



January 2019  
Contanda Terminal Expansion Project



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# Contanda Terminal Expansion Project State Environmental Policy Act Evaluation

Prepared for Contanda Terminals LLC

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## ABBREVIATIONS

City	City of Hoquiam
Contanda	Contanda Terminals LLC
CUP	Conditional Use Permit
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
JARPA	Joint Aquatic Resources Permit Application
LEED	U.S. Green Building Council Leadership in Energy and Environmental Design
N/A	not applicable
NAICS	North American Industry Classification System
ORMA	Ocean Resources Management Act
proposed project	Contanda Terminals Expansion Project
PSAP	Puget Sound and Pacific Railroad
RCW	Revised Code of Washington
REG	Renewable Energy Group, Inc.
SEPA	State Environmental Policy Act
SIC	Standard Industrial Classification
SSDP	Shoreline Substantial Development Permit
WAC	Washington Administrative Code
Westway	Westway Terminals, LLC

# 1 Introduction

Contanda Terminals LLC (Contanda), formerly Westway Terminals, LLC (Westway), is proposing to expand its existing bulk liquid facility located at the Port of Grays Harbor in the cities of Hoquiam and Aberdeen as part of the Contanda Terminals Expansion Project (proposed project). Contanda is proposing to construct additional new bulk liquid storage tanks and associated facilities to provide storage services for hire by its customers and has prepared this report to provide additional information about the proposed project and the potential for environmental impacts.

As discussed further in this report, Contanda is proposing a new project that is similar to but different from the Westway Expansion Project. The primary differences are that the proposed project would not involve the handling, storage, or transport of crude oil and that the total annual throughput of bulk liquids would be significantly reduced.

The purpose of this report is to provide additional information about the modified project and to clarify the extent to which the Westway Expansion Project Environmental Impact Statement (EIS) addresses the affected environment and potential impacts of the proposed project. Specific analyses relevant to the proposed project that have been completed in the Imperium Terminal Services Expansion Project EIS are discussed separately in a memorandum submitted to the City and Washington State Department of Ecology (Ecology) on August 8, 2018 (Appendix A).

## 1.1 Project Background

Westway was rebranded to Contanda in 2016. Prior to this name change, Westway had developed a proposal to expand its existing facilities to receive, store, and load for off-site transport crude oil (Westway Expansion Project) and had submitted a Shoreline Substantial Development Permit (SSDP) application, a Conditional Use Permit (CUP) application, a Joint Aquatic Resources Permit Application (JARPA), and a State Environmental Policy Act (SEPA) checklist to the City of Hoquiam (City) in 2013.

The City and Ecology subsequently completed an EIS for SEPA compliance purposes. The Final EIS was issued in October 2016, although no permit decisions for that proposal were made due in part to a court decision that additional analysis to demonstrate compliance with planning criteria established under the Ocean Resources Management Act (ORMA) applies.

Contanda has received guidance from Ecology (Hennessey 2018<sup>1</sup>) clarifying how best to demonstrate ORMA compliance and will submit an updated ORMA review evaluation during the shoreline permitting phase for the proposed project consistent with this guidance.

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<sup>1</sup> Hennessey, Jennifer (Washington State Department of Ecology), 2018. Personal communication with Brenden McFarland and Fran Sant (Contanda Terminals LLC). May 16, 2018.

## 1.2 Proposed Project Changes and Potential Impacts

Over time, Contanda has continued to market the project site for expansion and has continually evaluated the Pacific Northwest fuels market in terms of supply, demand, and distribution facilities considerations. To document these considerations, Contanda completed a market analysis (Appendix B) for the following products, which represent those included in the newly proposed project instead of crude oil:

- Biodiesel
- Ultra-low-sulfur diesel
- Renewable diesel
- Diesel
- Gasoline
- Ethanol

As described in the market analysis, while the fuel market in the Pacific Northwest is supply-side constrained and relatively isolated, there has been an increased emphasis on the use of biofuels in existing local markets. Biofuel use is encouraged through national- and state-level policies, tax incentives, and regulations requiring some level of renewable fuels consumption. Both Oregon and Washington require the blending of ethanol into gasoline, and the governor of Washington recently proposed legislation to substantially reduce carbon emissions in the next 15 to 25 years in part through implementation of a low-carbon fuel standard.

The proposed project would provide a means for increasing not only the flexibility of the existing petroleum fuels distribution system but also opportunities for blending fuels to meet renewable fuel standards.

As discussed in this report, the environmental impacts likely to result from construction or operation of the proposed project would be the same or less than those that were disclosed in the Westway Expansion Project EIS. This is because the proposed project would generally involve the same facilities and operations but a lower throughput volume (i.e., fewer unloading and loading events and less rail and vessel traffic) and different products, including renewable fuels, that are less persistent<sup>2,3</sup> if released into the environment. Additionally, given the market considerations and volume/types of liquids under consideration, the proposed products are more likely to arrive at the

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<sup>2</sup> Persistence in the environment is a factor that influences the planning, preparedness, and response actions required to reduce the risks associated with an incident involving the release of oil. Oil is defined in WAC 173-184-025. Persistence is rated by Ecology and can range from non-persistent to highly persistent (Ecology 2015).

<sup>3</sup> Ecology (Washington State Department of Ecology), 2015. *Washington State 2014 Marine and Rail Oil Transportation Study*. Publication Number 15-08-010. March 2015.

site via manifest trains instead of unit trains. In other words, the proposed project would result in a substantially lower number of impacts than those that were previously identified in the Westway Expansion Project EIS.

For these reasons, Contanda is providing this report, along with the associated appendices, to the City and Ecology for the purposes of supporting the evaluation of SSDP/CUP permit applications for the proposed project. With respect to SEPA compliance, Contanda is providing this report to clarify how the Westway Expansion Project EIS addresses the potential impacts associated with the proposed project so that EIS, as well as the Imperium Terminal Services Expansion Project EIS, may be relied upon for the purposes of satisfying SEPA compliance consistent with Washington Administrative Code (WAC) 197-11-600(4)(a).

### 1.3 Report Outline

This report contains the following sections:

- Section 2 – Existing Conditions, which includes a description of the project site and the existing methanol facilities and operations
- Section 3 – Proposed Project, which includes a description of the proposed project and changes relative to the Westway Expansion Project EIS
- Section 4 – Affected Environment, which includes a list of the environmental resources with the potential to be affected by the proposed project as described in greater detail in the Westway Expansion Project EIS
- Section 5 – Potential Environmental Impacts, which describes the potential for impacts relative to the analysis presented in the Westway Expansion Project EIS

## 2 Existing Conditions

The following information is from Chapter 2 of the Westway Expansion Project EIS and is included to provide context for the proposed project. Operation of the existing methanol facility would continue regardless of the proposed project.

### 2.1 Project Site

The project site consists of paved land approximately 7 acres in size located within the cities of Hoquiam and Aberdeen to the southwest of the intersection of Port Industrial Road and West 1st Street (Figure 1).<sup>4</sup> Local road access to the project site is provided via Port Industrial Road at

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<sup>4</sup> The City of Hoquiam is in Section 18, Township 17, Range 9 West, North of the Willamette Meridian, Tax Parcel #056402300000; and the City of Aberdeen is in Section 7, Township 17, Range 9 West, North of the Willamette Meridian, Tax Parcel #029902000200. Latitude 46.968253, longitude -123.855871.

the intersection with West 1st Street. Regional highway connections are provided within a few miles of the project site by U.S. Route 12, which runs east, and U.S. Route 101, which runs north and south.

**Figure 1**  
**Existing Facilities**



Rail access to the project site is provided by the Puget Sound and Pacific Railroad (PSAP), which is owned and operated by Genesee and Wyoming, Inc. The rail line extends 59 miles from Centralia to Hoquiam. Trains arriving at and departing from the project site must travel along the PSAP rail line before connecting with either the BNSF Railway or Union Pacific Railroad in Centralia. The PSAP rail line largely parallels U.S. Route 12 from Centralia to Aberdeen, where it generally parallels the Chehalis River before terminating at the Port's loop track. No changes to the PSAP rail line are proposed as part of the proposed project.

## 2.2 Existing Methanol Facilities

The existing facilities, constructed in 2009, include methanol bulk liquid storage tanks, loading and unloading areas, an array of pipelines pumps and valves connecting the loading areas with bulk liquid storage tanks, and associated office and electrical buildings (Figure 1). These assets are under

long-term contract with its current customer as a non-petroleum product. A description of the existing facilities follows.

### 2.2.1 Storage Tanks

Four aboveground storage tanks are located on the northern portion of the project site. Each tank has the capacity to hold approximately 80,000 barrels (3.36 million gallons), totaling 320,000 barrels (13.44 million gallons) of storage for the facility. The tanks are located in a containment area. Each tank is on a concrete footer, and the area is surrounded by a concrete wall. The storage tank area has the capacity to hold the volume of a single tank, plus an allowance for precipitation (Figure 2).

**Figure 2**  
**Existing Storage Tanks in Containment Area**



### 2.2.2 Loading and Unloading Areas

The applicant is currently permitted to load methanol by rail and tanker truck and unload methanol tank vessels and rail cars. A vapor combustion unit, which is used to incinerate vapors associated with rail and truck loading, is located east of the storage tanks.

#### 2.2.2.1 Rail Loading and Unloading Area

Two rail spurs with 18 loading and unloading spots connect to the PSAP rail line via a crossing of Port Industrial Road at West 1st Street. The loading and unloading spots are located over a concrete

containment area that has the capacity to hold the contents of a single rail car, plus an allowance for precipitation (Figure 3).

**Figure 3**  
**Rail Unloading Facilities**



#### **2.2.2.2 Truck Loading and Unloading Area**

The truck-loading area is paved, covered, and located near the northeast entrance to the project site (Figure 1). It has containment capacity equal to an entire tanker truck.

#### **2.2.2.3 Vessel Loading and Unloading Area**

Tank vessels are unloaded at the Terminal 1 berth. The berth is also used by the Renewable Energy Group, Inc. (REG), to load biodiesel produced at the company's production facility, which is located directly north of the project site, for transport by tank vessel. The two companies have separate infrastructure used for vessel loading and unloading: Contanda's pipelines run along the north side of the dock and REG's pipelines run along the south side.

### **2.2.3 Pipelines**

A system of pipelines connects the loading and unloading areas (rail, truck, and vessel) with the storage tanks. The pipelines run from the truck and rail loading and unloading areas via elevated pipe bridges, then along the southern side of the storage tanks via at-grade supports, then cross the Port's loop track at the southwest corner of the project site via an elevated pipe bridge to connect

with the Terminal 1 dock. Docklines throughout the facility are constructed per American Society of Mechanical Engineers Code for Pressure Piping (ASME B31<sup>5</sup>) and are tested annually to 1.5 times the maximum allowable working pressure per U.S. Coast Guard regulations. Non-dockline piping is tested after construction and periodically retested per applicable codes (API 570 nondestructive examinations<sup>6</sup>).

## 2.2.4 Buildings

Several smaller buildings and an adjacent parking lot are located on the eastern edge of the project site: two of the buildings provide office space for four full-time employees; the third is an electrical building. An empty wood-frame warehouse is located along the northwestern edge of the project site.

## 2.3 Existing Methanol Operations

### 2.3.1 On-Site Operations

The facility receives, certifies, and loads methanol on behalf of its customers for transport to the end customer. The facility's allowable (permitted) throughput capacity is 1.3 million barrels (54.6 million gallons) of methanol per year. Currently, the facility receives approximately 857,000 barrels (35,994,000 million gallons) and ships approximately 793,000 barrels (33,306,000 million gallons) of methanol annually.<sup>7</sup> In general, methanol arrives at the project site by rail or vessel, is unloaded via a system of pipes and hoses, and is transferred to storage tanks for certification. The methanol is then transported via the same pipeline system from the storage tanks to the tanker truck and rail loading areas.

### 2.3.2 Off-Site Transport

The specific mode of transportation to and from the project site depends on the source and final destination of the methanol. As stated previously, methanol is currently transported to the facility by rail and tank vessel and from the facility by tanker truck and rail.

Currently, approximately 60% of the incoming methanol arrives at the facility by rail as part of PSAP rail line standard freight traffic. Most of this methanol originates from Medicine Hat, Alberta, Canada.

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<sup>5</sup> ASME (The American Society of Mechanical Engineers), 2016. *Process Piping – ASME Code for Pressure Piping, B31. ASME B31.3-2016* (Revision of ASME B31.3-2014). January 2016.

<sup>6</sup> API (American Petroleum Institute), 2016. *API 570 – Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems*. API 570 (Fourth Edition). Product No. C57004. February 2016.

<sup>7</sup> The difference in volume received and shipped represents the volume required to maintain the internal floating roof and to meet customer distribution requirements.

Rail cars carrying methanol are separated from other cars in the Aberdeen rail yard; they are stored on sidings in the yard then moved by a switching locomotive to the facility for unloading. This process typically results in one to two trips onto and off of the project site each day to deliver and remove an average of 10 rail cars. The rail cars are parked on the existing rail spurs on the facility where methanol is unloaded via the pipeline system and pumped to the storage tanks.

The remaining 40% of methanol entering the facility is transported by tank vessels. These tank vessels typically originate from Brunei, Indonesia, Malaysia, and Venezuela and berth at Terminal 1. From Terminal 1, they are unloaded via the pipeline system that transports the methanol to the storage tanks. This process takes about 24 to 36 hours. Recent operations at the project site have resulted in approximately three vessel calls per year.

Methanol is transported from the project site by tanker truck and rail. Methanol is transferred from the storage tanks to tanker truck at the truck-loading area for transport off site. Tanker trucks enter and leave the terminal via Port Industrial Road and make approximately 2,700 round trips each year. Rail cars transporting methanol from the project site are parked along the existing rail spurs and loaded via the same process described for unloading. Loaded rail cars are moved off site as part of the one to two switch trips described previously.

