Chapter 3
Affected Environment, Impacts, and Mitigation

3.0 Introduction

This chapter describes existing conditions in the study area, presents the environmental impacts that would likely result from construction and routine operation[1] of the proposed action, and identifies measures to mitigate those impacts. For comparison purposes, the consequences of the no-action alternative are also discussed.

3.0.1 What topics are addressed in the impact analysis?

This chapter is divided into the following 17 sections, with each section addressing one element of the built or natural environment.

- 3.1 Earth
- 3.2 Air
- 3.3 Water
- 3.4 Plants
- 3.5 Animals
- 3.6 Energy and Natural Resources
- 3.7 Noise and Vibration
- 3.8 Land and Shoreline Use
- 3.9 Aesthetics, Light, and Glare
- 3.10 Recreation
- 3.11 Historic and Cultural Preservation
- 3.12 Tribal Resources
- 3.13 Public Services and Utilities
- 3.14 Hazardous Materials
- 3.15 Rail Traffic
- 3.16 Vehicle Traffic and Safety
- 3.17 Vessel Traffic

[1] Chapter 4, *Environmental Health and Safety*, addresses the potential impacts from increased risk of accidents (e.g., storage tank failure, train derailments, vessel collisions) and related consequences (e.g., release of crude oil or other proposed bulk liquids).

3.0.2 How is each resource section organized?

Each section answers the following questions.

- What is the study area for the resource?
- What laws and regulations apply to the resource?
- How were impacts on the resource evaluated?
- What are the types and condition of the resource in the study area?
- What are the potential impacts on the resource?
- What mitigation measures would reduce impacts on the resource?
- Would the proposed action have unavoidable and significant adverse impacts on the resource?

3.0.3 What alternatives are analyzed in this chapter?

This chapter presents an analysis of impacts that could occur as a result of construction and routine operation of the proposed action. The analysis considered impacts over a 20-year period (2017 to 2037) to account for future growth and development.

This chapter also presents an analysis of impacts that could occur if the proposed action were not approved (the no-action alternative). This analysis also considered impacts over the 20-year analysis period, and includes impacts associated with future growth and development that is reasonably certain to occur during this timeframe, regardless of the proposed action. Impacts of the no-action alternative are presented first as a basis of comparison.

3.0.4 What areas and activities were analyzed?

The study area is specific to each resource but in most cases includes resources on and near the project site that could be affected by construction and onsite operations, resources along the Puget Sound & Pacific Railroad (PS&P) rail line—from Centralia, Washington, to the project site—that could be affected by rail transport, and resources in and around Grays Harbor that could be affected by vessel transport.

The project site includes the property leased by Imperium Terminal Services (applicant) on which the existing and proposed facilities are and would be located. Activities at the project site would include construction (e.g., site clearing and erecting storage tanks) and operations (e.g., rail unloading and vessel loading) that would be directly under the control of the applicant. These activities would be subject to the permit conditions that would be required by the City of Hoquiam, the Washington State Department of Ecology (Ecology), and other state and local agencies.

Transport of bulk liquids to and from the project site by rail and vessel would occur under the responsibility of the rail and vessel operators, respectively. Although the applicant does not have control over offsite transport, implementation of the proposed action would generate rail and vessel trips that could result in environmental impacts along the transportation corridors. For example, increased rail and vessel trips could lead to congestion and related traffic delays, increased noise, and increased air emissions. The transportation corridors that would be affected by offsite transport would vary depending on the commodity being transported, the source of the commodity, and the final destination for delivery. However, all rail trips generated by the proposed action would occur

along the PS&P rail line between Centralia and the project site because this is the only rail line connecting the national mainline railroad system to the Port of Grays Harbor. Similarly, all vessel trips generated by the proposed action would travel through Grays Harbor from Terminal 1 to the Pacific Ocean. Therefore, these known corridors are the focus of the impact analysis related to offsite transport in this chapter.

3.0.5 How was mitigation identified?

Development of the mitigation measures included an evaluation of whether applicable regulations, specific permit conditions, and the required plans would adequately reduce potentially substantial impacts identified in this draft environmental impact statement (Draft EIS). Additionally, when applicable, the Draft EIS considered the incorporation of specific voluntary measures or design features to be executed by the applicant and how those measures would reduce potential impacts. When those combined measures did not sufficiently reduce the risk of impacts, additional applicant measures were identified as required by the Washington State Environmental Policy Act (SEPA) consistent with Washington Administrative Code [WAC] 197-11-660. The thresholds and measures were developed based on direction and guidance from the co-lead agencies. Potential measures were identified and evaluated even if they were not under the jurisdiction of the deciding co-lead agencies, in this case, the City of Hoquiam and Ecology.

3.0.6 What impacts are addressed in other chapters of the Draft EIS?

The analysis in this chapter focuses on impacts associated with construction and routine operation of the proposed action in the study area. The following chapters present additional impacts.

Chapter 4, *Environmental Health and Safety*, looks at the potential for increased safety risks under the proposed action. Specifically, onsite operation activities (e.g., rail unloading, tank storage, and vessel loading) and the increased frequency of rail and vessel trips could increase the likelihood of an accident (e.g., storage tank rupture, train derailment, or vessel collision) and result in substantial environmental incidents (e.g., release of crude oil or other proposed bulk liquids). Although the specific impacts would depend on the frequency, location, contents, and volume of a spill, as well as the efforts to contain and clean up the spill, the potential impacts on the human and natural environment would be far-reaching.

Chapter 5, *Extended Rail and Vessel Transport*, addresses impacts related to rail and vessel transportation beyond the study area from the source of the bulk liquids to their final point of delivery.

Chapter 6, *Cumulative Impacts*, addresses the impacts of the proposed action when considered in combination with all other past, present, and reasonably foreseeable future projects.

Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economics, social policy, and the costs and benefits related to the proposed action.