e.g., Clatskanie Rural Fire Protection District) would have responsibility for addressing emergencies at PWW and in the zone change area, if an emergency were large then OEM may also participate in the response.

Water Resources Department

The Oregon Water Resources Department (OWRD) manages water rights within the state. If industrial uses in the zone change area wish to install new systems to utilize surface water or groundwater, they would first need to obtain water rights from OWRD, a process which requires demonstration that measures are in place to ensure that water is not wasted.

If industrial uses in the zone change area wish to utilize groundwater, they would need to utilize a certified well constructor to ensure that the well was installed per state standards and properly reported to the state. If the user later wishes to abandon the well, again the work would need to be performed by a certified well constructor, with reporting provided to OWRD.

Oregon Department of Transportation

ODOT Rail

The Oregon Department of Transportation (ODOT) Rail and Public Transit Division (ODOT Rail) inspects track and performs inspections of railroad equipment and track in conjunction with the FRA to maintain safety of infrastructure and rail cars. ODOT Rail requires carriers to prepare emergency response plans per ORS 824.082, which specifies that rail carriers need to provide notice to the state in advance of transporting hazardous materials by rail.

State Agencies Providing Supplemental Review

Additional state agencies provide supplemental review and comment on permit applications under review by other agencies. The reviewing agencies' comments help the lead agencies comply with Federal and state environmental laws by providing recommendations on courses of action.

 ⁴⁵ Oregon Office of Emergency Management. Accessed July 12, 2020 from https://www.oregon.gov/oem
⁴⁶ Oregon Office of Emergency Management, State of Oregon Emergency Management Plan, Volume III: Emergency Operations Plan, April 2017. Accessed July 12, 2020 from

https://www.oregon.gov/oem/Documents/2017_OR_EOP_complete.pdf



Oregon Department of Fish and Wildlife

- Oregon Department of Fish and Wildlife (ODFW) comments on water rights applications to OWRD.47
- ODFW comments on impacts to endangered species (and sensitive or threatened species) and may require mitigation (e.g., design changes) for impacts.⁴⁸
- ODFW provides comments to Columbia County on whether mitigation would be appropriate or necessary to mitigate for habitat impacts for development in wetlands and riparian corridors.⁴⁹
- ODFW comments on DEQ Section 401 Removal and Fill Certifications.⁵⁰
- ODFW comments on DEQ NPDES water quality permit applications.
- ODFW comments on DSL wetland fill permit applications⁵¹ and EFSC energy facility applications.⁵²

Oregon Heritage

Oregon Heritage is the State Historic Preservation Office (SHPO) within Oregon Parks and Recreation Department.

- SHPO comments on Federal permit applications under Section 106 of the National Historic Preservation Act, which requires Federal agencies to account for impacts on historic properties and archaeological sites prior to making decisions.⁵³
- Similarly, SHPO also comments on Federal permit applications falling under NEPA provisions.
- If historic or cultural elements are present, applicants may need to modify their development proposals to avoid or minimize impacts.⁵⁴

⁴⁷ Oregon Department of Fish and Wildlife, The Water Quality and Quantity Program. Accessed July 1, 2020 from https://www.dfw.state.or.us/fish/water/

⁴⁸ OAR Chapter 635, Division 415, Fish and Wildlife Habitat Mitigation Policy. Accessed July 1, 2020 from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=2989

⁴⁹ Columbia County Zoning Ordinance section 1170

⁵⁰ Oregon Department of State Lands, An Introduction to Water-Related Permits and Reviews Issued by Oregon State Agencies, August 2012. Accessed July 1, 2020 from https://www.oregon.gov/DSL/WW/Documents/ water related permits user guide 2012.pdf ⁵¹ Ibid.

⁵² Oregon Department of Energy, Oregonians' Guide to Siting and Oversight of Energy Facilities, September 2017. Accessed July 1, 2020 from https://www.oregon.gov/energy/facilities-safety/facilities/Documents/Fact-Sheets/EFSC-Public-Guide.pdf

⁵³ Oregon Heritage, Begin Project Review Process. Accessed July 1, 2020 from

https://www.oregon.gov/oprd/OH/Pages/ProjectReview.aspx.

⁵⁴ Ibid.



Applicable Columbia County Programs

County regulations and programs that directly or indirectly serve to maintain compatibility with adjoining uses are identified below.