## 2.4 Stormwater Management

The Standard Industrial Classification (SIC) code for bulk liquid terminals providing services for hire, including the existing facilities, is 4226. The descriptive text for 4226 contains a list of businesses, including "petroleum and chemical bulk stations and terminals for hire." The corresponding North American Industry Classification System (NAICS) code is 493190. This code is a subcategory within the "transportation" division and is assigned to establishments "primarily engaged" in the warehousing and storing of special products that are not classified elsewhere. Per the state's "Industrial Stormwater General Permit", business in SIC 4226 are required to obtain coverage if they "perform vehicle maintenance activity, equipment cleaning operations, airport deicing operations." Since these activities are not performed at the site, coverage under the Ecology's Industrial Stormwater permit is not required; however, Contanda has sought and obtained coverage for the existing operations.

Currently, 15 acres of the 16-acre project site are covered with impervious asphalt and concrete. Consequently, most precipitation that falls at the project site runs off as sheet flow. Stormwater that falls within the storage tank and rail containment areas is directed to containment sumps where it is visually inspected. After inspection, stormwater is manually released to the Port's stormwater conveyance system and discharged to the harbor via the Port outfall located next to the Terminal 1 dock. If stormwater is determined to be contaminated, it can be treated in place or, if necessary, pumped out by a certified wastewater hauler and taken to an appropriate treatment facility.

Stormwater that falls outside of the existing containment areas flows into catch basins that drain into the same conveyance system and discharge to Grays Harbor via the same outfall.

### 3 Proposed Project

This section begins with a review and comparison of the proposed new Contanda project with the former Westway Expansion Project and includes a description of the proposed facilities and operations, including the anticipated types and volumes of bulk liquid to be stored and handled on site. There are no plans to change the existing methanol facilities as they are described previously; therefore, this section focuses on describing the additional facilities needed for the proposed project.

#### 3.1 Comparison to the Westway Expansion Project

The Westway Expansion Project and the proposed project are similar in nature. In addition to being located at the same project site, the two projects have other similarities. For example, construction methods and many of the on-site operational aspects would be basically the same. The primary similarities between the two projects are listed as follows:

- Both projects have the same expansion footprint and involve the construction of the same types of facilities—bulk storage tanks, pipelines, unloading and loading facilities, and related buildings—using the same construction methods.
- Both projects involve unloading, storage, and loading bulk liquids for off-site transport.
- Both projects involve the delivery of bulk liquids by rail transport to the site.
- Both projects involve the transport of bulk liquids off-site primarily by marine vessel.
- Both projects would provide needed economic growth in the local community through jobs creation and increased tax revenue.

The primary differences between the two projects are that the proposed project does not involve the handling or storage of crude oil, includes an emphasis on renewable fuels, and has a lower level of annual throughput. In addition, Contanda intends to implement the applicable mitigation measures from the Westway Expansion Project EIS, as well as additional mitigation measures developed in coordination with the City and Ecology, as environmental commitments to offset the potential for impacts. The final list of these measures is presented in Appendix C. Table 1 provides a comparison of the key elements for the Westway and Contanda expansion projects.

**Table 1**  
**Comparison of Proposed Project Elements to Prior Westway Expansion Project Elements**

<b>Project Element</b>	<b>Westway Expansion Project</b>	<b>Contanda Expansion Project (Proposed Project)</b>
Proposed bulk liquid(s)	Crude oil	Biodiesel, ultra-low-sulfur diesel, renewable diesel, diesel, gasoline, and ethanol <sup>1</sup>

<b>Project Element</b>	<b>Westway Expansion Project</b>	<b>Contanda Expansion Project (Proposed Project)</b>
Annual maximum throughput	17.9 million barrels (751.8 million gallons)	12 million barrels (504 million gallons)
Environmental Commitments	5 voluntary measures included as part of the proposal	54 voluntary measures included as part of the proposal
Number of storage tanks	5	8
Storage tank size	200,000 barrels (8.4 million gallons) 150 feet wide by 64 feet high Concrete slabs/pilings	Varied but none larger than 150,000 barrels (6.3 million gallons) 115 feet wide by 65 feet high Concrete slabs/pilings
Total storage capacity	1 million barrels (42 million gallons)	1.1 million barrels (46.2 million gallons) <sup>3</sup>
Other proposed facilities	Pipelines Rail unloading Vessel loading	Same but with one additional truck-loading area (similar to the existing facility) for local distribution  Contanda is also pursuing the option to construct a third rail on site that would allow for the storage of an entire train
Rail transport	PSAP transport to the site: 229 calls <sup>2</sup> /year 19 calls/month 4.4 calls/week 0.6 calls/day	PSAP transport to the site: 204 calls/year 17 calls/month 4.25 calls/week 0.56 calls/day
Maximum train length (cars)	120	96
Vessel traffic	Grays Harbor Navigation Channel: 96 to 119 calls/year 8 to 9.9 calls/month 1.8 to 2.3 calls/week 0.26 to 0.33 calls/day Panamax vessels to tank barges	Grays Harbor Navigation Channel: 48 calls/year 4 calls/month 1 call/week 0.14 call/day Panamax vessels to tank barges
Truck traffic	N/A	Minor local traffic of a few trips per week
Jobs	Construction: 86 (Phase 1)/49 (Phase 2) Operation: 36	Construction: 80 to 100 Operation: 4 to 20
Construction	Phase 1: 10 to 12 months Phase 2: 10 months See Chapter 2 of EIS for methods.	12 to 24 months

Notes:

1. See Appendix D for more information.
2. Calls are round trips, meaning there would be two trips per call, one inbound and one outbound.
3. Although the storage is slightly greater than what was proposed for the Westway Expansion Project, operational constraints of the proposed operations and a commitment by Contanda not to exceed the annual throughput capacity per the terms of the SSDP and air permits being sought would ensure that annual throughput would not exceed 12 million barrels per year and remain lower than was proposed for the Westway Expansion Project.

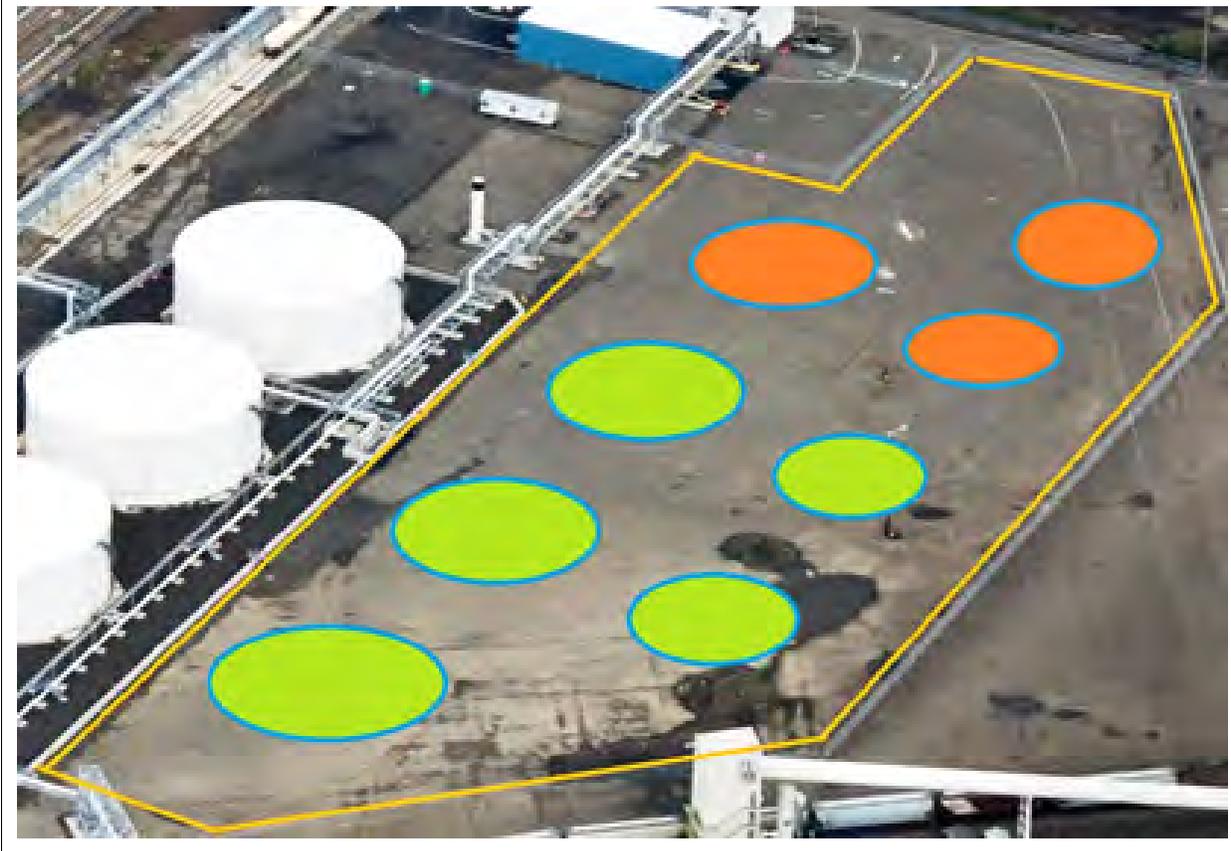
N/A: not applicable

## 3.2 Proposed Facilities

The proposed project would involve constructing up to eight additional bulk liquid tanks of product totaling approximately 1,100,000 barrels and associated support facilities, including ship, truck and rail infrastructure, to receive, store, load and unload bulk liquids for off-site shipment. Key components of the newly proposed facilities include the following and are shown in Figure 4:

- Up to eight additional bulk liquid storage tanks
- Associated pipelines
- Rail spur and rail loading and unloading facilities
- Vessel-loading and unloading facilities, including a marine safety unit and a vapor combustion unit
- Truck-loading facilities
- New structures and buildings (e.g., office building, operation and maintenance building) will be designed to incorporate U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) features, such as using solar and wind generated power and energy efficient construction methods.

**Figure 4  
Proposed Facilities Map**



Storage tanks, pipelines, and loading and unloading facilities would be designed and constructed consistent with applicable requirements for spill prevention and containment. These requirements are summarized in Appendix E.

### *3.2.1 Storage Tanks*

Up to eight aboveground storage tanks would be built south of the existing tanks as shown in Figure 4. The largest of these tanks would not exceed 150,000 barrels (6.3 million gallons). The tanks would be constructed on pile-supported foundations as described in greater detail in Appendix C. The specific tank sizes and volumes will be built to suit customer needs; however, the total gross volume will not exceed 1.1 million barrels (46.2 million gallons)<sup>8</sup> and the maximum height of the tanks is anticipated to be 65 feet high.

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<sup>8</sup> The total working volume would be less, estimated to be approximately 1,004,000 barrels (42.2 million gallons) because the tanks would not be filled to maximum capacity.

The bulk liquids to be handled and stored at the project site include renewable and petroleum products. Renewable (non-petroleum) products may also include ethanol, renewable diesel, and biodiesel. The petroleum products may include distillates such as ultra-low-sulfur diesel, diesel, and gasoline. Representative safety data sheets, including a summary of pertinent safety-related characteristics, are presented in Appendix D.

Although the specific mix of bulk liquids would depend on customer demand, the total combined annual throughput of both petroleum and non-petroleum products would be capped at a maximum annual throughput of 12 million barrels (504 million gallons) per year or an average of 32,877 barrels (1.38 million gallons) per day. Throughput operations are described in greater detail in the following sections.

### **3.2.2 Pipelines**

A system of plant pipelines would be constructed to connect the rail racks, storage tanks, truck racks and marine facilities. The storage tanks would be connected to the vessel-loading facilities at the Terminal 1 dock. A carbon steel pipeline would be installed on the existing pipe bridge to connect the storage tanks to the vessel-loading facilities at the Terminal 1 dock. The loading rates would be the same as those evaluated in the Westway Expansion Project EIS. New carbon steel pipelines would be installed to move the bulk liquids from the rail unloading areas to the storage tanks. Hoses used at Terminal 1 for over-water transfers will comply with U.S. Coast Guard hose assembly requirements for facilities transferring oil or hazardous material in bulk (33 Code of Federal Regulations 154.500, Hose Assemblies). They will be pressure-tested annually per U.S. Coast Guard requirements.

### **3.2.3 Loading and Unloading Facilities**

#### **3.2.3.1 Rail**

The two existing rail spurs would be lengthened and two new spurs would be added, thereby increasing the total number of loading and unloading spots from 18 up to 80. Similar to the existing rail loading spots, the new loading and unloading spots would be constructed within a containment area—a center-sloped concrete slab that collects and directs any spills to a central sump. This containment area would have the capacity to contain the total volume of a single rail car, plus an allowance for precipitation.

Connection of the new spurs to the PSAP rail line would use the existing grade crossing at Port Industrial Road and would require no track to be constructed off site.

#### **3.2.3.2 Truck**

Truck-loading facilities may include one additional two-bay rack similar to the existing truck-loading facilities adjacent to the west of the existing truck loading rack.

### **3.2.3.3 Vessel**

The following improvements would be made to accommodate the loading of tank vessels with bulk liquids. A hose tower would be installed on the dock to add structural support for the hoses used to load the tank vessels. The dockline from the terminal would connect to one end of the tower, and a hose on the other end of the tower would be used to load the tank vessels.

A marine vapor control system would be installed to control emissions of volatile organic compounds from vapors displaced during vessel loading.

### **3.2.4 Buildings**

Additional administrative office space may be constructed or relocated off site. Support facilities, including a new electrical building south of the existing electrical building and shower and change rooms, may be constructed on site. The existing warehouse is not currently being used and would be removed to make room for the new and expanded rail spurs.

All facilities are being designed with consideration to LEED standards.

## **3.3 Proposed Operations**

Under the proposed project, Contanda's operations would consist of providing bulk liquid transload services to its customers. This means that Contanda would accept/unload, store, and load specific bulk liquids on behalf of the customer so the bulk liquids could be transferred between different modes of transportation. Contanda does not own the bulk liquids but would accept responsibility for unloading, storing, and loading them while on its property. Based on the liquids being considered and market characteristics, the proposed bulk liquids are most likely to be delivered to the project site by rail along the PSAP then loaded by Contanda for off-site delivery by truck or vessel.

These operations are driven by Contanda's customer demand, facility design and operational constraints related primarily to off-site rail and vessel transport limitations, and Contanda's commitment to not exceed specific throughput limitations. These commitments and throughput limitations are described further in the following text with the expectation they would also be required as conditions in the Shoreline Substantial Development and Air Permits being sought by Contanda.

Contanda's customers contract directly with rail and vessel operators to transport the bulk liquids to and from the project site and are therefore responsible for determining the type and frequency of transport (directly informed by the terms of their contract for transload services with Contanda).

While there may be some minor variation in the characteristics of this transport, particularly in the shorter term, the average set of characteristics (e.g., train length, vessel type, trip frequency) can be

determined and monitored because transport directly relates to the annual throughput volume limits contractually agreed to by Contanda with its customers.

Specific to the proposed project, Contanda plans to accept the cargo from PSAP, which is the rail carrier to and from the project site. The liquids are most likely to arrive via manifest trains; however, the analysis herein considers the most impactful (albeit less likely) scenario that the liquids could arrive on unit trains consistent with the approach taken in the Westway Expansion Project EIS. The liquids would then be stored on site in the proposed tanks until ready for off-site transport.

Contanda would then load the liquids for off-site transport either by truck or vessels. Vessels would call at the Port's Terminal 1 berth for transport out of Grays Harbor.

At this time, customer demand indicates the most likely scenario for throughput operations would involve shipping various forms of biodiesel, ultra-low-sulfur diesel, renewable diesel, diesel, gasoline, and ethanol to the site. Anticipated throughput for these commodities would be approximately 12 million barrels (504 million gallons) of throughput per year.

Based on this throughput, the proposed project would result in the addition of approximately 204 trains to and from the project site per year. Transport from the site is expected to occur via a mix of Panamax vessels up to 400,000 barrels (16.8 million gallons) per vessel for low-sulfur diesel, diesel, and gasoline and articulated barges up to 100,000 barrels (4.2 million gallons) per vessel for ethanol, renewable diesel, and biodiesel for a combined total of 48 vessel calls per year, with about half carrying distillates or gasoline.

It is possible that all storage (1.1 million barrels) could be used for low-sulfur diesel, diesel, and gasoline; however, the primary products are anticipated to be renewable fuels, such as biodiesel or renewable diesel. Changes in the proportion of liquids would not result in a material change in train or vessel transport or total annual throughput. This is because the capacity that would otherwise be dedicated to the petroleum products would be directly converted to the other renewable products. While the facility might operate with a slightly higher working turnover for the tanks, the overall total throughput volume would remain the same.

In addition to rail and vessel traffic, the proposal could also result in a slight increase in truck traffic. Truck traffic would involve minimal trips (a few per week) from the project site to local customers.

### **3.4 Stormwater Management**

The proposed facilities would fall within the same SIC and NAICS codes as described in the Existing Facilities and Operations – Stormwater Management section of this memorandum. Impervious surface area would increase at the project site by 1 acre under the proposed project. Seven of the 8.3 acres proposed for development are currently paved, and construction of the proposed project would require paving the remaining acre. In general, runoff would flow into the Port's stormwater

system similar to existing conditions. Under the proposed project, the applicant would continue to inspect the sump for potential pollution prior to discharge and would conduct any additional testing if required and would obtain an individual National Pollutant Discharge Elimination System permit.

### **3.5 Environmental Commitments**

These facilities would be designed, constructed, and operated in accordance with the specifications required by applicable local, state, and federal law. A summary of these requirements is presented in Appendix F. To further ensure potential environmental impacts from the proposal are addressed, Contanda will also implement the environmental commitments presented in Appendix C, which includes those applicable measures recommended in the Westway Expansion Project EIS and additional measures subsequently developed in coordination with the City and Ecology.

### **3.6 Construction Schedule and Methods**

Construction of the proposed project is anticipated to include the construction of up to eight tanks and all support facilities (e.g., pipelines, loading and unloading facilities, and buildings). Construction is tentatively scheduled to start in 2019 and is anticipated to last 12 to 24 months. Construction would require approximately 80 to 100 workers and would occur during daylight hours (7:00 a.m. to 7:00 p.m.) Monday through Friday. However, the schedule may be altered to add some weekend daytime construction to make up for weather delays.

Construction would require using the following types of machinery: an excavator, dozer, dump truck(s), backhoe(s), maintenance trucks, cranes, generator(s), a manlift, forklift(s), air compressor(s), a concrete pump, a compactor, and concrete finisher. Construction activities for several of the facilities would likely occur simultaneously.

## **4 Affected Environment**

The study area for the proposed project would be the same as what was analyzed in the Westway Expansion EIS. Therefore, this information is not being presented again in this report. Information about potentially affected resources is provided in Chapter 3 of that EIS and includes the following elements:

- Earth
- Air
- Water
- Plants
- Animals
- Energy
- Noise
- Land

- Aesthetics, Light, and Glare
- Recreation
- Historic and Cultural Preservation
- Tribal Resources
- Public Services and Utilities
- Hazardous Materials
- Rail Traffic
- Vehicle Traffic and Safety
- Vessel Traffic
- Environmental Health and Safety

## 5 Potential Environmental Impacts

Much of the Westway Expansion Project EIS is pertinent to the analysis of impacts for the proposed project and could be largely relied upon as being adequate for making a SEPA determination for the new proposed project. The primary reasons for this are listed as follows and discussed in greater detail in this section:

- By comparison, the proposed project involves a lower annual throughput volume and a different mix of proposed bulk liquids that are less persistent in the environment if spilled.
- The remaining potential for impacts would occur as the result of construction and operational activities that are generally the same for both projects.
- The proposed project incorporates, as environmental commitments, the mitigation measures that were recommended in the Westway Expansion Project EIS that are applicable to the proposed project. These environmental commitments are listed in their entirety in Appendix C.

Appendix G presents a crosswalk that compares the potential for significant impacts between the two projects and clarifies which mitigation measures are being included as environmental commitments to specifically address these impacts. The key findings are summarized in the following sections.

As noted previously, the Imperium Terminal Services Expansion Project EIS also provides analysis relevant to many of the bulk liquids proposed under the Contanda project. The applicability of that EIS to the proposed project is addressed in Appendix A.

### 5.1 Impacts Anticipated to Be Different but Lower

The fact that impacts would be different but lower than those in the Westway Expansion Project EIS has to do with the proposed project having a lower annual throughput volume and a different mix of bulk liquids.

With respect to these aspects of the Westway Expansion Project, that EIS found that the following environmental resources had the potential to be significantly affected:

- Earth (tsunami risk)
- Noise (rail horn noise)
- Tribal Resources (fishing conflicts with vessels)
- Vehicle Traffic and Safety (delays related to trains)
- Environmental Health and Safety (risks associated with likelihood and consequence of potential incidents involving the release of crude oil)
- Cumulative impacts on these resources

As noted in Table 2 and discussed in greater detail in the following sections, the potential for impacts to these environmental resources from the proposed project would be less than those identified in the Westway Expansion Project EIS. Appendix G includes a more detailed evaluation in terms of specific impacts and mitigation measures on these and other resources with the potential to be significantly affected.

**Table 2  
Comparison of Anticipated Potentially Significant and Unavoidable Impacts to Prior Westway Project**

Environmental Resource	Westway Expansion Project	Contanda Expansion Project (Proposed Project)
Earth	Potential risks of exposure associated with tank failure in the event of a tsunami	<p>Risks would be lower because the bulk liquids are less persistent and the project facilities would be designed in compliance with applicable regulations related to tsunami load standards.</p> <p>As noted in Appendices C and G, Contanda is committing to the implementation of mitigation measures as part of the proposed project to further reduce potentially significant impacts.</p>
Noise	Potentially significant increase in noise at certain at-grade crossings	<p>Noise associated with the passing of a single train going to the project site would be the same as existing conditions.</p> <p>The potential increase in average noise levels associated with the proposed project would be lower because the length of the train would be shorter and the number of trips would be fewer. In addition, train horn soundings would be fewer and completed in compliance with applicable regulations for public safety.</p> <p>As noted in Appendices C and G, Contanda is committing to the implementation of mitigation measures as part of the proposed project to further reduce potentially significant impacts.</p>

Environmental Resource	Westway Expansion Project	Contanda Expansion Project (Proposed Project)
Tribal Fishing	Potentially significant fishing access conflicts with project vessels	Potential for conflicts between tribal fishers and project vessels would be lower because of less frequent vessel calls. In addition, Contanda has been working closely with the Quinault Indian Nation to ensure that potentially significant impacts are adequately addressed and will implement the commitments in Appendix C.
Vehicle Traffic and Safety	Potentially significant increased delay at average hour (East Heron/Newell) and peak hour (Washington)	Potential for vehicle delay at average hour (East Heron/Newell) and peak hour (Washington) would be even lower because the length of the train would be shorter and the number of trips would be fewer. As noted in Appendices C and G, Contanda is committing to the implementation of mitigation measures as part of the proposed project to further reduce potentially significant impacts.
Environmental Health and Safety	Potentially significant increase for incidents that could result in significant environmental impacts	Risks associated with potential spills would be lower because the proposed liquids are less persistent in the environment and the proposed throughput volume would be lower. As noted in Appendices C and G, Contanda is committing to the implementation of mitigation measures as part of the proposed project to further reduce potentially significant impacts.
Cumulative	Potential for a contribution to cumulatively significant impacts associated with noise, tribal fishing, vehicle traffic and safety, and environmental health and safety (risks)	The potential for the proposed project to contribute to cumulatively significant impacts is lower because of the reduction in throughput and the change in the proposed bulk liquids.

**5.1.1 Reduced Throughput Considerations**

Because the number of rail and vessel trips would be less than those that would occur from to the Westway Expansion Project, the potential for impacts from rail and vessel transport (e.g., train noise and traffic conflicts affecting vehicle traffic and safety and tribal resources) would be lower.

The lower throughput would also mean that there would be fewer loading and unloading transfers and a lower likelihood that incidents would occur. Lower volumes of incoming liquids via rail additionally means that liquids are more likely to arrive by manifest train instead of unit train, further reducing the likelihood of incidents. Incorporation of the measures listed in Appendix C and as evaluated in Appendix G would help to further reduce the potential for these impacts individually.

For these same reasons, the proposed project’s contribution to cumulative impacts would also be less. As noted in Table 3, the total cumulative number of rail and vessel trips presented in the Westway Expansion Project EIS were found to be 7.35 and 3.2, respectively.

**Table 3**  
**Rail and Vessel Traffic Under Cumulative Conditions**

Project	Westway Expansion Project EIS		Current Conditions	
	Rail <sup>1</sup> (One-Way Trips/Day)	Vessel <sup>2</sup> (One-Way Trips/Day)	Rail (One-Way Trips/Day)	Vessel (One-Way Trips/Day)
Westway Project EIS	1.25	0.7	N/A	N/A
Contanda Proposed Project	N/A	N/A	1.1	0.26
REG Project	2	1.1	N/A	N/A
Grays Harbor Rail Terminal Project	1	0.3	N/A	N/A
BHP Billington, Canada, Inc., Potash Project	N/A	N/A	1.42	1.2
Existing Traffic	3.1	1.2	3.1	1.2
<b>Total</b>	<b>7.35</b>	<b>3.2</b>	<b>5.62</b>	<b>2.66</b>

Notes:

1. As presented in Table 6-10 of the Westway Expansion Project EIS for traffic projected through 2037.
2. As presented in Table 6-19 of the Westway Expansion Project EIS for traffic projected through 2037.

N/A: not applicable

Since issuance of the Westway Expansion Project EIS, REG (formerly Imperium Terminal Services) has decided to expand in Ferndale (REG 2018<sup>9</sup>), and the Grays Harbor Rail Terminal Project has been replaced with a proposal by BHP Billiton, Canada, Inc. At the time of this publication, no other potential projects have been identified that were reasonably foreseeable to occur. Similar to the approach taken in the Westway Expansion Project EIS, potential projects were considered in the cumulative analysis if they had active permit applications.

Table 3 also shows an updated analysis of potential rail and vessel trips associated with currently proposed projects that would rely upon the same transportation infrastructure. As shown, the total cumulative traffic to and from the proposed project site would be less than was previously disclosed in the Westway Expansion Project EIS.

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<sup>9</sup> REG (Renewable Energy Group, Inc.), 2018. "Phillips 66, REG to Build Renewable Diesel Plant in Washington." *Biodiesel Magazine*. Accessed January 9, 2019. Available at: <http://www.biodieselmagazine.com/articles/2516503/phillips-66-reg-to-build-renewable-die>.

### 5.1.2 Environmental Health and Safety Considerations

To provide further information about the potential risks associated with the proposed bulk liquids, Table D-1 in Appendix D summarizes the relevant safety-related characteristics of a representative range of bulk liquids that could be handled and stored at the project site.

As shown in Table D-1, the range of proposed liquids are similar in terms of the potential health and environmental risks that were identified for crude oil in the Westway Expansion Project EIS, which were described in Chapter 4, Section 4.7 of that EIS. However, by comparison, the proposed bulk liquids are less persistent in the environment. By comparison, if an incident occurred that resulted in a fire, emergency response protocols do not require the use of specialized foam.

As noted in Appendix D, the range of bulk liquids with the potential to be handled and stored at the project site include petroleum and non-petroleum products. Table 4 presents the relationship of the proposed liquids relative to the applicable regulatory framework for petroleum products and oil.