Zoning Ordinance

Columbia County is the land use authority at Port Westward and throughout unincorporated portions of the County. Accordingly, the County has adopted its Zoning Ordinance to implement the County's Comprehensive Plan to ensure that land uses are consistent with adopted statewide and local goals, policies, and objectives. The underlying premise of a zoning ordinance is that it will protect human health and safety by limiting incompatibility of surrounding uses. For instance, as part of the current zone change application, the County will impose conditions as part of any approval to ensure compliance with both County and statewide policies, and future development proposals will be subject to public land use review processes that comply with the terms and limitations of an exception granted to Goal 3 (e.g., uses must be dock-dependent), and any other then-applicable land use regulations (and related regulations) at the state and local level.

Specific provisions applicable to the RIPD zone (to be applied in the zone change area) require that new developments provide setbacks "necessary to adequately protect adjacent properties." As part of the County's future Conditional Use review process for individual industrial developments, the Planning Commission has authority to impose additional conditions of approval to ensure consistency with land use regulations (e.g., requiring documentation on all required Federal, State, and County permits):

The Commission may attach conditions and restrictions to any conditional use approved. The setbacks and limitations of the underlying district shall be applied to the conditional use. Conditions and restrictions may include a specific limitation of uses, landscaping requirements, off-street parking, performance standards, performance bonds, and other reasonable conditions, restrictions, or safeguards that would uphold the intent of the Comprehensive Plan and mitigate any adverse effect upon the adjoining properties which may result by reason of the conditional use being allowed.⁵⁵

In order to grant the Conditional Use, the applicant must provide evidence of compliance with applicable zoning provisions and the following approval criteria:

- A. The use is listed as a Conditional Use in the zone which is currently applied to the site;
- B. The use meets the specific criteria established in the underlying zone;
- C. The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, existence of improvements, and natural features;
- D. The site and proposed development is timely, considering the adequacy of transportation systems, public facilities, and services existing or planned for the area affected by the use;
- E. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying district;

⁵⁵ Columbia County Zoning Ordinance section 1503.2



- *F.* The proposal satisfies the goals and policies of the Comprehensive Plan which apply to the proposed use;
- G. The proposal will not create any hazardous conditions.⁵⁶

The Zoning Ordinance also requires Site Design Review for new industrial developments; this application requires submittal of information on proposed conditions including such aspects as building and paved areas, natural features, stormwater facilities, lighting, erosion control, waste management areas, noise sources, measures to protect water bodies and habitat, landscaping, and grading. As part of the process, the Planning Commission has the authority to impose conditions of approval as needed to comply with the following approval criteria:

- A. Flood Hazard Areas: See CCZO §1100, Flood Hazard Overlay Zone. All development in Flood Hazard Areas must comply with State and Federal Guidelines.
- B. Wetlands and Riparian Areas: Alteration of wetlands and riparian areas shall be in compliance with State and Federal laws.
- C. Natural Areas and Features: To the greatest practical extent possible, natural areas and features of the site shall be preserved.
- D. Historic and Cultural sites and structures: All historic and culturally significant sites and structures identified in the Comprehensive Plan, or identified for inclusion in the County Periodic Review, shall be protected if they still exist.
- *E.* Lighting: All outdoor lights shall be shielded so as to not shine directly on adjacent properties and roads.
- *F.* Energy Conservation: Buildings should be oriented to take advantage of natural energy saving elements such as the sun, landscaping and land forms.
- G. Transportation Facilities: Off-site auto and pedestrian facilities may be required by the Planning Commission, Planning Director or Public Works Director consistent with the Columbia County Road Standards and the Columbia County Transportation Systems Plan.⁵⁷

As required by the Zoning Ordinance and referenced in Ordinance 2018-1, new uses in the zone change must meet the following standards for RIPD Use Under Prescribed Conditions:

- A. The requested use conforms with the goals and policies of the Comprehensive Plan specifically those policies regarding rural industrial development and exceptions to the rural resource land goals and policies.
- *B.* The potential impact upon the area resulting from the proposed use has been addressed and any adverse impact will be able to be mitigated considering the following factors:
 - .1 Physiological characteristics of the site (ie., topography, drainage, etc.) and the suitability of the site for the particular land use and improvements;

⁵⁶ Columbia County Zoning Ordinance section 1503.5

⁵⁷ Columbia County Zoning Ordinance section 1563



- .2 Existing land uses and both private and public facilities and services in the area;
- .3 The demonstrated need for the proposed use is best met at the requested site considering all factors of the rural industrial element of the Comprehensive Plan.
- *C.* The requested use can be shown to comply with the following standards for available services:
 - .1 Water shall be provided by an on-site source of sufficient capacity to serve the proposed use, or a public or community water system capable of serving the proposed use.
 - .2 Sewage will be treated by a subsurface sewage system, or a community or public sewer system, approved by the County Sanitarian and/or the State DEQ.
 - .3 Access will be provided to a public right-of-way constructed to standards capable of supporting the proposed use considering the existing level of service and the impacts caused by the planned development.
 - .4 The property is within, and is capable of being served by, a rural fire district; or, the proponents will provide on-site fire suppression facilities capable of serving the proposed use. On-site facilities shall be approved by either the State or local Fire Marshall.⁵⁸

The Zoning Ordinance contains floodplain management standards that are developed to mitigate impacts to floodplains and to promote compatibility within the frequently flooded areas, applicable to areas subject to a one percent or greater chance of flooding in any given year. Based on the floodplain boundaries identified on Flood Insurance Rate Map 41009C0050D, these standards would apply to the Thompson Property but not to the remainder of the zone change area.

The Zoning Ordinance also contains provisions regulating impacts to wetlands and riparian corridors, including obtaining applicable permits from state and Federal agencies (e.g., wetland fill permits from DSL and the Corps) prior to issuance of County permits. The County's 1995 Wildlife and Sensitive Lands (adopted in the Comprehensive Plan) maps do not indicate the presence of Natural Areas, Non-Game Areas, or Sensitive Plants Areas within or adjacent to the zone change area. However, they do classify as Major Waterfowl Habitat the entire zone change area and portions of the adjacent area. Additionally, they indicate that portions of the adjacent area south of the zone change area (but not the zone change area itself) are classified as Columbia White-tailed Deer – Marginal Habitat. As part of its review, the County consults with ODFW to determine if mitigation would be appropriate or necessary to mitigate for habitat impacts.

Onsite Wastewater Program

The County's Public Health Department requires onsite sewage systems (e.g., septic systems) to meet state rules issued by DEQ, specifically OAR 340 Divisions 71 and 73. These regulations require applicants to design and construct systems in a manner demonstrated to protect water quality and properly manage human waste. Onsite systems cannot be constructed until an applicant obtains permits from the County.⁵⁹

⁵⁸ Columbia County Zoning Ordinance section 683.1

⁵⁹ While the existing Port Westward Industrial Park has a small private sewer system, future tenants have the option to either connect to the existing system or to manage their own sanitary wastes via private on-site systems.



Stormwater and Erosion Control Ordinance

The Columbia County Stormwater and Erosion Control Ordinance was enacted to achieve the following objectives:

- Prevent water quality degradation of the county's water resources;
- Prevent damage to property from increased runoff rates and volumes;
- Protect the quality of waters for drinking water supply, contact recreation, fisheries, irrigation, and other beneficial uses;
- Establish sound developmental policies which protect and preserve the county's water and land resources;
- Protect county roads and rights-of-way from damage due to inadequately controlled runoff and erosion;
- Protect the health, safety, and welfare of the inhabitants of the county;
- Maintain existing instream flows; and
- Preserve and enhance the aesthetic quality of the county's water resources.⁶⁰

This ordinance is applicable to all building permits and grading permits disturbing more than 2,000 square feet or for drainage modifications in streams, stormwater facilities, or wetlands.⁶¹ For industrial developments, this ordinance requires conveyance structures sized for design-year storms; flow control at stormwater outfalls; cut-fill balance in the regulated floodplain; erosion control measures; stormwater detention; and water quality treatment (e.g., swales, oil-water separators, etc.).

These provisions are implemented by requiring engineered stormwater plans to be approved by the County prior to issuance of building permits.

Building Code

To maintain safety of buildings and structures, the Columbia County Building Division enforces current versions of building codes issued by the Oregon Building Codes Division. Applicable codes for development in the zone change area include:

- Oregon Structural Specialty Code
- Oregon Zero Energy Ready Commercial Code
- Oregon Mechanical Specialty Code
- Oregon Electrical Specialty Code

⁶⁰ Columbia County Stormwater and Erosion Control Ordinance No. 2001-10, Effective February 26, 2002.