**Table 4**  
**Terms Applicable to the Regulatory Framework for the Proposed Liquids**

Relevant Terms	Proposed Liquids
Refined petroleum (RCW 80.50)	Petroleum diesel Gasoline
Liquefied petroleum product (assumed to include petroleum derivatives; RCW 80.50)	Petroleum diesel Gasoline
Petroleum fuels (WAC 197-11-938[7])	Petroleum diesel Gasoline
Any liquid fuel (WAC 197-11-938[9])	Petroleum diesel Gasoline Renewable diesel Biodiesel Ethanol
Nonrenewable resources (assumed to mean oil, including fossil fuels and associated derivatives; RCW 43.143, WAC 173-86)	Petroleum diesel Gasoline
Oil (WAC 173-180)	Petroleum diesel Gasoline Renewable diesel Biodiesel

Note:  
RCW: Revised Code of Washington

As noted in Appendix D, the proposed bulk liquids that are classified as petroleum products and/or oil are more biodegradable and less persistent in the environment if an incident were to occur.

Compared to crude oil, the proposed liquids are considered to be non-persistent (Ecology 2015, Appendix D, Table 57<sup>10</sup>). Some forms of crude oil that were previously considered in the Westway Expansion Project EIS, such as tar sands, can also sink, which makes cleanup much more difficult. The bulk liquids associated with the proposed project do not exhibit these properties and would be much easier to contain and clean up.

Because emergency response protocols indicate that incidents involving the release of these proposed bulk liquids can be handled with water fog or spray, there is also not the same specialized need for equipment that is required for crude oil. In addition, the difference in persistence between all the proposed bulk liquids and crude oil means that certain planning, preparedness, and response criteria are already addressed through compliance with existing regulatory requirements (listed in Appendix E of this report).

For these reasons and because the proposed project would have a lower throughput volume (i.e., lower number of loading/unloading events, as shown in Table 1), the risks (i.e., likelihood and consequences) related to the proposed project are lower and have otherwise been adequately addressed as described in the Westway Expansion Project EIS or the Imperium Terminal Services Expansion Project EIS, as discussed further in Appendix A. Incorporation of the measures listed in Appendix C and as evaluated in Appendix G would help to further reduce the potential for these impacts, both individually and cumulatively.

## 5.2 Anticipated Impacts

The remaining potential for impacts has to do with construction and the more general operational aspects of the proposed facilities. These impacts are expected to be the same as those identified for the Westway Expansion Project. Construction-related impacts would be the same because the proposed facilities and construction methods have not substantially changed.

Potential operational impacts that are unrelated to throughput volume or the specific type of bulk liquid would also be the same. This is because the type of storage tanks and the way bulk liquids would be unloaded, stored, and loaded would be the same. These impacts include those that would occur more generally as the result of the expanded facility, such as on-site noise, energy demands, and aesthetic changes.

As is the case for other potentially significant impacts related to the proposed project, Contanda intends to implement applicable mitigation measures recommended in the Westway Expansion Project EIS and additional measures developed in collaboration with Ecology, the City, and local

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<sup>10</sup> Ecology (Washington State Department of Ecology), 2015. *Washington State 2014 Marine and Rail Oil Transportation Study*. Publication Number 15-08-010. March 2015.

emergency response organizations. These measures are included as environmental commitments in Appendix C, with the analysis of which impacts and measures apply presented in Appendix G. Contanda commits to implementing these measures to ensure that the potential for these impacts remains less than significant.

Appendix A  
Applicability of the Imperium Terminal  
Services Expansion Project Draft  
Environmental Impact Statement  
Memorandum

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## Memorandum

August 8, 2018

To: Brenden MacFarland and Fran Sant, Washington Department of Ecology  
Brian Shay, City of Hoquiam

From: Terry Duplantis and Ken Shoemake, Contanda, LLC

cc: Kim Marcotte, Anchor QEA, LLC

**Re: Contanda Terminals Expansion Project – Applicability of the Imperium Draft EIS**

### Background

Contanda Terminals, LLC (Contanda), submitted a shoreline permit application to the City of Hoquiam (City) for the Contanda Terminals Expansion Project (proposed project) on October 23, 2017. This submittal included an evaluation<sup>1</sup> of how the final Westway Expansion Project *Environmental Impact Statement*<sup>2</sup> (Westway EIS) could satisfy in part City and Washington Department of Ecology (Ecology; collectively, the co-lead agencies) responsibilities for State Environmental Policy Act (SEPA) compliance and provided decision-making information to permitting authorities such as the co-lead agencies.

The authority for relying on existing documents to meet all or part of an agency's responsibilities under SEPA is set forth in Washington Administrative Code (WAC) 197-11-600. The co-lead agencies have acknowledged that additional relevant information from the draft Imperium Terminal Services Expansion Project *Environmental Impact Statement*<sup>3</sup> (Imperium EIS) may be relied upon for SEPA compliance for the proposed project and to support subsequent permit decisions and approvals related to the proposed project. The analysis in the Imperium EIS is particularly relevant to the operational aspects of Contanda's proposed project, given that several aspects of Contanda's proposed project (including the transport, storage, and handling of several of the same bulk liquids) were analyzed in the Imperium EIS.

This memorandum identifies areas of the Imperium EIS that are applicable to the proposed project and is presented to the co-lead agencies for consideration regarding the extent to which the

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<sup>1</sup> Anchor QEA, LLC, 2017. *State Environmental Policy Act Evaluation*. Contanda Terminals Expansion Project. October 2017.

<sup>2</sup> Washington Department of Ecology and City of Hoquiam, 2016. *Environmental Impact Statement*. Final. Westway Expansion Project. September 2016.

<sup>3</sup> Washington Department of Ecology and City of Hoquiam, 2015. *Environmental Impact Statement*. Draft. Imperium Terminal Services Expansion Project. August 2015.

Imperium EIS provides adequate information to support SEPA compliance for Contanda’s proposed project. While the focus of the memorandum is on the Imperium EIS, references to the Westway EIS are included where relevant to provide further clarification as to the extent of applicable analyses available for consideration in evaluating Contanda’s proposed project.

## Comparison to the Imperium Terminal Services and Westway Expansion Projects

Table 1 presents the key components addressed in the Imperium Terminal Services and Westway Expansion Projects compared to Contanda’s proposed project.

**Table 1**  
**Comparison of Imperium Terminal Services and Westway Expansion Projects to Contanda Terminals Expansion Project**

Project Element	Imperium Terminal Services Expansion Project	Westway Expansion Project	Contanda Terminals Expansion Project (Proposed Project)
<b>Proposed Bulk Liquid(s)</b>			
Biodiesel	x		x
Ethanol	x		x
Renewable diesel	x		x
Petroleum diesel	x		x
Gasoline	x		x
Methanol	x	Already permitted	Already permitted
Vegetable oil	x		
Used cooking oil	x		
Animal fat	x		
Bakken crude oil	x	x	
Renewable jet fuel	x		
Jet fuel	x		
Kerosene	x		
Petroleum naphtha	x		
No. 2 diesel fuel	x		
No. 6 fuel oil	x		
Vacuum gas oil	x		
Benzene, toluene, and xylene (BTX)	x General consequences addressed as constituents of crude oil	x General consequences addressed as constituents of crude oil	x

Project Element	Imperium Terminal Services Expansion Project	Westway Expansion Project	Contanda Terminals Expansion Project (Proposed Project)
Styrene	x General consequences addressed as constituents of crude oil (polycyclic aromatic hydrocarbon)	x General consequences addressed as constituents of crude oil (polycyclic aromatic hydrocarbon)	x
Methylene diphenyl diisocyanate (MDI) foam			x
<b>Proposed Storage Tanks</b>			
Proposed annual throughput evaluated	30 million barrels (1.26 billion gallons)	17.9 million barrels (751.8 million gallons)	12 million barrels (504 million gallons)
Number of tanks	9	5	8
Size of tanks	80,000 barrels (3.4 million gallons) 64 feet tall by 95 feet wide	200,000 barrels (8.4 million gallons) 64 feet tall by 150 feet wide	Varied but none larger than 150,000 barrels (6.3 million gallons) 65 feet tall by 115 feet wide
<b>Rail Transportation</b>			
Unit train transport	<b>Length:</b> 120 cars <b>Traffic:</b> 365 calls/year <b>Routes:</b> Puget Sound & Pacific Railroad (PSAP) from Centralia to project site; BNSF Railway (BNSF) from Williston Basin or Alberta, Canada <b>Commodities:</b> Crude oil; EIS states transport of other commodities are based on market conditions	<b>Length:</b> 120 cars <b>Traffic:</b> 229 calls/year <b>Routes:</b> PSAP from Centralia to project site; BNSF from Williston Basin or Alberta, Canada <b>Commodities:</b> Crude oil	<b>Length:</b> 96 cars <b>Traffic:</b> 204 calls/year <b>Routes:</b> Same <b>Commodities:</b> Renewable diesel, petroleum diesel, gasoline
Manifest train transport	<b>Length:</b> Train length not expected to vary substantially from existing conditions <b>Traffic:</b> Trips accounted for within projected unit train numbers <b>Routes:</b> PSAP from Centralia to the Project site; BNSF routes varied <b>Commodities:</b> EIS states transport of other commodities are based on market conditions	No increase	<b>Length:</b> Train length not expected to vary substantially from existing conditions <b>Traffic:</b> Trips accounted for within projected unit train numbers <b>Routes:</b> Same <b>Commodities:</b> Biodiesel, ethanol, BTX, styrene, and MDI foam

Project Element	Imperium Terminal Services Expansion Project	Westway Expansion Project	Contanda Terminals Expansion Project (Proposed Project)
<b>Vessel Transport</b>			
Panamax/Articulated Tug Barges	<b>Traffic:</b> 200 calls/year <b>Route:</b> Grays Harbor Navigation Channel; West Coast within U.S. waters but could be transported abroad <b>Commodities:</b> Crude oil; EIS states transport of other commodities are based on market conditions	<b>Traffic:</b> 96 to 119 calls/year <b>Route:</b> Grays Harbor Navigation Channel; West Coast within US Waters <b>Commodities:</b> Crude oil	<b>Traffic:</b> 48 calls/year total <b>Route:</b> Same as Imperium <b>Commodities:</b> Renewable diesel, petroleum diesel, gasoline, biodiesel, ethanol, BTX, styrene, and MDI foam
<b>Truck Transport</b>			
Truck traffic/routes	No increase	No increase	Minor local traffic of a few trips per week replacing distribution from other suppliers (no increase)

## Operational Environmental Impacts

As noted in Table 1, five of Contanda’s proposed bulk liquids were explicitly evaluated in the Imperium EIS: biodiesel, ethanol, renewable diesel, petroleum diesel, and gasoline. The Materials Safety Data Sheets submitted as part of the original SEPA Checklist<sup>4</sup> for the Imperium Terminal Services Expansion Project are presented in Attachment 1. While two liquids (benzene, toluene, and xylene (BTX) and styrene) were not proposed for bulk transfer as part of the Imperium Terminal Services Expansion Project, as previously noted and described further herein, these materials are constituent components of crude oil, diesel, and gasoline. Therefore, the consequences of exposure to these liquids were addressed in both the Westway and Imperium EISs.

Information related to the potential impacts associated with the eighth bulk liquid proposed by Contanda (methylene diphenyl diisocyanate [MDI] foam) has been previously presented as part of the shoreline application materials submitted by Contanda. While MDI foam was not considered in either EIS, it is neither flammable or hazardous to aquatic life. Other than acting as a potential skin sensitizer/allergen upon exposure, it is consistently in a lesser risk category than previously considered bulk fluids (Attachment 2).

Because of the similarities between the Imperium Terminal Services Expansion Project and the proposed project—mainly from the transport, storage, and handling of all proposed liquids with the

<sup>4</sup> Imperium Renewables, 2013. State Environmental Policy Act Checklist. February 2013.

exception of MDI foam—the following selections from the Imperium EIS are directly applicable to the proposed project and would not require further analysis:

- Section 3.14 – Hazardous Materials
- Chapter 4 – Environmental Health and Safety
  - On-Site Operations
  - Rail Transport from Centralia to the Project Site
  - Vessel Transport Along the Grays Harbor Navigation Channel
- Chapter 5 – Extended Rail and Vessel Transport Within Washington and along the West Coast

## Hazardous Materials

The potential hazardous materials impacts associated with the transport, storage, and handling of five of the eight liquids included in Contanda's proposed project (biodiesel, ethanol, renewable diesel, petroleum diesel, and gasoline) were addressed in Section 3.14 – Hazardous Materials of the Imperium EIS. Specifically, Table 3.14-4 lists the chemical properties of these materials and served as the basis for the analysis of hazardous materials impacts. As noted in that section:

Similar to existing conditions, exposure to hazardous materials associated with routine operations under the proposed action would be most likely to occur during unloading and loading activities. Most likely causes would continue to be human error (e.g., misuse of equipment, inadequate application of health and safety procedures, improper implementation of specific handling requirements) or minor equipment failure (e.g., small valve leak), resulting in incidental spills or exposure to other hazards (e.g., dermal absorption, inhalation exposure, small fires, slips and falls).

These risks could routinely result in minor releases that would be easily contained and cleaned up by onsite personnel. As noted in Chapter 2, *Proposed Action and Alternatives*, and consistent with the regulations outlined in Section 3.14.2 (Facility Oil Handling Standards, WAC 173-180; Clean Water Act [33 U.S.C (United States Code) 1251 et seq.] and the Oil Pollution Act [33 U.S.C. 2701 et seq.]), the proposed facilities would be designed and operated to meet the appropriate safety standards as a designated oil facility.<sup>5</sup> Specifically, the facilities would be designed to meet primary and secondary containment standards in the event of an oil spill. Additionally, the applicant would be required to update the integrated contingency plan to reduce the potential for releases of crude oil or hazardous materials and to clarify emergency notification and response protocols during site operations

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<sup>5</sup> These same regulations would apply to the proposed project, as noted in the shoreline permit application materials.

and vessel transfers. Similar to existing conditions, the applicant would also continue to ensure that personnel training and handling and storage activities would comply with the appropriate safety standards intended to reduce the risks of incidents and to address potential spills during operation.