⁶¹ By contrast, Farm Use activities (per ORS 215.203) are specifically excluded from the Stormwater and Erosion Control Ordinance.



Oregon Plumbing Specialty Code⁶²

Prior to issuance of permits, applicants must demonstrate that structures comply with applicable codes. Once permits have been issued, applicants may commence construction and must obtain interim and final inspections by County staff to ensure construction is undertaken consistent with code standards.

Solid Waste Management Ordinance

The Columbia County Solid Waste Management Ordinance was enacted to achieve several County objectives, including the following which are applicable to the zone change area:

- Provide for safe and sanitary accumulation, storage, collection, transportation, disposal, and utilization of wastes and solid wastes.
- Prohibit accumulation of wastes or solid wastes on private property in such a manner as to create a public nuisance, a hazard to health or a condition of unsightliness to provide for the abatement of such conditions where found.
- Provide for a coordinated countywide solid waste management plan in cooperation with federal, state and local agencies responsible for the prevention, control or abatement of air, water and ground pollution and prevention of litter.
- Promote energy and resource conservation through reduction, reuse, recycling and resource recovery.⁶³

This ordinance establishes solid waste franchises to collect, transport, and properly dispose of waste. Other provisions prohibit unauthorized dumping; require rigid, leak-proof solid waste containers that also prevent wind-blown material from escaping; and prohibit storage or collection of waste on private property that "...is offensive or hazardous to the health and safety of the public or which creates offensive odors or a condition of unsightliness."

Enforcement Ordinance

The Columbia County Enforcement Ordinance establishes the County's authority to enforce adopted statutes, administrative rules, ordinances, orders and resolutions, both those adopted at the County level and at the state level. Based on this ordinance, the County can declare violations of the above as nuisances, issue citations, impose daily fines, and compel compliance with the adopted regulations.⁶⁴

Emergency Planning

The County's Department of Emergency Management coordinates with multiple parties including the state, nearby local governments, the Port, fire districts, and facility operators to develop emergency plans for a variety of risks, whether those emergencies are natural disasters or caused by human activities. The Department is also a member of the Regional Disaster Preparedness Organization which includes four counties in Oregon plus Clark County, Washington and improves preparedness for large-scale disasters

⁶² Oregon Building Codes Division, Codes and Standards. Accessed July 1, 2020 from

https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx

⁶³ Columbia County Solid Waste Management Ordinance, updated through October 2010.

⁶⁴ Columbia County Enforcement Ordinance, integrated through March 4, 2020.



and emergency incidents. Finally, the Department helps coordinate responses to emergencies and performs training activities to help people prepare for how to respond in a safe and effective manner.

Other Local Programs

Clatskanie Rural Fire Protection District

In addition to compliance with building codes, industrial development must also satisfy provisions of the Oregon Fire Code,⁶⁵ including standards for emergency access, fire hydrants and water supply, building information signs (denoting construction type and fire-resistance rating, fire protection systems, occupancy type, and hazards), fire suppression systems, and emergency responder radio coverage. In the Port Westward area, the Fire Code is administered by the Clatskanie Rural Fire Protection District. To maintain adequate building safety, Fire Code provisions apply on a continuing basis even following a building's final construction inspection by the County Building Division. The Fire District can compel operating or design changes to comply with the Fire Code and minimize fire risk.

Beaver Drainage Improvement Company

The Beaver Drainage Improvement Company manages nearly 12.5 miles of dikes and associated stormwater conveyance and pumps within the Beaver Drainage District, which includes the zone change area. Accordingly, the District has an interest in ensuring that stormwater is properly managed and that any alterations to the dikes themselves are approved by the District and the Corps.

The District's dikes have the added benefit of isolating the zone change area (with the exception of the Thompson property) from the Columbia River, which can provide additional mitigation against pollutant transport to the river in the event of a spill.

Summary of Applicable Regulations

Based on the assessment of Federal, State, and local regulatory programs described above, Table 4 identifies which agencies address the potential adverse impacts for the five proposed industrial uses identified in Table 1.