Section 3.14 of the Imperium EIS further notes that no unavoidable significant adverse impacts would be expected from routine operations.

## Environmental Health and Safety

By extension, the risks associated with these liquids were also addressed in the Imperium EIS. A *Risk Assessment Technical Report*<sup>6</sup> (Risk Assessment) was completed for both the Imperium Terminal Services and Westway Expansion Projects to support their respective EISs. The Risk Assessment evaluated, among other things, the likelihood various spill scenarios would occur from on-site operations and off-site rail and vessel transport. The rail and vessel routes evaluated were the same routes proposed for Contanda's proposed project: rail transport would travel along the Puget Sound & Pacific Railroad, and vessel transport would operate within the Grays Harbor Navigation Channel. The results of the Risk Assessment are summarized in Sections 4.3, 4.4, and 4.5 of both the Imperium and Westway EISs, respectively describing the likelihood of incidents occurring on site and during rail and vessel transport, and in Section 4.7, describing the potential impacts on resources. The findings and applicability to the proposed project are discussed further in the following sections for each operational aspect.

### *On-Site Operations*

The following five scenarios were identified to characterize on-site risks and were evaluated in the Risk Assessment for the Imperium Terminal Services and Westway Expansion Projects:

- **Scenario 1.** Rail-unloading spill scenario: spill of 2,100 gallons (50 barrels) on the project site.
- **Scenario 2.** Vessel-loading spill scenario: spill of 2,100 gallons (50 barrels) into Grays Harbor.
- **Scenario 3.** Vessel-loading spill scenario: spill of 10,000 gallons (238 barrels) into Grays Harbor.
- **Scenario 4.** Pipeline or storage tank spill scenario: spill of 50,400 gallons (1,200 barrels) on the project site.
- **Scenario 5.** Storage tank failure spill scenario: spill of 3.36 million gallons (80,000 barrels, the entire contents of one full storage tank).

The first three scenarios address the likelihood of a spill occurring during loading and unloading events. As noted in the original permit application materials, Contanda's proposed loading and

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<sup>6</sup> ICF International, 2016. *Risk Assessment Technical Report*. Westway and Imperium Terminal Services Expansion Projects. September 2016.

unloading rates would be the same as those that were analyzed for the Westway Expansion Project. Because the total throughput for Contanda's proposed project would be less, the likelihood of an incident occurring during loading or unloading (Scenarios 1 through 3) would be lower than what was evaluated in the Westway EIS.

Scenarios 4 and 5 address the likelihood of a spill occurring from pipeline on storage tank failure. Because Contanda's proposed project differs with respect to the number and size of proposed storage tanks, the analysis in the Westway EIS for these scenarios is not as directly applicable to the proposed project.

However, as discussed further in the Risk Assessment, the same failure rates were applied to both the Imperium Terminal Services and Westway Expansion Projects for Scenarios 4 and 5, regardless of differences in tank size or design. This is because failure rates were based on historical data and not a detailed evaluation of each tank's specific design or safety features. Given that the number of storage tanks and the range of sizes are within the range analyzed in the Westway and Imperium EISs (Table 1 in this memorandum), the same rates of incident would also apply to Contanda's proposed project. Risks associated with equipment failure were calculated by multiplying this risk factor by the number of tanks. The number of storage tanks proposed for Contanda's proposed project is less than what was analyzed in the Imperium EIS (eight versus nine). Therefore, the risks related to Scenarios 4 and 5 would be lower than what was analyzed in the Imperium EIS.

### *Rail Transport from Centralia to the Project Site*

With respect to the risks associated with rail transport, the Imperium and Westway EISs also used the same probabilities of an incident occurring for both projects, even though the Imperium Terminal Services Expansion Project involved a variety of other liquids, as is the case with Contanda's proposed project. This was presumably because of the following: 1) Bakken crude oil is more persistent in the environment and was considered to be representative of the volatility of the other liquids proposed by Imperium Terminal Services, making the application of failures related to the crude oil incidents appropriate for the transport of all Imperium Terminal Services' proposed liquids; and 2) the risks associated with transport on manifest trains are anticipated to be within (lower than) the risk profile of transport by unit trains. Attachment 2 presents a comparison of the liquids considered for Contanda's proposed project that are the same as the Imperium Terminal Services Expansion Project with crude oil. As noted in Table 1, only renewable diesel, petroleum diesel, and gasoline would be transported by unit train.

As discussed further in the Imperium Terminal Services Risk Assessment, the analysis of risks related to rail transport involves a two-part approach: determining the appropriate failure rates, followed by determining the appropriate accident rate. As noted in the Risk Assessment, the failure rates were based on large-scale incidents, involving mainly crude oil rail transport. Accident rates were based on Federal Rail Administration data available through 2014.

Assuming the same probabilities could be applied to Contanda's proposed project due to the similarities across all the proposals and the notion that applied data are within a reasonably recent time frame, the Risk Assessment findings for the rail transport spill scenarios evaluated in the Imperium EIS could be relied upon to the extent that the likelihood of any of the spill scenarios occurring from Contanda's proposed project would be lower. This is due to the lower proposed throughput and lesser volatility and persistence of similar types of products.

### *Vessel Transport Along the Grays Harbor Navigation Channel*

The same rationale discussed for rail transport previously is applicable in terms of why the approach used in the Imperium and Westway EISs for vessel risk analysis would apply and would similarly result in the conclusion that Contanda's proposed project would result in lower potential risks compared to either the Westway or Imperium EISs.

### *Impacts on Resources*

Similar to the approach taken in the Westway EIS, the Imperium EIS addresses the consequences associated with the spill scenarios analyzed in the Risk Assessment in general terms. These consequences are presented in Section 4.7 – Impacts on Resources. This includes the risks associated with biodiesel, ethanol, renewable diesel, petroleum diesel, and gasoline.

As noted through Section 4.7, the EIS considered the consequences of exposure to biodiesel, ethanol, renewable diesel, petroleum diesel, and gasoline. Many of these effects include the same types of acute and persistent effects that could occur as the result of exposure to crude oil. Identified persistent impacts include increased erosion due to loss of vegetation, changes in the vegetative community, and long-term toxicity to animals.

With respect to human health effects, the Imperium EIS also identifies health hazards that could occur from exposure to crude oil and biodiesel, ethanol, renewable diesel, petroleum diesel, and gasoline. This analysis included benzene, general alkanes, and polycyclic aromatic hydrocarbons, which are groups that include BTX and styrene. Table 4.7-2 of the Westway EIS provides a summary of potential health effects associated with these chemicals.

### **Extended Rail and Vessel Transport**

The Imperium EIS notes that the specific routes outside the vicinity of the project site are difficult to predict and would be based on market conditions; however, Chapter 5 – Extended Rail and Vessel Transport does describe the potential routes and corresponding impacts that would be expected in this extended study area from rail and vessel transport beyond Centralia and the Grays Harbor Navigation Channel. The approach to this analysis was qualitative and acknowledges the potential for transport abroad.

As discussed in Section 5.4.3 – Freight Rail Corridors and shown in Figure 5-10, rail transport routes evaluated in the Imperium EIS include the same BNSF Railway main line routes in Washington that would be used by operators carrying bulk liquids to Contanda's project site. Similarly, the routes and considerations relevant to vessel operators traveling along the West Coast would apply to operators carrying liquids from Contanda's project site. The potential impacts associated with rail and vessel transport in this extended study area are addressed in general terms in Section 5.5.2 – Proposed Action. The qualitative analysis of impacts in this area considers the same general routes that would be used related to Contanda's proposed project in this extended study area.

## **Conclusions**

For the reasons outlined in this memorandum, the analysis provided in the Imperium and Westway EISs addresses the potential impacts associated with the transport, storage, and handling of biodiesel, ethanol, renewable diesel, petroleum diesel, gasoline, BTX, and styrene in Contanda's proposed project; therefore, no further analysis is warranted.

Appendix B  
Market Analysis

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November 21, 2018

**To:** Brenden McFarland and Fran Sant, Washington State Department of Ecology  
Brian Shay, City of Hoquiam  
**From:** Terry Duplantis, Contanda Terminals, LLC  
**Re:** **Contanda Terminals Expansion Project Market Analysis**

### **Introduction**

Contanda Terminals, LLC (Contanda), is proposing to expand its current bulk liquid storage terminal at the Port of Grays Harbor, Washington (proposed project), to provide for the receipt, storage, and shipment of various hydrocarbon and renewable fuels. The purpose of this report is to provide information on the market for Contanda's project relative as to whether the proposed project would alleviate any constraints (restrictions) in the current distribution network for these fuels on the West Coast. In addition, this report addresses the current modes and routes of transportation from source to destination for these products.

### **Proposed Project**

The proposed project would expand Contanda Terminals' existing bulk liquid storage facility at the Port of Grays Harbor, Washington, to handle additional storage volumes. The project objective is to provide additional storage and transload opportunities on the West Coast of the United States to increase flexibility and improve distribution within the existing supply chains so customers can more efficiently deliver products to market.

The proposed project is a terminal expansion that functions as a wholesale distribution center where the proposed products are stored in bulk before they are transferred to the next point in the supply chain. The demand for the proposed project comes from businesses best served by the West Coast requiring temporary storage, quality control testing, and (in some cases) limited blending of the proposed bulk liquids before being transferred to the next buyer or supplier.

The proposed project would involve constructing up to eight additional bulk liquid tanks for storage of various forms of fuels and biofuels (ethanol, biodiesel, and renewable diesel), diesel, ultra-low-sulfur diesel, and gasoline (totaling approximately 1.1 million barrels [46.2million gallons]) and associated support facilities (including ship, truck, and rail infrastructure) to receive, store, load, and unload bulk liquids for off-site shipment. Anticipated throughput for these commodities would be approximately 12 million barrels (504 million gallons) per year.

Based on this throughput, the proposed project could result in the maximum addition of approximately 204 trains to and from the project site per year. Transport from the site is expected to occur via a mix of Panamax vessels (up to 400,000 barrels [16.8 million gallons] per vessel) and articulated barges (up to 100,000 barrels [4.2 million gallons] per vessel) for a combined total of 48 vessel calls per year.

### **General Market Considerations**

#### ***Product Suppliers***

Potential sources of the proposed products include existing petroleum refineries (i.e., diesel, ultra-low-sulfur diesel, and gasoline) and biofuel production facilities. Each of these markets are discussed in greater detail in the following sections. As part of the proposed project, Contanda Terminals would receive these materials from refineries or other production facilities and store them until the point when they would be shipped to the next destination.

#### ***Common Carriers***

The majority of products are shipped throughout the region via common carriers, including rail and vessel transport, truck transport, and by pipeline. Specific transportation systems used within the Pacific Northwest are discussed for each market in greater detail in the following sections.

#### ***Terminals***

Terminal operations are a key component in the functioning of the overall supply chain. Terminals primarily serve two functions: buffering, where product is stored until a point at which further distribution is possible, and transload, where product is transferred from one mode of transport to another. The main function of terminals within the supply chain is to increase the flexibility of the overall system's ability to balance supply and demand by placing the facilities in locations strategic to potential customers. Terminal operations located in multiple different locations allow for

product to move through the system more efficiently without needing to increase terminal capacity to handle more product. That is, more facilities in more locations allow for product to be efficiently stored and handled closer to more potential customers.

### **Petroleum Product Market**

There are five refineries in Washington that produce, among other products, diesel, ultra-low-sulfur diesel, and gasoline (Table 1). The combined maximum capacity of these facilities is approximately 630,000 barrels (26.5 million gallons) per day. Although there are fluctuations that occur seasonally and supply can periodically be disrupted, the facilities are all generally operating at capacity and would require facilities expansion to consistently serve additional markets (ICF 2007).

**Table 1**  
**Refineries in Washington State**

Location	Current Owner	Past Owners	Year Constructed	Major Products <sup>1</sup>	Current Capacity (barrels/day) <sup>2</sup>	Markets Served
Ferndale	Phillips 66	ConocoPhillips, Tosco, BP, Mobil, General Petroleum	1954	Gasoline, diesel oil, jet fuel, liquid petroleum, residual fuel oil	101,000	Western Washington, Oregon, exports
Anacortes	Marathon	Andeavor, Tesoro, Shell Oil	1955	Gasoline, diesel oil, turbine and jet fuel, liquid petroleum gas, residual fuel oil	120,000	Western Washington, Oregon
Anacortes	Shell Oil	Equilon Enterprises, Texaco	1957	Gasoline, diesel oil, jet fuel, propane, coke, sulfur	145,000	Western Washington, Oregon, exports
Tacoma	US Oil	--	1957	Gasoline, diesel oil, jet fuel, marine fuel, gas oils, emulsified and road asphalt, low-sulfur diesel	40,700	Western Washington
Blaine	BP	ARCO	1971	Gasoline, diesel oil, jet fuel, calcinated coke, low-sulfur diesel	225,000	Western Washington, Oregon, exports
<b>Total</b>					<b>631,700</b>	

Notes:

1. [https://en.wikipedia.org/wiki/Petroleum\\_refining\\_in\\_Washington\\_state#cite\\_note-3-2](https://en.wikipedia.org/wiki/Petroleum_refining_in_Washington_state#cite_note-3-2)

2. Total operable atmospheric crude oil distillation capacity, barrels per calendar day as of January 1, 2015 (USEIA 2015a)

--: not applicable

The petroleum market in the Pacific Northwest is relatively isolated from the competitive markets in the rest of the United States and overseas. Oregon has no refineries, and California's more stringent requirements for emissions standards imposed by the California Air Resources Board mean that California refineries can only competitively supply the Puget Sound region when there are refinery outages or other supply disruptions within the region. The West Coast is 10 days' travel by tanker from the U.S. Gulf Coast, 3 weeks' travel from Asia, and more than 4 weeks' travel from Europe, and there are no pipelines that deliver crude oil across the Rocky Mountains (Morningstar 2017). Washington refineries typically meet the region's needs and produce additional products for export, mainly to Alaska, Canada, and California (USEIA 2015b).

Movement of petroleum products from these refineries within and outside of Washington occurs via the following two main corridors: 1) through the Olympic Pipeline, extending from Blaine, Washington, with deliveries occurring along the route to Portland, Oregon; and 2) via marine transport from Puget Sound. Marine deliveries within the region occur via the Columbia and Willamette rivers to the Vancouver, Washington/Portland area. These cities serve as the hub for further transport to eastern Washington and southern Oregon. Barges provide further transport from



Vancouver, Washington, and Portland to Pasco, Washington, where the Chevron and Yellowstone pipelines further transport products to eastern Washington. The Kinder Morgan pipeline provides capacity to transport products to Eugene, Oregon, where another distribution terminal transfers product into the surrounding area.

Rail transport from the five Washington refineries is typically used for receiving crude oil, while refined products are more often shipped off site via pipeline or marine transport (Ecology 2016). One reason for this is the fact that the costs of shipping by rail are higher than alternatives, such as shipping by pipeline (DOC 2013). The routes for rail transport of refined products from Washington refineries consists of the north-south BNSF Railway Company (BNSF) main line route from the United States/Canada border to Everett, Washington, to Seattle, Washington, and down to Vancouver, Washington. Other routes through Stampede Pass, Stevens Pass, and the Columbia River Gorge exist but are mainly used for transporting crude oil to refineries or other terminals.

The Olympic Pipeline is a 400-mile interstate system that runs from Blaine to Portland and connects four refineries to delivery points in Seattle’s Harbor Island; the Seattle-Tacoma International Airport; Renton, Washington; Tacoma, Washington; Vancouver, Washington; and Portland. The pipeline’s maximum capacity is 325,000 barrels (13.7 million gallons) per day. The volumes available to ship via pipeline are always greater than the pipeline capacity, so shippers coordinate marine movements with the pipeline schedule to control product inventory levels at the refineries.

There are eight deep-draft public ports within Puget Sound and private terminals at Anacortes, Washington; Ferndale, Washington; and Cherry Point, Washington, capable of handling ocean-going vessels (WSDOT 2017). Transport of petroleum products goes mainly to the Vancouver, Washington/Portland area via the Columbia River or to California markets down the coast. In general, marine transport is more expensive than the Olympic Pipeline but not significantly so.

Although specific distribution data are not available from the refineries for antitrust and confidentiality reasons, Table 2 provides an indication of the relative magnitude of where refinery products are being distributed.

**Table 2**  
**Estimated Distribution for Pacific Northwest Refineries**

Volume Produced (barrels per day)	Volume Distributed (barrels per day)	Comments	
430,000	<b>Total Gasoline, Jet Fuel, and Distillate Production Based on Reported Crude Capacity: 92% Utilization and 80% Yield of Clean Products</b>		
	40,000	Used within local area (northwest Washington demand)	
	290,000	Shipped via Olympic Pipeline (assuming near-capacity)	
	<b>Shipped by Marine Vessel from Pacific Northwest Refineries</b>		
	100,000	Foreign exports based on U.S. Army Corps of Engineers estimates (10,000 barrels per day)	
		Volume to Vancouver, Washington/Portland based on U.S. Army Corps of Engineers (estimated range of 60,000 to 70,000 barrels per day)	
Volume assumed to be going to California by difference (20,000 to 30,000 barrels per day)			

Source: ICF 2007

As shown in Table 2, about 40,000 barrels (1.7 million gallons) per day are used by the northwest Washington market with about 290,000 barrels (12.2 million gallons) per day shipped via the Olympic Pipeline. The remaining available volume, about 100,000 barrels per day, is shipped via marine transport abroad (10,000 barrels [4.2 million gallons] per day), California (20,000 to 30,000 barrels [840,000 to 1.3 million gallons] per day), and the Vancouver, Washington/Portland area (60,000 to 70,000 barrels [2.5 million to 2.9 million gallons] per day).

The volumes of products being shipped to other markets (i.e., California and abroad) are unlikely to decrease due to the fact those markets are higher value (DOC 2013). This means forecasted increases in demand for Washington refinery products would have to be met through imports in the absence of refinery expansion (ICF 2007). Another way to state this is that terminal capacity is not the limiting factor in the region, but it does decrease efficiency and



options for shipping to existing customers.

If the proposed project is constructed, it would not eliminate a barrier that would increase supply. The refineries are already operating at capacity and rely mainly on marine transport to balance the additional capacity needed that's provided by the Olympic Pipeline for refined products. Although some increases in rail transport may occur, the circumstances in which producers may want to ship smaller volumes through Grays Harbor would be most economical in the event of other supply-side disruptions (e.g., adverse weather affecting marine transport or pipeline disruptions). If currently produced product is shipped by rail or marine vessel to the Port of Grays Harbor, the proposed project would be providing additional buffering capacity to increase supply-side flexibility and adaptability, not increased capacity for additional product or significant changes in the routing of petroleum product already occurring.

### **Biofuels (Biodiesel, Renewable Diesel, and Ethanol)**

Biofuels are renewable fuels that are also used as transportation fuels. National and state-level policies and tax incentives encourage biofuel production, and certain regulations are in place at the national and state level requiring some level of renewable fuels consumption. For example, both Oregon and Washington require blending of ethanol into gasoline.

There are three ethanol plants in Oregon, but most ethanol comes from the Midwest (PNW Extension 2018). This means that ethanol is mainly used within the region, although the United States as a whole is the largest exporter of ethanol (USDA 2007). Ethanol arriving from out of the Pacific Northwest is transported by rail and would arrive at the proposed project site along the BNSF main line route described previously, where it must be stored in segregated tanks before it is blended.

According to the U.S. Energy Information Administration, the origins, destinations, and volumes of ethanol and biodiesel shipped by rail have not changed much over the past 6 years. Almost all ethanol and biodiesel ends up in the motor gasoline or diesel pools, respectively. The only other outlet for fuel ethanol or biodiesel is exports, which are relatively small compared to domestic consumption, making up 6% and 7% of the total ethanol and biodiesel volumes produced in 2015, respectively (USEIA 2018a).

The requirement for segregated tank storage in the face of limited storage capacity means that the logistics of terminal management can be difficult when it comes to balancing inventory with demand—particularly the demand for different grades or blends of fuels that are required by different markets. As noted previously, although increased tank storage would improve system flexibility and potentially help to minimize disruptions in the overall supply of fuel products, it is not a limiting factor. According to the U.S. Energy Information Administration, domestic ethanol production outpaced domestic demand in 2017, further indicating that infrastructure constraints are not limiting factors in the overall market (USEIA 2018b).

Biodiesel production within the region is concentrated in Washington State (USEIA 2015b), but similarly to ethanol, it is also largely produced in the Midwest. Supply is also similarly influenced by state and federal incentives, which have result in a biodiesel production increase over time (USEIA 2018c). Although it can be used directly as a fuel, it is more often blended to meet particular requirements to help petroleum producers meet required standards (e.g., Renewable Fuel Standard), which (like ethanol production) results in the economics of pricing and incentives relative to other fuel sources being a larger driver in production than existing infrastructure capacity.

Renewable diesel is also becoming an increasingly important alternative fuel. Although it is produced from renewable feedstock and contains no fossil carbon, it is chemically identical to conventional diesel fuel and can be stored and transported using existing infrastructure for combustion in existing diesel engines with no need for conversion. It is more expensive to produce and is therefore in highest demand in states with lower emissions standards in place (e.g., California). The California Air Resources Board estimates the “carbon intensity of renewable diesel to be 50 to 85 percent lower than diesel fuel” (Leonard and Couch 2017).

Sources of renewable diesel are more limited compared to biodiesel and ethanol, with the major producer serving the West Coast being Singapore with some demand also being met by domestic production in Louisiana (California Energy Commission 2017). Relative to these points of origin, renewable diesel would most likely arrive at the proposed project site by marine vessel. Some biodiesel production operations are also starting to convert to renewable diesel, and at least two companies within Washington have plans to expand facilities to include biodiesel



production (Tavares Kennedy 2018).

Under the proposed project, renewable diesel would be received and blended on site, most likely with biodiesel or possibly other forms of petroleum fuel. Like most renewable fuels, distribution of finished products to market more frequently occurs directly to distributors. Any market-ready renewable diesel coming from the proposed project site is expected to replace supply to the local market currently being served by Renewable Energy Group, Inc., at the neighboring facility or by other local distributors. Some product may also be shipped by vessel to other markets in California.

In contrast to biodiesel and ethanol, renewable diesel is not blend-wall limited, which means manufacturers are not limited in the amount of renewable diesel that may be blended with petroleum-based fuel (such as gasoline or diesel) to develop a market-ready product. This is important because it provides for greater flexibility of storage and transport within the existing distribution system. Because the costs of renewable diesel production are higher than petroleum-based equivalents, current market constraints are due to the economics of pricing more so than the product's ability to be distributed to market.

### **Conclusions**

The Pacific Northwest market is relatively isolated in terms of the competition for production by the five refineries located in Washington state. These refineries satisfy most of the region's need for refined fuels and export regularly to Alaska, Canada, and California via marine transport. There is limited infrastructure in terms of additional pipeline capacity, and although rail transport is increasing, the economics of long-distance, high-volume transport indicate continued reliance on marine transport. Creation of a new terminal at the Port of Grays Harbor would not alleviate any supply-side constraints but would instead increase the flexibility of the existing petroleum market to address supply chain disruptions (e.g., pipeline or weather disruptions) for specific customers and help provide additional means to allow for blending of fuels to meet increased requirements for biofuels in existing local markets.

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Appendix C  
Environmental Commitments

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As the applicant, Contanda Terminals LLC (Contanda), will implement as part of the Contanda Terminals Expansion Project (proposed project) the following measures to minimize the potential for significant environmental impacts on the resources noted in the following sections. Contanda respectfully requests early notification of whether a determination of significance is likely under the State Environmental Policy Act (consistent with Washington Administrative Code 197-11-350) to enable a process to discuss whether additional mitigation measures applicable to the proposed project may be recommended.

## General

- Contanda will cap the total annual throughput capacity for any new bulk liquids to be received, stored, and loaded for off-site transport at 12 million barrels (504 million gallons).
- In addition to the already permitted operations, Contanda will only accept bulk liquids that fall within the parameters presented in Table D-1 of Appendix D unless otherwise re-evaluated as appropriate related to its applicable permits and approvals.

## Earth

- To minimize the potential for impacts at the project site related to unstable soils, the applicant will prepare the project site for construction as follows and as described in the applicant's geotechnical report (Hart Crowser 2013<sup>1</sup>)
  - Recompect and/or over-excavate and replace areas observed to be soft, loose, wet, or yielding with structural fill.
  - Install a geotextile stabilization fabric, additional clean gravel material, and/or a greater thickness of fill if areas larger than 0.5 acre of exposed ground are unusually soft or disturbed.
  - In all disturbed areas during construction, remove any soft, loose, or organic zones and replace with structural fill. The upper material provides lateral support for pile foundations. In areas with pile and structural slab systems, rigorous preparation of the subgrade is not required.
- To minimize the potential for damage to the storage tanks related to geologic risks and unstable soils, the applicant will install pile-supported foundations that extend to the necessary depths to embed in competent soil required to resist seismic forces and maintain stability if liquefaction, lateral spreading, and settlement of surface soils occurs.

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<sup>1</sup> Hart Crowser, Inc., 2013. *Geotechnical Engineering Report, Westway Terminals Expansion*. Port of Grays Harbor, Washington. February 2013.

- To minimize the potential for damage to the storage tanks related to geologic risks and unstable soils, the applicant will develop final design specifications for proposed structures based on the following updated standards/information, including additional site-specific evaluation for the easternmost portion of the project site:
  - U.S. Geological Survey ground-shaking report and maps released in July 2014 (Petersen et al. 2014<sup>2</sup>)
  - American Petroleum Institute Standard 650 (2012)
  - International Building Code 2012
- To minimize the potential for spills and leaks that could occur at storage tank connection points, the applicant will design and install flush-mounted or internal automatic shut-off valves that allow the tanks to remain isolated from pipe distribution systems that may shear off or be damaged during seismic-related events.
- The applicant will ensure that a tsunami evacuation and emergency management plan is prepared prior to beginning project operations. This plan will consider evacuation planning, identification of safe havens, and identification of evacuation routes to natural high ground and will be developed in coordination with emergency management officials (City of Hoquiam, Grays Harbor County, Washington State, U.S. Coast Guard, ship captains, and pilots).
- [This is one of the mitigation measures still in question.] Should the American Society of Civil Engineers (ASCE) 7-6 recommendations be adopted by a future Uniform Building Code update before design of the project is complete and building permit applications are submitted, the storage tanks will be designed to meet any applicable requirements of that standard.

## Air

- The applicant will ensure that all engine-powered equipment and vehicles used in construction, operation, and maintenance at the facility are subject to a regular inspection and maintenance schedule in order to minimize air pollutant emissions, greenhouse gas emissions, and fuel consumption. Preventive maintenance activities will include but not be limited to the following actions:
  - Replacing oil and oil filters as recommended by manufacturer instructions
  - Maintaining proper tire pressure in on-road vehicles
  - Replacing worn or end-of-life parts
  - Scheduling routine equipment service checks

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<sup>2</sup> Petersen et al. (Petersen, M. D. et al.), 2014. Documentation for the update of the United States national seismic hazard maps. U.S. Geological Survey Open-File Report 2014-1091.

- The applicant will develop and implement an anti-idling policy for both construction and operation and ensure that equipment operators receive training on best practices for reducing fuel consumption in order to reduce project-related greenhouse gas emissions. The anti-idling policy will include required warmup periods for equipment and prohibit idling beyond these periods. The policy will define any exemptions where idling is permitted for safety or operational reasons, such as when ambient temperatures are below levels required for reliable operation. In addition, the use of technologies such as idle management systems or automatic shutdown features will be considered part of the policy.
- To minimize idling from trains and vessels and resulting emissions, the applicant will coordinate with the Port of Grays Harbor and Puget Sound and Pacific Railroad (PSAP) to manage waiting times for rail and vessel arrivals or departures.