⁶⁵ 2019 Oregon Fire Code. Accessed July 1, 2020 from https://codes.iccsafe.org/content/OFC2019P1



Potential Adverse Impact	Regulatory Bodies				
(from Table 1)	Federal	State	Local		
Airborne emissions (particulates, dust, water droplets, odor, steam, fumes, gas, smoke, etc.)	EPA FERC	DEQ			
Noise		DEQ	Columbia County ⁶⁶		
Rail/truck/ship traffic for raw materials, finished products, and wastes	FRA USDOT EPA Coast Guard	ODOT Rail ODOT DEQ			
Vehicle and machinery exhaust emissions	EPA ⁶⁷	DEQ			
Stormwater runoff which may contain chemicals, nutrients, colors, or sediment	EPA NMFS	DEQ	Columbia County		
Process/cooling water discharge	EPA	DEQ			
Wastewater discharge	EPA	DEQ	Columbia County		
Fire/explosion	EPA PHMSA FRA FERC	OSFM OEM ODOT Rail	Columbia County Clatskanie Rural Fire Protection District		
Chemical spills (including oils and hazardous materials)	EPA PHMSA FRA FERC Coast Guard	DEQ ODOE OSFM OEM ODOT Rail	Columbia County Clatskanie Rural Fire Protection District		
Light			Columbia County		
Water usage	EPA	OWRD ODFW			
Wetland impacts	Corps EPA USFWS NMFS	DSL DEQ	Columbia County		
Wildlife impacts	USFWS Corps EPA NMFS	ODFW	Columbia County		

Table 4: Regulatory Bodies Addressing Potential Adverse Impacts from Proposed Industrial Uses

⁶⁶ The County may choose to incorporate DEQ's model noise control rules and enforce them in the event that noise becomes an issue at a noise sensitive property.

⁶⁷ EPA regulates emissions from passenger vehicles, trucks, locomotives, and U.S. vessels. The International Convention for the Prevention of Pollution from Ships (MARPOL) regulates emissions from international vessels.



Potential Adverse Impact	Regulatory Bodies				
(from Table 1)	Federal	State	Local		
Navigation impacts	Corps MARAD				
Dike impacts for any levee modifications	Corps FEMA		Beaver Drainage District		
Accumulation of waste materials	EPA	DEQ OSFM	Columbia County		
Nuisances from waste materials			Columbia County		
Combustibility	EPA PHMSA	DEQ OSFM	Clatskanie Fire		

Applicable Regulations as Applied to Proposed Industrial Uses

Table 5 demonstrates how the regulations described above would likely apply to representative examples for each of the five proposed rural industrial uses for the zone change area. This table further illustrates how the proposed uses are adequately regulated by programs that require mitigation measures leading to compatibility.

	Forestry/Wood Products	Dry Bulk	Liquid Bulk	Natural Gas	Breakbulk
Regulatory Program	Example: Wood pellets/chips	Example: Sawdust	Example: Petroleum	Example: Natural Gas	Example: Drums or barrels
	Fede	eral Programs			
National Environmental Policy Act	х	х	х	х	х
National Historic Preservation Act	х	х	х	х	х
Rivers and Harbors Act	Х	Х	Х	Х	Х
Clean Water Act	Х	Х	Х	Х	Х
Oil Pollution Act	Х	Х	Х	Х	Х
Toxic Substances Control Act and Lautenberg Chemical Safety Act			х	х	х
Emergency Planning and Community Right-to-Know Act	х	х	х	х	х
Pollution Prevention Act	Х	Х	Х	Х	Х
Safe Drinking Water Act and Resource Conservation and Recovery Act	х	х	х	х	х
Clean Air Act	Х	Х	Х	Х	Х