## Plants and Animals

- Vessel operators are required to comply with state and federal law, which are intended in part to minimize the potential for this impact. All vessels entering U.S. water are required to have a U.S. Coast Guard Ballast Water Management Plan. The applicant will ensure that all vessels received shall be certified.

## Energy

- To minimize energy use, the applicant will employ the most energy-efficient systems for all pumps, motors, electrical equipment, and process technology equipment as practicable.
- To minimize energy use, the applicant will apply U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Standards to the design of new buildings.

## Noise and Vibration

- To reduce construction noise at nearby sensitive receptors, the applicant will maintain construction and maintenance equipment in good working order with properly functioning mufflers to control noise.
- To address increased noise from rail traffic, the applicant will coordinate with PSAP and interested communities along the PSAP rail line on the creation of quiet zones, if requested. Elimination of locomotive horn sounding at the affected grade crossings would eliminate impacts from increased horn noise. Quiet zones can only be established by public agencies using a procedure established in Federal Railroad Administration (FRA) regulations. The quiet zone allows the installation of enhanced safety measures at grade crossings such that train horns would not be required to be used. Implementation of a quiet zone is subject to FRA approval. Quiet zones include measures to maintain the level of safety while reducing noise.

## Aesthetics, Light, and Glare

- To reduce potential glare, the applicant will ensure the proposed storage tanks are of a tone that blends into the surrounding landscape and/or matches the existing facility tank paint or insulation, are appropriate to the existing design, and do not affect air emissions for the surrounding structures.
- To ensure that lighting at the project site does not conflict with other land uses, the applicant will coordinate with the Port of Grays Harbor to develop the proposal for project lighting.

## Recreation

- While fishing boats are required to follow the U.S. Coast Guard navigation rules to improve awareness of vessel traffic in the navigation channel, the applicant will work with the Grays Harbor Safety Committee, including the U.S. Coast Guard and Port of Grays Harbor, to establish procedures to announce project-related vessel traffic arrivals and departures over a designated very high frequency (VHF) marine radio channel at least 1 hour before arriving and departing.

## Cultural Resources

- To reduce the risk of disturbing undocumented cultural resources, the applicant will prepare an unanticipated discovery plan to address previously unidentified archaeological resources should any be discovered during the construction of the proposed action. The applicant will submit the plan to the Washington State Department of Archaeology and Historic Preservation before construction. The plan will contain provisions requiring that if archaeological resources are uncovered during excavations, construction activities will cease immediately and the applicant will notify the City of Hoquiam, the Washington State Department of Archaeology and Historic Preservation, the Quinault Indian Nation, and the Confederated Tribes of the Chehalis Reservation. In such cases, the applicant will provide for a site inspection and evaluation by a professional archaeologist to ensure that all possible valuable archaeological data are properly salvaged or mapped.
- The applicant will have a qualified professional archaeologist monitor ground-disturbing activities that would result in the excavation and exposure of subsurface deposits at depths greater than 15 feet below the current ground surface. If archaeological monitoring reveals fill deposits at greater depths, these results will be used to establish a 100-foot buffer around the location of the discovery in which no additional archaeological monitoring would be needed to the maximum depth at which fill deposits have been documented.

## Tribal Resources

- To mitigate impacts on access to tribal treaty fishing areas, the applicant will discuss between Contanda and Quinault Indian Nation tribal officials to identify additional mitigation measures and intends to implement the following measures:
  - To mitigate potential impacts on tribal fishing, the applicant will coordinate with the Quinault Indian Nation and Washington Department of Fish and Wildlife annually, as requested, to support review and possible adjustment of docking schedules to minimize conflict with fishing schedules negotiated pre-season by the state and tribe. Consultation will account for operations, including anticipated vessel movements related to the proposed action.
  - While tribal fishing boats are required to follow the U.S. Coast Guard navigation rules to improve awareness of vessel traffic in the navigation channel, the applicant will work with the Grays Harbor Safety Committee, including the U.S. Coast Guard and Port of Grays Harbor, to establish procedures to announce project-related vessel traffic arrivals and departures over a designated VHF marine radio channel at least 1 hour before arriving or departing.
  - To mitigate impacts on access to tribal treaty fishing areas, the applicant will initiate a process between stakeholders and Quinault Indian Nation tribal officials to discuss and identify additional mitigation measures. Initiation of the process between the parties will occur before vessel operations begin.

## Hazardous Materials

- If groundwater or odiferous, stained, or discolored soil is encountered during construction activities, or if groundwater encountered is suspected to be contaminated during construction activities, the following mitigation measures will be implemented:
  - The applicant will seek the professional recommendation of a consultant specializing in the handling and identification of hazardous materials and contaminated media.
  - If deemed necessary, based on the aforementioned consultation, the applicant will conduct soil and/or groundwater testing for identification of possible hazardous materials.
  - Construction personnel will isolate and cover suspect soil until analytical results are reviewed by qualified personnel.
  - The consultant will compare analytical results to the applicable U.S. Environmental Protection Agency's regional screening levels, which address common environmental pollutants. If hazardous materials are discovered in the soils and/or groundwater at levels above the regional screening levels, the consultant will provide recommendations on the steps required for proper treatment and/or removal and disposal of the contaminated media.

## Vessel Traffic

- While commercial fishing boats are required to follow the U.S. Coast Guard navigation rules to improve awareness of vessel traffic in the navigation channel, the applicant will work with the Grays Harbor Safety Committee, including the U.S. Coast Guard and Port of Grays Harbor, to establish procedures to announce project-related vessel traffic arrivals and departures over a designated VHF marine radio channel at least 1 hour before arrival and departure.
- To improve vessel management and reduce the risk of an incident, the applicant will coordinate with the Port of Grays Harbor and participate as an active member of the Grays Harbor Safety Committee (<https://www.portofgraysharbor.com/harbor-safety/index.php>) and work to implement the recommendations for waterway management detailed in the recently completed Grays Harbor Vessel Traffic Risk Assessment ([https://www.ezview.wa.gov/site/alias\\_1962/view\\_our\\_committees\\_grays\\_harbor\\_vtra/37194/grays\\_harbor\\_vtra.aspx](https://www.ezview.wa.gov/site/alias_1962/view_our_committees_grays_harbor_vtra/37194/grays_harbor_vtra.aspx)).
- To improve vessel management and situational awareness and to reduce potential risk of incident of vessel collision or allision in Grays Harbor, the applicant will coordinate with the Port of Grays Harbor and participate as an active member of the Grays Harbor Safety Committee (<https://www.portofgraysharbor.com/harbor-safety/index.php>) and work to implement the recommendations for waterway management detailed in the recently completed Grays Harbor Vessel traffic Risk Assessment ([https://www.ezview.wa.gov/site/alias\\_1962/view\\_our\\_committees\\_grays\\_harbor\\_vtra/37194/grays\\_harbor\\_vtra.aspx](https://www.ezview.wa.gov/site/alias_1962/view_our_committees_grays_harbor_vtra/37194/grays_harbor_vtra.aspx)).

## Vehicle Traffic and Safety

- To mitigate vehicle traffic impacts associated with rail operations of the proposed action, the applicant will work with the City of Hoquiam, the City of Aberdeen, the Port of Grays Harbor, the Grays Harbor Council of Governments, and PSAP to address vehicle delay between the project site and Poynor Yard. Washington State Department of Transportation (WSDOT), the City of Hoquiam, the City of Aberdeen, and the Port of Grays Harbor will approve proposed measures for the areas where they are responsible for vehicle delay. The applicant will ensure measures are in place prior to beginning the proposed operations. The proposed changes should include an evaluation of impacts on potentially affected low-income and minority populations.
- To mitigate vehicle traffic impacts associated with rail operations related to the proposed action, the applicant will work with the City of Hoquiam, the City of Aberdeen, the Port of Grays Harbor, the Grays Harbor Council of Governments, and PSAP to address vehicle delays at PSAP grade crossings into and out of the Olympic Gateway Plaza. WSDOT, the City of Hoquiam, the City of Aberdeen, and the Port of Grays Harbor will approve proposed measures for the areas where they are responsible for vehicle safety. The applicant will ensure

acceptable measures are in place prior to beginning the proposed project operations. The proposed changes should include an evaluation of impacts on potentially affected low-income and minority populations.

## Environmental Health and Safety

### *On-Site Risks*

- To improve petroleum oil recovery in the case of a spill during vessel loading at the dock, the applicant will retain a licensed engineer to perform an independent engineering analysis and feasibility study. The engineer will determine the number of days per year it is safe and effective to pre-boom its transfers and will identify site-specific improvements that could increase the number of days. The applicant will submit the study to the Washington State Department of Ecology (Ecology) for review and approval before operations begin. If approved, the applicant will implement improvements from the study. If the study identifies no feasible alternative to improve the number of days it is safe and effective to pre-boom, or until the changes are in place, the applicant will implement the following alternative measures during petroleum oil transfers in addition to those measures already required by regulation:
  - One spill response vessel with crew, skimmer, and at least 1,000 feet of boom at the dock
  - On-water tank barge storage devices (not including bladders) pre-staged at the dock with the skimmer to ensure a minimum of 450 barrels of recovery ready to be deployed
- To improve recovery in the case of a spill, equipment required at hour 6 under Washington Administrative Code 173-182-355 must be resident in Grays Harbor. Additionally, the applicant must purchase and stage the following equipment in Grays Harbor:
  - An additional 200 feet of boom and temporary storage of at least 196 barrels with the ability to collect, contain, and separate collected petroleum oil from water. The additional boom should be capable of encountering oil at advancing speeds of at least 2 knots in waves. This boom will be of a type appropriate for the operating environment.
  - An additional 1,000 feet of shore seal boom
- To reduce the impacts from a spill, the applicant will establish and implement a procedure for blocking all drains on the dock prior to oil transfers and observing the area for discharges before removal. This best practice will be documented in the facility operations manual for approval by Ecology.
- Fire-fighting capability inside the terminal will be dramatically improved by installing the following on all new tanks:
  - Automatic flame detection systems

- Automatic self-expanding foam systems (these automated systems will notify the Hoquiam Fire Departments upon activation)
  - Internal floating roofs for vapor control
- The existing automatic flame detection and foam fire-fighting systems on the truck and rail racks will be extended to any new truck and/or rail loading/unloading stations.
- The applicant will supply three totes of alcohol-resistant aqueous film-forming foam at the project site for use by local fire departments.
- To improve preparedness for incidents, including oil spills, explosions, and fires, the applicant will ensure an emergency preparedness workshop is conducted prior to beginning project operations. The applicant will coordinate the workshop with Ecology. The workshop will be no more than 1 day in length and will be held prior to beginning operations and thereafter will become part of the facility drill program. The initial workshop will focus on familiarizing local emergency responders with the contents of the Northwest Area Contingency Plan, the Grays Harbor and Chehalis Geographic Response Plans, other local response plans, the facility response plan, and the measures that are in place for a rapid and effective spill response.
- To improve response times and communication in the event of an incident that could affect tribal resources, the applicant will include tribal contacts (names and/or phone numbers) in notification protocols in the oil spill contingency plan.
- To reduce risks related to an explosion or fire on site, the applicant will meet with local emergency management officials including representatives from the City of Hoquiam and City of Aberdeen Fire Departments to identify training needs for local responders who will respond to an emergency on the project site. This effort will include development and execution of a training program for those responders to increase the level of awareness and understanding of the hazards associated with a rail tank car incident or a storage tank incident on site. The training will include identification of notification protocols, use of personal protective equipment, and equipment deployment procedures. This training will be completed before the applicant begins receiving trains and will be offered at least annually.
- To reduce the risks and impacts from a spill, prior to beginning the proposed operations the applicant will conduct a study to identify an appropriate level of financial responsibility for the potential costs for response and cleanup of spills and natural resource damages, as well as costs to state and affected counties and cities for their response actions. The study should address the factors in Revised Code of Washington 88.40.025, Evidence of Financial Responsibility for Onshore or Offshore Facilities, including a reasonable worst-case spill volume; the cost of cleaning up the spilled petroleum oil; the frequency of operations at the facility; prevention measures employed by the facility that could reduce impacts through spill containment, immediate discovery, and shutoff times; and the damages that could result from the spill (including restoration). The study should identify any constraints related to the commercial availability and affordability of financial responsibility. Based on the study,

Ecology will determine the appropriate level of financial responsibility and require the applicant to demonstrate their financial responsibility to the satisfaction of Ecology. Proof of financial responsibility will be included as documentation in the applicant's contingency plan.

### *Risks During Rail Transport*

- To improve response times to reduce the initial impacts of a spill, the applicant will ensure that two trailers containing the spill response equipment listed in the following text are available prior to beginning operations for use by initial local and emergency responders along the PSAP rail line. One trailer will be kept and maintained on site by the applicant. The second trailer will be offered to either the Quinault Indian Nation or the Confederated Tribes of the Chehalis Reservation.
- The second trailer and equipment will be maintained by the recipients if accepted for use. The equipment will be provided to a tribal government only if they agree to store the equipment in a secure location and ensure the equipment is used by appropriately trained personnel. The applicant will work with Ecology and local emergency officials to update the Western Region Response List website ([www.wrrl.us](http://www.wrrl.us)) and any applicable spill response plans to address the emergency equipment caches and to document notification protocols, necessary training, use of personal protective equipment, and equipment deployment procedures.

Mobile trailers should be of a specific size to hold the following equipment:

- 3,000 feet of river boom
  - 5,000 feet of sausage sorbent boom
  - 30 anchoring systems (e.g., anchors, lines, floats)
  - 20 shoreside anchoring systems
  - 1 towing bridle
  - 4 heaving lines
  - 1 machete (or other vegetation cutting tool)
  - 1 pair of bolt cutters
  - 50 sandbags
  - 1 roll plastic sheeting
  - 4 each plywood sheets (4 feet by 8 feet)
  - 500 feet 3/8-inch poly line
  - Personal protective equipment: coveralls or Tyvek® disposable suits, gloves, outer (chemical-resistant and disposable) boots, safety glasses or chemical splash goggles, and hard hats—sufficient for 5 people
- To reduce risks related to a spill, the applicant will not accept petroleum oil by rail until PSAP meets with local emergency management officials to identify training needs for local responders who will respond to an emergency on the PSAP rail line. This effort will include development and execution of a training program to these responders to increase the level of

awareness and understanding of the hazards associated with a train incident. The training will include identification of notification protocols, use of personal protective equipment, and equipment deployment procedures. This training will be completed before the applicant begins receiving trains and will be offered at least annually.

- To reduce potential risk from tank car punctures and spills identified with use of DOT-111 tank cars for transport of petroleum products, the applicant will not accept these products by rail unless the following actions occur:
  - The rail cars meet or exceed the new U.S. Department of Transportation Specification 117 design or performance criteria.
  - Existing tank cars are retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 Federal Register 26643).
- To improve response capability and protect human health, the applicant will contract with an experienced air-monitoring consultant to respond with equipment and personnel for incidents. The contract will be incorporated into the facility's contingency plan and will be approved by Ecology. The contract will be in place prior to beginning operations.
- To increase the timeliness and maximize the coordination of responses to spills and incidents involving petroleum product along the PSAP rail line, the applicant will ensure the Grays Harbor Local Emergency Planning Committee's emergency response plan is updated to address the applicant's operations. This information must be included prior to beginning operations.

### *Risks During Vessel Transport*

- Due to sensitivity of the local environment, tribal resource concerns, and the potential presence of sensitive species, to reduce the risk of incident from loss of propulsion, loss of steering, grounding, or severe weather, the applicant will not receive or load petroleum oil to tankers or tank barges unless the vessels have tug escorts through Grays Harbor as described herein. This requirement will remain in place until rules are implemented pursuant to Engrossed Substitute House Bill 1449, Section 12, at which time the rules will apply to the proposed action. Tug escort requirements are as follows:
  - At least one tug must accompany a laden tanker or tank barge carrying petroleum oil between the Hoquiam River and Grays Harbor entrance, and two tugs (one escort tug and one assist tug) must assist the vessel during mooring procedures.
  - For laden tankers, the escort tug must be appropriately tethered while transiting Grays Harbor.
  - Tugs must have an aggregate shaft horsepower equivalent to at least 5% of the deadweight tons of the escorted tanker or tank barge.
  - Tugs must have sufficient mechanical capabilities to provide for safe escort.

- To ensure adequate safety for tug operations and thereby reduce the risk of an incident, the applicant will not receive or load petroleum oil to tankers or tank barges unless the vessels supply Grays Harbor pilots and tug companies with bollard pull capacities of the vessels prior to entering Grays Harbor.
- To reduce the risk of an incident, the applicant will coordinate with the Port of Grays Harbor and, as a member of the Grays Harbor Safety Committee, work to develop and implement specific procedures for escorting, tethering, and emergency maneuvering to control laden tank vessels. The procedures must be drafted before proposed operations begin. These procedures should be included in the Grays Harbor Safety Plan. At a minimum, these procedures must include the following elements:
  - Escort configurations and maneuvering characteristics of escorted tankers and tank barges
  - Specific emergency connection and tethering procedures for connection of tugs to tankers and tank barges
  - Specific maneuvers necessary for the tug to maintain control of the tanker while transiting Grays Harbor waters specifically during incidents of loss of propulsion or steering
  - Appropriate safe speed of transit in Grays Harbor when tugs are tethered
  - Guidelines for tanker or tank barge bridge teams to rapidly recognize and respond to a loss of power or steering. By improving recognition and reaction time, the tug can more effectively steer the vessel through the navigation channel upon incident.
  - Requirement for a pre-transit conference
  - Refueling operations
- To reduce the risk of an incident during vessel refueling, the applicant will ensure that any tank barges loaded with fuel for the purpose of refueling vessels at the project site follow the navigation and safety mitigation measures for petroleum oil tank barges described in this section.
- To reduce the potential for a spill from a vessel incident, the applicant will allow only tankers with independent fuel tanks (i.e., not located next to the hull) at the dock. To improve response times and increase coordination of responses, the applicant will develop and implement a program approved by Ecology to educate its tankers and tank barge customers on the reporting requirements for vessel incidents resulting in a threat of a spill under Revised Code of Washington 88.46.100, Notification of Vessel Emergencies Resulting in Discharge of Oil, prior to beginning the proposed operations.
- To improve response times and communication in the event of an incident that could affect commercial or recreational fishing, the applicant will develop a method for providing information on potential incidents to commercial and recreational fishing boats and will describe this measure in the oil spill contingency plan prior to beginning operations.

- To improve marine firefighting capabilities in Grays Harbor, the applicant will enter into a memorandum of understanding (MOU) with Brusco Tug & Barge, Inc., located in Grays Harbor, for marine firefighting capacity. The MOU would state that in the event of a vessel or dock fire at the Contanda terminal, Brusco Tug & Barge would respond with their tug to provide marine fire-fighting assistance. The MOU will be in place prior to operation at the expanded facility.

### **Economics, Social Policy, and Cost Benefit Analysis**

- The applicant will appoint a community liaison to consult with affected communities, businesses, and agencies; develop cooperative solutions to address local concerns; be available for public meetings; and conduct periodic public outreach. The applicant will provide the name, telephone number, and email address of the community liaison to mayors and other local officials in each community through which the PSAP rail line passes.
- The applicant will appoint a tribal liaison to assist in addressing issues of concerns to federally recognized tribes, develop cooperative solutions to tribal concerns, be available for tribal meetings, and conduct periodic outreach. The applicant will provide the name, telephone number, and email address of the tribal liaison to officials of each tribe that wish to be notified.
- The applicant will submit quarterly reports to the City of Hoquiam on the progress of, implementation of, and compliance with all mitigation measures. The reporting period for these reports will begin the first quarter after permit issuance and continue quarterly through the first year of project operations, after which the applicant will submit a report annually through the first 5 years of operation.

## Appendix E

# Applicable Regulatory Requirements

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## Contanda Applicable Laws and Regulations

### Federal

Laws and Regulations	Description
Clean Water Act (33 USC 1251 et seq.)	Establishes the basic structure for regulating discharges of pollutants into navigable waters of the United States by regulating point pollution sources, such as stormwater discharges, and contains specific provisions related to the accidental release of oil and other hazardous substances into U.S. waters.
Clean Air Act (42 USC 7401 et seq.)	Regulates the nation's air emissions through the enforcement of the National Ambient Air Quality Standards for criteria air pollutants in the ambient (outside) air. In 2007, the U.S. Supreme Court ruled to regulate greenhouse gas emissions as air pollutants under the Clean Air Act.
Oil Pollution Act of 1990 (33 USC 40 et seq.)	Expands the federal government's ability to prevent and respond to oil spills and preserves state authority to establish laws governing oil spill prevention and response.
EPA Railroad Noise Emission Standards (40 CFR 201) FRA's Railroad Noise Emission Compliance Regulations (49 CFR 210)	Govern railroad noise levels at the source and specify noise level limits for locomotives and rail cars.
Resource Conservation and Recovery Act (42 USC 6901 et seq.)	Regulates hazardous waste through a regulatory framework that includes requirements for entities that generate, store, transport, treat, and dispose of hazardous waste (40 CFR 260 through 299).
National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300)	Establishes federal on-scene coordinators for oil spills and hazardous material releases within the inland zone and coastal environments. Lays out a system for federal, state, and local agencies; tribal nations; private interests; environmental groups; and other stakeholders to jointly respond to spills and releases.
Oil Pollution Prevention (40 CFR 112) Facilities Transferring Oil or Hazardous Material in Bulk (33 CFR 154)	Requires installation of appropriate containment and diversionary structures or equipment such as dikes, berms, and retaining walls to prevent discharged oil from reaching navigable waters. The containment must be capable of containing the contents of the largest tank plus precipitation.
Natural Resource Damage Assessments (43 CFR 11)	Supplements the procedures established under the National Contingency Plan and provides a mechanism for natural resource trustees to determine compensation for injuries to natural resources that have not been nor are expected to be addressed by response actions conducted pursuant to the National Contingency Plan.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.)	Regulates proper site characterization of and site remediation for hazardous materials.

*State*

<b>Laws and Regulations</b>	<b>Description</b>
Facility Oil Handling Standards (WAC 173-180)	Establishes minimum standards for oil facility and transfer operations.
Washington Clean Air Act (RCW 70.94)	Regulates stationary sources of emissions to protect air quality.
Controls for New Sources of Toxic Air Pollutants (WAC 173-460)	Establishes the systematic control of new or modified sources emitting toxic air pollution to prevent air pollution, reduce emissions, and maintain air quality that will protect human health and safety.
Water Pollution Control Act (RCW 90.48)	Regulates the discharge of pollutants into waters of the state with the goal of preventing and restoring the quality and integrity of these resources.
National Pollutant Discharge Elimination System Permit Program (WAC 173-220)	Establishes a state permit program applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state.
Water Rights—Oil and Hazardous Substance Spill Prevention and Response (RCW 90.56)	Establishes programs to reduce risks and develop a response to oil and hazardous substance spills; provides a process to calculate damages from an oil spill and holds responsible parties liable for damages resulting from injuries to public resources.
Maximum Environmental Noise Levels (WAC 173-060)	Sets standards for permissible noise levels. However, surface carriers engaged in interstate commerce by railroad are exempt from these regulations.
Prohibited Methods of Sewage Disposal (RCW 43.20.050)	Prohibits disposal of sewage and industrial waste in a manner that would negatively affect domestic water supply or endanger the health and well-being of the people of the state.
Hazardous Substances Account Act (RCW 70.105 et seq.)	Regulates proper site characterization and site remediation of hazardous materials (Health and Safety Code Section 25300 et seq.).
Sediment Management Standards (WAC 173-204)	Establishes rules used to manage sediment in Washington through standards that apply to sediment quality and reduced pollutant discharges.
Dangerous Waste Regulations (WAC 173-303)	Provides authorities and standards for designating, tracking, generator management, and safely disposing of dangerous solid wastes.
Facility Oil Handling Standards (WAC 173-180)	Establishes facility oil handling standards.
Hazardous Waste Operations (WAC 296-843)	Provides regulations for employees working in operations, investigations, or cleanup operations at sites with hazardous waste.
Oil Spill Natural Resources Damage Assessment (WAC 173-183)	Establishes procedures for convening a resource damage assessment committee, completing a pre-assessment screening of damages, and selecting the damage assessment method.
Model Toxics Control Act (RCW 70.105D and WAC 173-340)	Establishes a toxic waste cleanup law.
Shoreline Management Act of 1971 (RCW 90.58)	Establishes regulations for managing the use, environmental protection, and public access of the state's shorelines.

*Local*

<b>Laws and Regulations</b>	<b>Description</b>
Stormwater Management Regulations (HMC 10.05.120 and AMC 13.70)	HMC 10.05.120 requires all new industrial development to provide for the control and management of stormwater runoff. AMC 13.70 establishes minimum requirements and procedures to control the adverse impacts associated with increased stormwater and surface water runoff.
City of Hoquiam: Landscaping and Screening Ordinance (HMC 10.05.65)	Requires that 18 inches' total caliper of new trees be planted per gross acre of new development.
City of Hoquiam: Public Noise Nuisances (HMC 3A.30)	Defines local noise ordinances, including those for construction.
Density and Dimensional Requirements (HMC 10.03.100)	Specifies height maximum of 55 feet for structures in the City of Hoquiam Industrial District.
Shoreline Management (HMC 11.04 and AMC 16.20)	Carries out responsibilities imposed by the Shoreline Management Act of 1971.
Critical Areas Ordinance (HMC 11.06 and AMC 14.100)	Sets forth the definitions and process for designating and protecting critical areas within the city limits of Hoquiam and Aberdeen, respectively.

## Appendix F

### Anticipated Permits and Approvals

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## Local

- City of Hoquiam Shoreline Substantial Development Permit
- City of Hoquiam Conditional Land Use Permit
- City of Aberdeen Critical Areas Review for fish and wildlife habitat and geologically hazardous areas
- City of Hoquiam Cultural Resources Study
- City of Hoquiam Building Permit
- City of Hoquiam Landscaping Plan
- City of Hoquiam Grade and Fill Permit
- City of Hoquiam Fire Department Permit
- City of Hoquiam Demolition Permit
- City of Aberdeen Utility Services Agreement
- City of Aberdeen Building Permit
- City of Aberdeen Grade and Fill Permit
- City of Aberdeen Fire Department Permit

## State

- Washington State Department of Ecology National Pollutant Discharge Elimination System Construction Stormwater General Permit
- Washington State Department of Ecology Resource Conservation and Recovery Act Notice of Registration Update
- Washington State Olympic Region Clean Air Agency Approval Order
- Washington State Department of Ecology Spill Prevention Plan
- Washington State Department of Ecology Spill Contingency Plan
- Washington State Department of Ecology Facility Operations Manual
- Washington State Department of Ecology Oil Handling Facility Training and Certification Report
- Washington State Department of Ecology Oil Handling Facility Safe and Effective Threshold Report

## Federal

- U.S. Environmental Protection Agency Facility Response Plan
- U.S. Environmental Protection Agency Spill Prevention Control and Countermeasure Plan
- U.S. Coast Guard Facility Response Plan
- U.S. Coast Guard Letter of Intent
- U.S. Coast Guard Oil Spill Response Plan
- U.S. Coast Guard Facility Security Plan and Facility Security Assessment
- U.S. Coast Guard Operations Manual Update