Table 5: Regulatory Programs Applicable to Proposed Industrial Use Examples



	Forestry/Wood Products	Dry Bulk	Liquid Bulk	Natural Gas	Breakbulk	
Regulatory Program	Example: Wood pellets/chips	Example: Sawdust	Example: Petroleum	Example: Natural Gas	Example: Drums or barrels	
Homeland Security Act of 2002	Х	х	х	х	х	
Hazardous Liquid Pipeline Act and Natural Gas Pipeline Safety Act			х	Х		
Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2016 (PIPES) Act			х	Х		
Federal Rail Safety Act	Х	Х	Х	Х	Х	
Natural Gas Act and Natural Gas Policy Act				х		
Interstate Commerce Act			Х	Х		
National Flood Insurance Program	х	х	х	х	х	
Migratory Bird Treaty Act	Х	Х	Х	Х	Х	
Marine Mammal Protection Act	х	х	х	х	х	
Endangered Species Act	Х	Х	Х	Х	Х	
Fish and Wildlife Coordination Act	Х	х	х	х	х	
Magnuson-Stevens Fishery Conservation and Management Act	х	Х	х	х	х	
Oregon Programs						
Wetland and Waterway Removal and Fill permits	х	х	х	х	х	
NPDES Permits	Х	Х	Х	Х	Х	
WPCF Permits	Х	Х	Х	Х	Х	
Underground Injection Control Program	х	х	х	х	х	
Onsite Wastewater Management Program	х	х	х	х	х	
Section 401 Removal and Fill Certification	х	Х	х	х	х	
Ballast Water Program	Х	Х	Х	Х	Х	
Cleaner Air Oregon Program	х	Х	Х	Х	Х	
Air Contaminant Discharge Permits	х	Х	x	Х	х	
Title V Operating Permits			Х	Х		

	Forestry/Wood Products	Dry Bulk	Liquid Bulk	Natural Gas	Breakbulk
Regulatory Program	Example: Wood pellets/chips	Example: Sawdust	Example: Petroleum	Example: Natural Gas	Example: Drums or barrels
Aboveground Storage Tanks	х	Х	x	Х	x
Underground Storage Tanks	Х	Х	Х	Х	Х
Hazardous Waste	Х	Х	Х	Х	Х
Noise Control	Х	Х	Х	Х	Х
DEQ Emergency Response	Х	Х	Х	Х	Х
Liquified Natural Gas				Х	
Energy Facilities			Х	Х	
Community Right to Know	Х	Х	Х	Х	Х
OSFM Emergency Response	Х	Х	Х	Х	Х
Fire Code and Inspections	Х	Х	Х	Х	Х
Incident Response	Х	Х	Х	Х	Х
Storage Tanks	Х	Х	Х	Х	Х
Office of Emergency Management	х	Х	x	Х	x
Water Resources Department	х	х	х	х	х
ODOT Rail	Х	Х	Х	Х	Х
Oregon Department of Fish and Wildlife	х	х	х	х	x
Oregon Heritage	Х	Х	Х	Х	Х
	Columbia	County Progr	rams		
Zoning Ordinance	Х	Х	Х	Х	Х
Onsite Wastewater Program	х	х	х	Х	х
Stormwater and Erosion Control Ordinance	х	Х	x	Х	x
Building Code	Х	Х	Х	Х	Х
Solid Waste Management Ordinance	х	Х	x	Х	x
Enforcement Ordinance	Х	Х	Х	Х	Х
Emergency Planning	Х	Х	Х	Х	Х
	Other	Local Program	ıs		
Clatskanie Rural Fire Protection District	х	Х	x	Х	х
Beaver Drainage Improvement Company	х	Х	x	Х	x

Μ.



VI. COMPATIBILITY ASSESSMENT

This section synthesizes the above information to demonstrate how the five proposed uses can and will be made compatible with adjacent land uses and natural resources under the applicable land use standards.

Regulatory Programs

Section V provides information on the numerous existing regulatory programs that are anticipated to be applicable to the zone change area at the Federal, State, and local level. While the programs do not guarantee zero impacts (e.g., an Air Contaminant Discharge Permit authorizes release of some amount of air pollutant), the programs require mitigation to ensure that emissions are limited to levels that have been scientifically determined to be acceptable for public health and environmental quality, or by performing actions such as developing and implementing spill response plans. These provisions are in keeping with the statute (ORS 197.732-197.736) and administrative rule (OAR 660-004-0020) which indicate that "Compatible' is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses."

The net effect of these regulations is to establish a framework that has the result of maintaining compatibility with adjacent land uses and adjacent aquatic resources, due to the numerous water quality and air quality standards detailed above.

To ensure that compatibility is maintained, the County has the ability to impose a condition as part of an approval of the Port's proposal that any future uses in the rezone area comply with all applicable regulatory programs, including all required Federal, state and local permitting. This requirement would be carried forward and additionally imposed on development proposals, and if it does so the County can find that this mitigates potential impacts on adjacent land uses and accordingly maintains compatibility under ORS 197.732 and OAR 660-004-0020.⁶⁸ The range of potential adverse impacts identified in Table 1 is addressed by the multiple agencies outlined in Table 4. Furthermore, Table 5 examines how a representative example from each of the five proposed uses would fall under the regulatory authority of the programs outlined in Section V.

The programs noted above (and other regulations that may be applicable to users even if not identified above) are wholly consistent with meeting the compatibility rule. To the extent that any development is conditioned so as to require compliance with all standards and requirements of all applicable regulatory programs, the County will be assuring compliance with the compatibility requirement under ORS 197.732 (2)(c)(D) and OAR 660-004-0020(2)(d).

Existing Conditions of Approval

Going beyond the regulations stated above, the Columbia County Board of Commissioners itself imposed several conditions of approval when enacting Ordinance 2018-1 to approve the Port's zone change

⁶⁸ Even without such a condition, compliance with the applicable regulatory programs is still mandatory. The approval condition would simply exercise the County's land use authority to require documentation of compliance with all applicable regulatory programs to a given use to ensure that compatibility with adjacent land uses is maintained.



request. Below is a list of those conditions, which further help maintain compatibility for all future land use applications and development in the zone change area:

- 1) Prior to an application for a building or development for a new use, the applicant/developer shall submit a Site Design Review and an RIPD Use Under Prescribed Conditions as required by the Columbia County Zoning Ordinance.
- 2) To ensure adequate transportation operation, proposed developments and expansions requiring site design review or Use Under Prescribed Conditions shall not produce more than 332 PM peak-hour trips for the entire subject property without conducting a new Traffic Impact Analysis ("TIA") with recommendations for operational or safety mitigation consistent with the Oregon Transportation Planning Rule 660-012-0060.
- 3) A traffic study be prepared for each proposed future development within the subject property to determine the number of trips generated, likely travel routes, impacts on both passenger car and heavy truck traffic and to ensure that County roadways are improved as needed to adequately serve future development. These TIA reports would also be used to ensure that the number of trips generated and accumulative trips do not exceed the trip cap.
- 4) To ensure compatibility with adjoining agricultural uses, the applicant/developer of new industrial uses shall comply with the following:
 - a. The habitat of threatened and endangered species shall be evaluated and protected as required by law.
 - b. Alterations of important natural features, including placement of structures, shall maintain the overall values of the feature.
 - c. All development adjacent to land zoned PA-80 shall include buffers that are established and maintained between the industrial uses and adjacent land uses on PA-80 zoned land, including natural vegetation and where appropriate, fences, landscaped areas and other similar types of buffers.
 - d. When possible the area of the site that is not developed for industrial uses or support shall be left in a natural condition or in resource (farm) production.
 - e. Controls, including suppression and requiring hard surfaces, shall be employed as needed to be determined by the County to mitigate dust caused by industrial uses that may emanate from the site and traffic to the site.
 - f. Site run-off shall be controlled and any harmful sediment shall be contained or otherwise treated before being released to ensure potential impacts to irrigation equipment and area water quality (both ground and surface) are controlled.
 - g. The industrial use impact on the water table and sloughs shall be monitored for water quality and surface water elevations to ensure that the area water can be maintained and managed for existing uses.
 - h. Railroad crossings shall be managed consistently with federal law regulating crossing to reduce crossing delays. Any proposed use that includes transportation to or from the subject property by rail shall submit a rail plan identifying the number and frequency of trains to the subject property and impacts to rail movements, safety, noise or other identified impacts along the rail corridor



supporting the County's transportation system. The plan shall propose mitigation to identified impacts.

- i. Development applications shall include an agricultural impact assessment report that shall analyze adjacent agricultural uses and practices and demonstrate that impacts from the proposed use are mitigated. The report shall include a description of the type and nature of the agricultural uses and farming practices, if any, which presently occur on adjacent lands zoned for farm use, type of agricultural equipment customarily used on the property, and wind pattern information. The report shall include a mitigation plan for any negative impacts identified.
- 5) The types of industrial uses for the subject Plan Amendment shall be limited to only those uses that are substantially dependent on a deepwater port and have demonstrated access rights to the dock, and those uses with employment densities, public facilities and activities justified in the exception, specifically:
 - a. Forestry and wood processing, production, storage, and transportation;
 - b. Dry bulk commodities transfer, storage, production, and processing;
 - *c.* Liquid bulk commodities processing, storage, and transportation;
 - d. Natural gas and derivative products, processing, storage, and transportation; and
 - e. Breakbulk storage, transportation, and processing.
- 6) The storage, loading and unloading of coal is specifically not justified in this exception. Such uses shall not be allowed on the subject property without a separate approved exception to Goal 3.
- 7) The Port (applicant) shall institute a plan and ongoing program for sampling ground and surface water quality to establish baseline measurements for a range of contaminates at the re-zone site and down-gradient. The program should be designed and managed for assurance that future industrial wastewater discharges are treated to prevent pollution to the watershed environment. The program shall be designed to detect leaking tanks.
- 8) The Port (applicant) shall prepare a response plan and clean-up plan for a hazardous material spill event. The plan shall include appropriate government agencies and private companies engaged in such clean-up activities.

These conditions of approval require an applicant to perform many steps that lead to compatibility:

- Apply for and obtain land use approval for the proposed project after demonstrating compliance with applicable criteria in the Zoning Ordinance;
- Comply with applicable standards of the Transportation Planning Rule (TPR) and demonstrate that appropriate transportation infrastructure is in place;
- Provide evidence demonstrating compatibility with adjacent land;
- Limit activities to the specific uses outlined above and rely on the deepwater port;

- Monitor water quality; and
- Plan for hazardous material spills.

These requirement for full analysis of impacts and implementation of appropriate mitigation measures assure that future development in the zone change will be compatible with adjacent uses.

Additional Recommended Condition of Approval

To fully ensure compatibility and have adequate measures identified in the record, it would be appropriate for the Board of Commissioners to consider an additional Condition of Approval requiring applicants for future development proposals in the rezone area to provide evidence of approval of all applicable Federal, State, and local permits prior to issuance of occupancy permits.⁶⁹

Compatibility Analysis Findings and Determination

Based on the totality of the evidence, the five rural industrial uses are appropriately situated to allow for any appropriate and necessary mitigation to achieve compatibility with adjacent land uses and natural resources including wetlands and area waterways:

- The extensive Federal, state, and local regulatory programs applicable to industrial development address the potential impacts from new development and require measures to safeguard that offsite effects are limited to acceptable levels as determined by the regulating agencies and programs.
- The five uses' dependence on the deepwater port and requirement to be consistent with the characteristics identified in the Goal Exception request help to further maintain compatibility by precluding objectionable uses and urban uses.
- The dike between the zone change area and the Columbia River separates the bulk of the zone change area (excluding the Thompson property) from the waterway, allowing for effective stormwater management approaches, and additionally improving emergency response options in the event of a spill.
- The required buffers between development in the zone change area and land zoned PA-80 separates industrial development from designated agricultural areas to ensure that the industrial development doesn't diminish the viability of farm use.

Ultimately, compatibility will be accomplished via overlapping programs and measures that protect area residents, land uses, and aquatic resources.

⁶⁹ As noted above, compliance with all applicable regulatory programs is required with or without such a land use condition. However, including such a condition ensures that the County will have an oversight role in the application regulatory programs, and in so doing have the ability to ensure that impacts are mitigated and land use compatibility maintained.



VII. SUMMARY AND CONCLUSION

This report supplements the record for the Port of Columbia County's application for a Comprehensive Plan Amendment, zone change, and Goal Exception for approximately 837 acres adjacent to the existing Port Westward Industrial Park. In accordance with the direction provided by LUBA and the Oregon Court of Appeals, and to provide substantial evidence for the County's record, land use compatibility has been assessed and appropriate mitigation measures identified to demonstrate compliance with the compatibility standards of ORS 197.732-197.736 and OAR 660-004-0020.

The report lists the five proposed uses and details the existing land uses within and adjacent to the zone change area, and finds that the majority of existing land is in agricultural tree farm uses and rural industrial uses. The report next describes the existing regulatory programs which would most likely be applicable to future industrial development, all of which have the effect of limiting adverse impacts and thereby maintain compatibility as provided under ORS 197.732(2)(c)(D) and OAR 660-004-0020(2)(d). Finally, the existing Conditions of Approval and the recommended Condition of Approval provide redundancy to ensure that the future development is fully protective of and compatible with its surroundings.